

**INFLUENCE OF FORGONE EARNINGS ON PRIMARY TO SECONDARY
EDUCATION TRANSITION IN MBITA SUB-COUNTY, KENYA.**

BY

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DECLARATION

This is my original work and has not been submitted for any other study programmes in any other university.

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My heartfelt gratitude and thanks are due to my wife Sylvia and children, Zelda ,Carson, Ivy and Lincoln for the period they endured during my study and preparation of this thesis. I will honour them to understand that this work is as much theirs as it is mine.

DEDICATION

This work is sincerely dedicated to my wife Sylvia Biko, our Sons Ben Carson and Abraham Lincoln, our daughters Volin Zelda and Ivy Harriet and my parents John Okul and Esther Okul whose undying love, encouragements and selfless determination enabled me to attain this degree and be what I am today.

ABSTRACT

Free Secondary Education policy was introduced in Kenya in 2008 with an aim of making secondary education affordable so as to enhance access, transition, retention and student academic performance. However, this has not been realized in Mbita sub-county where the average primary to secondary education transition rate from 2010 to 2014 was at 46.94%, lagging behind the neighbouring Suba sub county and the national rates at 59.78% and 72.78% respectively during the same period. A recent study of transition in Mbita indicates an improvement in transition rate to 60% in 2016 which was still far below the targeted 100% national transition rate. The reviewed studies did not examine how gender difference is reflected in the transition rates in Mbita, hence there was need to establish the current transition rates in terms of gender in the sub county. While studies indicate high cost of education as the main cause of low transition, there is need to incorporate the influence of forgone earnings as an indirect component of education cost on transition. Therefore, the purpose of the study was to determine the influence of forgone earnings on primary to secondary education transition in Mbita sub-county. The specific objectives of the study were to; establish the proportion of pupils transiting from primary to secondary education between 2013 and 2017, establish the sources of forgone earnings and determine the influence of income of pupils on transition in Mbita sub-county. The target population included 111 head teachers, 1925 form ones, 1391 dropouts and 1 sub-county Quality Assurance and Standards Officer. The study sample consisted of 43 head teachers, 385 dropouts, 385 form one students selected through simple random sampling and 1 Sub-county Quality Assurance and Standards Officer. The study was guided by a conceptual framework which postulates that the level of income of pupils in primary school influences their transition to secondary school. This study made use of descriptive and correlational survey designs. Research instruments were questionnaires and interview schedules. Pilot study was conducted among 4 head teachers, 12 dropouts and 12 form ones. Face and content validity of the instruments were established by research experts at the university. Through test-retest technique, the coefficient of reliability of the head teachers' and form ones' questionnaires were found to be 0.790 and 0.834 respectively. Qualitative data from interviews and open-ended questions were analyzed through content analysis and organized into themes and patterns corresponding to the research questions. Both descriptive and inferential statistics were used to analyze quantitative data. The results indicate an average primary to secondary education transition rate of 60.71%, with girls at 60.28% and boys at 61.18% in the sub county between 2013 to 2017 showing that 39.29 % of pupils enrolled in class eight still fail to transit to secondary school. The main sources of forgone earnings are fishing, transport sector, charcoal burning/selling and peasant farming. By use of Pearson's r , a strong negative correlation of -0.789 was obtained between forgone earnings and transition. This means that an increase in forgone earnings would decrease transition. The study concluded that forgone earnings form the indirect component of education cost, raising the secondary education costs to levels unbearable by pupils especially those from poor households, hence they fail to transit to secondary school, the reason for the continued low transition even in the era of FTSE. The study recommends that the government should instigate effective machineries to fully mitigate the persistent high cost of secondary education. The findings of the study may inform education stakeholders on strategies to improve or redesign FTSE policy in order to ensure affordable secondary education and realize 100% primary to secondary education transition rate.

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LIST OF ABBREVIATIONS AND ACRONYMS

ASALs	Arid and Semi- Arid Lands.
EFA	Education for All.
FTSE	Free Tuition Secondary Education.
ILO	International Labour Organization
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KIHBS	Kenya integrated household budget survey
MOE	Ministry of Education
MOEST	Ministry of Education, Science and Technology
PCR	Pupil Completion Rate
ROK	Republic of Kenya
SPSS	Statistical Package for Social Sciences
SSA	Sub-Saharan Africa
SQASO	Sub County Quality Assurance and Standards Officer.
TIQET	Totally Integrated Quality Education Training
UNICEF	United Nations International Children's Education Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPE	Universal Primary Education
UIS	UNESCO Institute for Statistics

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The flow of students from one level of education to another known as transition is an integral part of education development. This is thought to be a good indicator of balanced or unbalanced development of education between two levels. However, it has been reported that a large proportion of primary graduates fail to proceed to secondary school level all over the world (Ebel, 2009). This has been attributed to a number of reasons. For instance, Kariuki (2006) argued that school based factors such as school rules, attitudes, the curriculum, teachers, physical facilities and management practices does affect transition rates. In addition socio-economic and cultural factors such as parental level of education, parental occupation, family size, parental involvement or students' own attitudes towards education also have an effect on transition rates. These findings slightly differ with the results of studies by Otaala (1976), Akinkunle (1977) and Koff (1967), which observed that many pupils at primary level consider education as a means of occupational mobility. Thus many pupils at this level hope to continue with education beyond primary level by being selected to secondary level to achieve this aspiration. They instead noted that the problem of low transition rates from primary to secondary education facing the world is mainly attributed to high costs of education as opposed to the other school based factors indicated in Ebel (2009) and Karuiki (2006).

In recent studies, low transition rates have been noted with great concern all over the world as secondary education is emphasized because of its important role in empowering individuals socially and economically. A report by UNESCO (2005) on Global Education Digest, indicates that few children in Africa continue their education past the primary level and that worldwide, 85% of children in the last grade of primary school go on to attend secondary school. In addition, the report shows that only two regions have transition rates below the global average; Eastern and Southern Africa (67.1%) and West and Central Africa (52.4%). The transition rates are highest in industrialized countries (98.2%) and in Eastern Europe (96.1%). However, even in Sub-Saharan Africa, some countries have transition rates above 80%. The difference between male and female transition rates is negligible except for two regions: South Africa and West and Central Africa. In South Africa girls are more likely to transit to secondary school; the

transition rate is 89.5% for girls and 84.5% for boys. In West and Central Africa, the opposite can be observed; here the transition rate is 54.6% for boys and 49.4% for girls. Girls in the region are thus doubly disadvantaged. Not only do they have very low primary school enrollment rates, they are also less likely to continue their education to secondary level. (UIS, 2005).

In Sub-Saharan Africa, the access to secondary and tertiary education remains limited to most young people. For example in the school year ending in 2005, the median transition rate from primary to secondary education was 62% (UNESCO,2009).There are also marked disparities in transition rates in terms of gender among many countries. The study further shows that, transition rate for boys(66%) was 9 points higher than their girls' counterparts(57%).Very low transition rates of below 50% were also reported in several countries including Burundi(34%),Botswana(35%) and Cameroon(33%).However, the report indicates a rising enrollment in the region with over 12million more students ,up from 20.6 million in 1999.Despite this significant enrollment trend ,the average secondary NER in Sub-Saharan Africa was 25% in 2006.This implies that nearly 78 million of the regions' secondary school age children were not enrolled in secondary school (UNESCO,2009).

This is in agreement with the findings of Lewin and Colloids (2001) on Analysis of Gross Enrollment rates in Sub-Saharan Africa which indicates that two-thirds of countries with GER of 40% and below are in Africa and that only a small minority participates and finishes secondary schooling. According to Onsomu et al (2006) the main factors hindering primary to secondary education transition in SSA include, high cost of education, large family sizes, low quality and irrelevant education, inequitable distribution of secondary school opportunities, early pregnancies and marriages, low parental level of education and long distances to school. According to Ohba (2009) the wide gap in secondary enrolment in Sub Saharan Africa and the rest of the world is raising concern. Many governments in the Sub Saharan Africa are considering abolishing secondary school fees in order to meet their targets of Education for All and the Sustainable Development Goals. Fees charged at secondary education are the major obstacles for some children to access secondary education. Evidence indicates that secondary enrolment in SSA continues to be the lowest in the world (Ohba, 2009).

Werunga, Musera, and Sindabi (2011) conducted a study on factors affecting transition rates from primary to secondary schools in Kenya. The study used a sample size of 144 respondents consisting of 88 parents and 56 primary school head teachers in Taita Taveta Sub-County. The main tools of data collection were a questionnaire and interview schedule. Data analysis involved use of percentages and chi-square. The results indicate that an average of 40% of pupils fail to transit to secondary schools every year in the sub-county and the most affected are girls. The main reasons for low transition are lack of funds to pay school levies, early marriages, long distances to school and lack of interest in schooling. Almost similar findings are indicated in a study by Ogolla (2013) on factors influencing transition rate of learners from primary to secondary schools in Homa Bay County which showed that transition from primary to secondary schools is highly determined by the cost of education which is reflected in the amount incurred to settle the student in school including school fees and levies as well as personal expenses. Other factors identified include teenage pregnancies, early marriage and child labour. In addition the study established primary to secondary education transition rate of 50.0% (boys) and 51.9% (girls).

In all the above studies cost of education was cited as the greatest hindrance to transition. The secondary education costs are still not affordable to all pupils despite the implementation of FTSE policy since 2008. However, the studies did not consider the indirect component of education cost, the opportunity cost which is the income of pupils that they forfeit when proceeding to secondary level of education. This opportunity cost is not addressed by FTSE policy. This study therefore sought to establish the main sources and level of income of pupils and how they affect overall cost of secondary education and whether they have an influence on primary to secondary education transition in Mbita Sub-County.

Information from Homa-Bay county education office indicated that the Gross Enrolment Rate in Mbita sub-county was 33% for 2014 against national gross enrolment rate of 47.8%. The transition rate for Mbita sub-county from 2010 to 2014 were 39.4, 41.2, 40.4, 54.5, 59.2 which is lower than the neighbouring Suba sub-county transition rates of 56.2, 54.4, 61.1, 59.1 and 68.1 and the national transition rates of 68.9, 69.4, 68.4, 76.8 and 80.4 for the same period as indicated in table 1.1. Academic performance mean score in Kenya Certificate of Secondary Education for 2011 to 2014 in Mbita was low at 5.0. While it is clear that FTSE has failed to

realize its goal of 100% transition rate and availing quality education to all secondary school age, there was need to establish how gender is reflected in the recent transition rates in the sub-county. Therefore the study established transition rates by gender between 2013 and 2017.

According to Ministry of Education (2012), Mbita and Suba sub-counties, now separate sub-counties were once one district until the year 2010 when they were separated. Data available from the two sub-counties indicate that in 2010, Suba had a total enrolment of 3,595 (2151-boys and 1395-girls) while Mbita had a total enrolment of 4948(3376-boys and 1572-girls).Mbita reflected only 33% out of 4948 students' access. From this statistical evidence, there is mismatch between the current trends in enrolment rates in Mbita sub-county vis- a-vis the national government achievement of 47.8% in the entire county. Similarly, Table1 shows the comparison of enrolment data for student per sub-county. It indicates that Mbita had the least enrolment of 8% compared to other sub-counties. The low secondary enrolment is a function of primary to secondary transition rate and retention rate which are mainly influenced by cost of secondary education. The question as to why education cost could still remain unbearable by many parents despite the implementation of FTSE policy cannot be avoided. A study by Ayodo (1991) also concurs with the above finding and observes that the most important factor which influences the quantity of demand for a given level education is the total cost of education. This total cost includes fees and other direct costs such as expenditure on books or materials, uniform and meals as well as the indirect cost component: opportunity cost. The total cost influences to a great extent the level of demand from individuals. If the costs are so high that only the rich can afford them, the quantity of demand for education decreases. Conversely, if the cost decreases and becomes affordable by many, then the quantity of demand increases. This study therefore sought to establish whether there exist opportunity costs of pursuing secondary education and the influence of the same on transition in Mbita Sub-County.

Abagi and Oanda (2014) observed that disparities in access, transition and performance at secondary school have persisted despite a series of policy interventions like Free Secondary Education. One of the reasons for the persisting inequalities is rooted in government funding policy in education sector. Consortium for Research on Education Access, Transition and Equity carried out a study in rural Kenya to establish whether Free Secondary Education has enabled the

poor to gain access to secondary education. The report indicated that Free Secondary Education cannot solve the problem of access. Some parents interviewed said that while lowering school fees has enabled some to take their children to school, this does not mean all children from poor households are assisted to gain access to secondary education. Household income for many families has not changed while most prices of food and other commodities have soared thus reducing their ability to pay fees even in a day school (Ohba, 2009). However, this study did not look at income of pupils as an opportunity cost of pursuing secondary education and the influence of the same on transition to secondary school.

Table 1.1 Transition Rates 2010-2014

	2010	2011	2012	2013	2014
National	68.9	69.4	68.4	76.8	80.4
Suba	56.2	54.4	61.1	59.1	68.1
Mbita	39.4	41.2	40.4	54.5	59.2

Source: Homa-Bay County Education Office, 2014

Table 1.2 Secondary Enrolment per Sub-County in 2013

Sub-County	Total Enrolment	Percentage
Homa-Bay	15,478	24
Mbita	5,272	8
Ndhiwa	9,581	15
Rachuonyo North	10,110	16
Rachuonyo South	17,963	28
Suba	6,034	9
Total	64,438	100

Source: Mbita Sub-County Education Office, 2014

Tables 1.1 and 1.2 shows transition rates and Gross Enrolment rates respectively. From Table 1.1, it can be noted that the transition rates for Mbita and Suba sub counties were below the national transition rates with the least being 39.4% and highest 68.1% for the years 2010 to 2014 while the national transition rates ranged between 68.4% to 80.4%. Table2 shows enrolment per sub-county in Homa-Bay County in 2013. The record indicates that Mbita Sub-County had 5,272(8%), while Suba Sub-County had 6,034(9%) and Ndhiwa 9,581(15%). The three Sub Counties had the lowest enrolment record compared to other sub- counties in Homa-Bay County. Clearly, Mbita sub-county is yet to realize the aims of FTSE policy.

1.2 Statement of the Problem

The overall research problem addressed in this study is that despite the introduction of FTSE Policy in Kenya in 2008 with an aim of making secondary education affordable so as to enhance access, transition, and retention and student academic performance, primary to secondary education transition rate in Mbita sub-county has persistently remained low. Information from Homa-Bay county education office indicates that the average primary to secondary education transition rates from 2010 to 2014 in Mbita was at 46.94% falling lower than that of the neighbouring Suba sub county and the national rates at 59.78% and 72.78% respectively. This may explain why Mbita had the lowest secondary Gross Enrollment Rate in 2013 compared to other sub counties in Homa Bay County. A recent study of transition in Mbita shows a rise in transition rate to 60% in 2016 falling below the national rate at 81.3%, and far from the targeted 100% national transition rate. However the reviewed studies did not establish how gender difference is reflected in the transition rates in Mbita Sub County. While recent studies concur that FTSE has failed to fully mitigate high cost of secondary education which remains the greatest hindrance to transition, there is need to incorporate the influence of forgone earnings as an indirect component of education cost on transition. This study therefore sought to establish the transition rates from 2013 to 2017 in Mbita Sub County in order ascertain in terms of gender the current transition trends. It also established the main sources of forgone earnings and the influence of the same on transition in Mbita Sub-County. If the issue of low transition is not fully addressed, many pupils will continue to miss opportunities to advance their education.

This in the long run will make it difficult for Kenya to achieve its target of Education for All and the Sustainable Development goals.

1.3 Purpose of the Study

The purpose of this study was to determine the influence of forgone earnings on Primary to Secondary education transition in Mbita Sub-County.

1.4 Objectives of the Study

The specific objectives of the study were to:

- i. Establish the proportion of pupils transiting from primary to secondary education level from 2013 to 2017 in Mbita sub-county.
- ii. Establish the sources of forgone earnings in Mbita sub-county.
- iii. Determine the influence of income of pupils on primary to secondary education transition in Mbita sub-county.

1.5 Research Questions

The following research questions were to be addressed in this study.

- i. What is the proportion of pupils transiting from primary to secondary education from 2013 to 2017 in Mbita sub-county?
- ii. What are the sources of forgone earnings in Mbita sub-county?
- iii. How does income of pupils influence primary to secondary education transition in Mbita sub-county?

1.6 Assumptions of the Study

The following were the major assumptions underlying the study

- i. Though there are high unemployment rates in Kenya, it is assumed that primary school pupils are self employed in sectors like Jua kali, agriculture and fishing.
- ii. Since Free Tuition Secondary Education policy offers Learning Resources and Quality assurance to all public Secondary schools, the influence of school based factors like, learner promotion policy, quality and relevance of education, performance and attendance on transition were held constant and therefore controlled for.
- iii. Respondents would honestly give true information required without biasness.

- iv. All secondary schools in the area of study give equal chances to all pupils completing their primary school to join secondary school.

1.7 Delimitations of the Study

The study was delimited by the following:

- i. Pupils may earn income during holidays as well as during school days. This study only focused on income earned by pupils during school days which they are forced to forgo during transition to secondary education level.
- ii. The pupils engage in both income generating activities and unpaid family labour such as domestic chores, child care, and unpaid agricultural work .This study only established the monetary value of pupil's time spent on paid labour.
- iii. Earnings forgone may influence grade to grade transition in both primary and secondary levels and primary to secondary education transition .This study only examined primary to secondary education transition.

1.8 Limitations of the Study

This study was limited by the following:

- i. Some schools might have not fully embraced the FTSE Policy by illegally charging extra levies such as money for paying salaries for teacher employed by Board of Management school development funds and activity fee. This might have affected transition but was overcome through accurate random sampling of schools. According to Mugenda (2003) randomization ensures that no systematic difference or error on a given characteristic exists among the subjects. It ensures equivalent representative groups that are essentially similar on a major characteristic.
- ii. Data on Income of pupils was obtained by asking form ones and dropouts of the same cohort questions on their approximate monthly earnings while in primary school. Earnings could best be studied through document analysis. However, this was not possible since pupils are mostly in non formal employment and rarely keep proper records of their income. This was mitigated through seeking head teachers' opinion on approximate monthly earnings pupils drawn from every economic activity they engage in so as to verify the responses given by form ones and dropouts.

1.9 Significance of the Study

The study may provide valuable information on the forgone earnings and its influence on primary to secondary education transition in Mbita sub-county. It is expected that the findings of this study may inform the ministry of education, education planners, teachers, parents and policy makers on strategies to improve or redesign Free Secondary Education policy in order to ensure that secondary education is affordable to all and work towards achieving 100% transition rate. This may further assist in the on-going search for efficient and quality education accessed by all. The findings may also be helpful to NGOs which may wish to assist in financing secondary education in terms of provision of necessities that are not included in the FTSE. Finally, the study may act as a basis for further research in various dimensions of transition in tertiary institutions of learning.

1.10 Conceptual Framework

According to Orodho (2008) a conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationship between variables in the study and show the relationship graphically or diagrammatically.

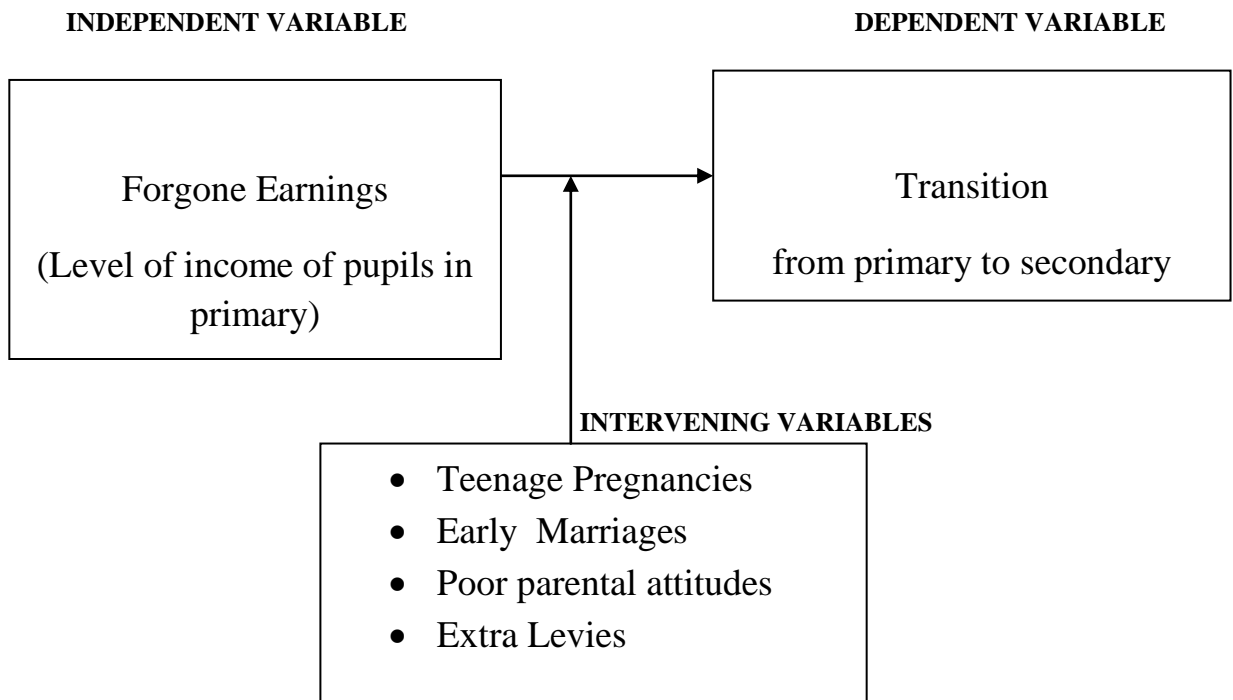


Figure 1.1 Conceptual framework showing influence of forgone earnings on transition. The conceptual framework (Figure 1.1) postulates that the level of income of pupils at primary

school influences their transition to secondary school. During transition to secondary school, pupils are expected to forgo their earnings at primary level because they cease from engaging in economic activities due to joining boarding school, change in learning environment and more demanding academic programme. The earnings to be forgone form an opportunity cost of acquiring secondary education. It is expected that if these earnings are high then they increase secondary education costs to levels unaffordable by pupils, especially those from poor households. However, primary to secondary education transition may also be confounded by teenage pregnancies, early marriages, parental attitudes and extra levies. These intervening variables were controlled for through collecting data on the influence of these variables on primary to secondary education transition in Mbita sub-county.

1.11 Definition of key operational terms.

To ensure clarity of terms in this study, the following definitions are provided:

Access refers to the right of entry, admission to secondary school.

Child means any human being under the age of eighteen years.

Forgone earnings refer to income of pupils at primary school which is to be forfeited by those transiting to secondary school.

Gross Enrolment Ratio refers to the total enrolment of learners in a grade or level of education, regardless of age, expressed as percentage of the corresponding eligible official age group population in given school year.

Net Enrolment Ratio refers to the number of learners enrolled in the official specific-age group expressed as a percentage of the total population in that age group.

Influence refers to the capacity to have an effect on the character development or behavior of someone or something.

Transition means continuing with schooling from primary to secondary education.

Transition rate refers to the ratio of first grade enrolment of a given level of education in a given year to last grade enrolment of the preceding level of education in the previous year expressed as a percentage.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviewed pertinent literature in the area of forgone earnings and its influence on primary to secondary transition. The chapter is organized into the following sections: Current trends of transition, sources of forgone earnings and influence of income of pupils at Primary school on transition.

2.2 Current trends of transition from primary to secondary.

Transition is the number of children who continue from one level of education to another. It is the key indicator of the degree of access to education. Transition therefore reflects the efficiency of education system (Kimitei, 2010). Globally, the secondary Gross Enrolment Rate rose from 43% to 68% between 1970 and 2009. This means that enrolment in secondary schools represented 68% of the targeted school age population. However, the situation varied considerably across and within regions (UNESCO, 2011). During the period 1970- 2009, enrolment growth in secondary education was highest in North America and Western Europe. This is not surprising given the combination of high participation in secondary education and the declining school- age population in this region. Total enrolment at the secondary level increased from 53 million to 62 million while the school-age population declined from 66 million during the same time. As a result, the Gross enrolment rate grew from 80% in 1970 to 100% in 2009, the highest participation rate among all regions. Evidence available indicates that the region has maintained gender parity in secondary education (UNESCO, 2011).

A report by UNESCO (2005) on Global Education Digest, indicates that few children in Africa continue their education past the primary level and that worldwide, 85% of children in the last grade of primary school go on to attend secondary school. In addition, the report found that only two regions have transition rates below the global average; Eastern and Southern Africa (67.1%) and West and Central Africa (52.4%). The transition rates are highest in industrialized countries (98.2%) and in Eastern Europe (96.1%). However, even in Sub-Saharan Africa, some countries have transition rates above 80%. The difference between male and female transition rates is negligible except for two regions: South Africa and West and Central Africa. In South

Africa girls are more likely to transit to secondary school; the transition rate is 89.5% for girls and 84.5% for boys. In West and Central Africa, the opposite can be observed; here the transition rate is 54.6% for boys and 49.4% for girls. Girls in the region are thus doubly disadvantaged. Not only do they have very low primary school enrollment rates, they are also less likely to continue their education to secondary level (UIS, 2005).

Karugu, Oanda and Sifuna (2006) say, most African countries are largely modeled on educational systems of England and France. A study of the two countries' education system indicates that in England most pupils move from primary school to secondary between ages 11 to 16 or 18. No charges are made for admitting pupils to publicly funded secondary schools. Most secondary schools are comprehensive, accepting pupils without regard to academic ability. Secondary education like primary education is compulsory up to 16 years of age in France (Karugu et al, 2006). In both countries primary education is free and compulsory thus promoting transition rate. In 2002, the Gross Enrolment Ratio in secondary school for both boys and girls was 26% in Sub-Saharan Africa. The low transition rates from primary to secondary education for both boys and girls means that secondary education in Africa is not accessible to the majority of the relevant age groups (Karugu, Oanda and Sifuna, 2006). The concern is why has attainment of Universal Primary Education been elusive in many African countries?

Ministry of Education (2012), while assessing the progress towards access, retention, equity, transition and quality since 2000 had this to report. Over the years enrolment had been steadily rising partly due to strategies of Free Primary Education and Free Secondary Education policies. A positive trend to transition rate had also been recorded with transition rates increasing from 43.3% (boys 43.8%, girls 42.6%) in 2000 to 56% (boys 57.2%, girls 54.7%) in 2005 surpassing the set target of 70% by 2010 and reached 72% by 2012 (Ministry of Education, 2012). The Ministry of Education reported that the transition rate from primary to secondary increased from 45.8% in 2003 to 59.9% in 2008 and estimated at 64.1% in 2009 and this was attributed to Free Secondary Tuition. The target remained 70% transition to secondary education (Ministry of Education, 2009). School of Education, University of Nairobi examined factors influencing transition rates from public primary schools to secondary school level in Murang'a East District. The study found that all the respondents that is, principals, parents and

standard seven pupils perceived secondary school education as expensive and beyond the reach of many. They were driven by the fact that many parents were unable to pay fees for secondary education. The study recommended that greater budgetary allocation should be made to the education sector and it should place a greater emphasis in the financing of secondary school education to cater not only for tuition but also other accompanying costs (University of Nairobi, 2012). However, the study did not consider earnings forgone by pupils transiting to secondary as a cost borne by parents and whether it could influence transition. This is a knowledge gap that this study sought to fill.

Saitoti (2004) while presenting a paper at the council on foreign relations reported that transition rate from primary to secondary schools was low, with only less than 50% of primary graduates entering secondary school. He attributed this to low quality of some of the existing secondary schools, high cost of secondary education and lack of perceived incentives to continue education. During this period, the Free Secondary Education policy had not yet been introduced hence many secondary schools lacked textbooks and other compliments. Students' to teachers' ratio was high and rigid academic programmes led to low quality education hence poor performance. This impacted negatively on transition.

Most recently, Ndolo and Simatwa (2016), conducted a study on impact of Free Secondary Education on Primary to Secondary Transition rate in Mbita and Suba sub-counties. The study adopted *ex-post facto* and correlational research designs. The study population consisted of 37 principals, 2775 students, 1 Sub-county Schools Auditor and 2 Sub –county Quality Assurance and Standards Officers. They observed that Free Secondary Education policy has positively and significantly influenced Primary to Secondary school transition rates. This is because it has made secondary education affordable to many pupils, and their parents. However, the study also noted that for the last five years, at least 40% of the standard eight pupils in any given year still failed to move to Secondary education level in the following year. The study looked at the combined transition rate for the two sub counties and did not factor the gender difference. This study therefore sought to establish current transition rates for Mbita alone in terms of gender difference. In addition the study sought to determine if income of pupils at primary school could help explain the current transition trends in Mbita sub county.

Ngware, Abuya, Admassu and Oketch (2009) examined whether household characteristics matter in schooling decision in urban Kenya. They reported that, the whole transition rate across all the study sites was about 75%. There was no noticeable difference by gender except in Nakuru where the rates were substantially slightly higher than the national level transition rate estimated to be 73% in 2010 (Ministry of Education, 2012). Both sexes combined, the lowest rate of transition is observed in Mombasa (66%) while highest in Kisumu (83%). There was strong association between the household head level of education and transition rate as well as household wealth index and probability of the transition. This is consistent with findings in previous studies examining the association between household socio-economic and schooling outcomes by Ngware et al (2009). Ngware et al, (2009) present the following arguments. One that students from high socio-economic households get academic support from educated parents and are more likely to score high in primary school leaving examination. Secondly, In addition, better-off-households have more economic resources to let children continue their secondary education than children from low socio-economic background.

However, when national data are disaggregated to the sub-counties and school levels, major differences in response to Free Secondary Education policy become apparent. In Suba sub-county for example the transition rate stood at 69% (72% boy sand 62% girls) in the year 2010. The girls' transition rate is far much below hence generating a lot of pertinent questions on gender parity and regional disparities remain key issues to address. In 2013, transition rates for Mbita and the neighbouring Suba sub-counties were 46% and 69% respectively while according to Economic survey (2015), the national primary to secondary transition rate rose to 80.4 per cent in 2014 from 76.8 per cent in 2013. The improvement in Primary to Secondary transition rate can partly be attributed to the implementation of Free Tuition Secondary Education (FTSE) and expansion of education facilities. While it's clear that transition rate in Mbita is lagging behind the neighbouring sub-counties' and the national transition rate, there was need to establish the most current transition rates in terms of gender in the sub county.

2.3 Sources of forgone earnings.

A study by Krishna and Shariff (2011) observed that the key to alleviating poverty in rural communities worldwide is whether the village is close to a city. Specifically, "households residing in villages located fewer than 5 km from the nearest city and connected by better bus services and denser telephone links had significantly higher odds of breaking out of poverty." This point has been corroborated by Khandker and Koolwall (2010), who argue that proximity to an urban area is important because it enables rural households to have access to electricity and paved roads. With reference to Bangladesh, they found that a one percent increase in households with electricity in the village leads to a 0.8 percent increase in total per capita income. Access to a paved road results in a 33 percent increase in total per capita income (Khandker and Koolwall, 2010: 1121). These arguments and results can be interpreted as meaning that non-farm sources of income are critical for rural poverty alleviation.

In Sub-Saharan Africa (SSA), agriculture is the predominant activity for most rural communities and it offers a strong option for spurring growth, overcoming poverty, and enhancing food security as stressed by the World Development Report 2008. This sector in SSA is mainly based on smallholder farms and contributes about 29% to GDP and employs up to 65% of the labor force (World Bank, 2007). However, recent studies examining agricultural dynamism in Africa find that only a small proportion of farms exhibit any dynamism in terms of intensification or expansion; with almost half of all surveyed farms stagnated (Djurfeldt et al., 2011). They found that the agricultural sector is characterized by decreasing farm sizes, low levels of output per farm, low productivity, a high degree of subsistence farming, with increases in production being driven mainly by area and not yield growth (Jirström et al., 2011).

Another study by Onyeiwu and Jialu (2011) on Determinants of Income and poverty in Africa; with empirical evidence from Kenya and Nigeria further revealed that Household size has a significantly large and negative effect on income. A larger household size decreases per-capita household income by 15.7% according to the Kenya survey. Consequently, efforts should be made to reduce fertility rates in rural Africa, where the demographic transition is yet to occur due to pervasive poverty, lack of education, lack of access to family planning resources, and cultural constraints. Education has a positive effect on household earning: an additional year of schooling is able to raise household income by 4.8%. The effect of age is non-linear: income

increases then decreases as people grow older. Education in the rural context should transcend formal education to include vocational training, skills acquisition and knowledge transfer in the areas of new methods of agricultural and livestock production, as well as business management skills (Onyeiwu and Jialu, 2011). The value and size of land owned are both important for explaining differences in income amongst rural households. Moreover ownership of non-durable assets including tools and livestock improves households' income generating ability.

According to Alarya et al (2011) the case of Niger Republic is abit contrary to expectation since livestock ownership is not a major source of income for households but both a tool for seasonal work and security, as well as a short and medium-term insurance .However irrigated agriculture and non-farm income from self-employment remain the significant sources of income especially for the wealthy group. Krishna and Shariff (2011) make a distinction between factors that reduce households' risk of being trapped in poverty, and those that help households escape from poverty. They argue that ownership of "rural-origin" material assets such as agricultural land can prevent a household from falling into poverty. On the other hand, they also point out that agricultural land fails to guarantee extricating people from poverty.

An almost similar situation is observed in Kenya where data from the KIHBS (2006) indicate that 68.8 per cent of all households are engaged in crop farming activities. In the rural areas, this proportion stands at 85.4 per cent. This activity is practiced on an estimated 12.3 million acres out of a total area of about 146.5 million acres. However, it is only on 6 percent of all agricultural parcels that irrigation farming is practiced. Contrary to the Niger case, the results show that 66.0 percent of Kenyan households keep at least one type of livestock making it a major source of income. The most common types of livestock are chicken and cattle which form 67.0 and 64.0 per cent of livestock rearing households respectively. Other common livestock types include goats, sheep, camels, pigs and donkeys. A Kenyan study by Anderson (2012) further observes a case similar to that of Bangladesh. The results indicate that lack of nonfarm sources of income and the variation over time in consumption burdens made poorer households less food secure and more vulnerable to the seasonal changes in agricultural production and food prices, while some wealthier farm households that could access nonfarm incomes were able to profit from the seasonality through trade-based or barter exchanges of produce in agricultural markets. Pull factorson the other hand, are opportunities for diversification

of income sources linked to commercial agriculture, improved infrastructure, proximity to an urban area, better market access, etc.

There is widespread agreement that smallholder farmers require improved access to agricultural markets to raise their farm productivity and living standards (Chamberlin and Jayne, 2012). Some studies also hold similar observation that market access is a key determinant of diversification of activities (Winters et al. 2009; Barrett et al. 2001). Those with access to adequate assets and infrastructure and faced with appropriate incentives engage actively in markets, while those who lack one or more of those three essential ingredients largely do not (Barrett, 2008). Proximity to markets provides opportunities to sell output, and purchase inputs, from self-employment activities as well as opportunities for non-farm wage employment (Winters et al., 2009). Barrett et al. (2001) argue that farmers with superior access to urban markets and those involved in contract farming schemes with processing plants or exporters are better able to overcome factor market constraints to produce for market. Opportunities available for farm households to engage into higher nonfarm income activities that can lead to accumulation seem to be more available in areas with better endowments in terms of agricultural potential, market access, proximity to urban centres and better infrastructure such as roads (Losch et al., 2011). Better infrastructure is linked to higher opportunities for farm and nonfarm employment (Escobal, 2001) and to increased agricultural production (Djurfeldt et al., 2008).

The above studies show that both farm and nonfarm employment opportunities, which are the main determinants of income in African communities require better infrastructure and access to markets to increase productivity and maximize income. However, there was need to establish whether situation is applicable to Mbita sub-county which is a semi-arid area with high levels of poverty. Therefore the study sought to establish the sources of forgone earnings so as to determine the influence of the same on transition in the sub-county.

Information from the first Homa Bay County Integrated Development Plan (2013-2017) indicates that the projected population of special age groups as per the 2009 census , close to (47.6%) half of the population of the county falls in the labour force age group(15-64years).The labour force bears the burden of supporting the aged population(65+years) who form a minority group constituting 3.6% of the total population as well as the dependent children population

between 0-14years,that would ideally put the dependency ratio at 100:110 if the entire labour force is meaningfully engaged in productive activities including children over 14 years of age. As per the 2012 projections, total of 102388 people are in the secondary school age (14-17years) representing 9.8% of the total population of the county. This population was expected to rise to 109,046 and 113,730 by 2015 and 2017 respectively. Rural development is mainly spearheaded by the following sub-sectors in the county; Agriculture, Livestock development, cooperative development, Land, Forestry and Wildlife and Fisheries development. Most farmers practice semi-subsistence farming and sometimes sell the surplus during the long rains. Agriculture is the leading income generating activity to the households besides being a contributor to household food security. The fisheries sub-sector is equally important in the county as it borders Lake Victoria. This sub-sector forms a major economic activity in the county, generating annual revenue of approximately Kshs 7 billion.

According to Suba District Development Plan (2008-2012), the population of secondary school age group (14-17years) was expected to rise by 13% thereby spelling need for increase in number of secondary schools. Since 1999, approximately 50% of this group has been females and the trend was expected to remain. The investment in educational institutions will require specific focus on the females given the challenges currently experienced such as early pregnancies and high dropout rates. These dropouts get absorbed in the prevailing economic activities in the District. Apart from agriculture and fisheries being the main economic activities, the district also has potential for tourism and wildlife due to the untapped resources that could be used to establish a vibrant tourism industry. These include the Rumba National Park with rare species of roan antelope and other forms of impressive array of physical features with high aesthetic value including 16 islands, hills, water views and waterfronts. Other economic activities attracting the youth in the Sub-County include transport industries which include matatu, motor bike and water transport businesses, jua-kali sector including sand harvesting, building and construction and many forms of small scale businesses as indicated in Suba District Development Plan (2008-2012).While these development plans identified the sources of income in Homa-Bay County and Mbita Sub-County respectively, they did not determine the pupil income drawn from each source so as to rank them in order of economic significance. This study did

not only establish the sources of forgone earnings but also the level of income of pupils that constitutes opportunity cost during transition to secondary level of education.

2.4 Influence of income of pupils at primary school on transition.

According to Forojalla (1993) the opportunity costs to an individual of being educated to whatever level, is the value of alternative opportunities she had to forgo by being educated up to the particular level. In modern wage economy the opportunity cost to a young person of voluntarily attending school is the wage she might have otherwise earned. In such situation, the opportunity costs are very considerable in late-adolescence or early-adulthood in the secondary stages or higher education whereas below the school-leaving age, the opportunity cost is nil as child labour is forbidden by law. However, a study by Woodhall (2004) slightly differs with the above finding and observes that in African societies, the service of the young child in minding younger brothers and sisters, fetching water or herding, are of great value to his family. This is because although the income-earning opportunities forgone by attending school between the ages of 15 and 25, may be less, particularly in rural setting, the labour of the young person on the farm or in the family business is no less valuable.

The study by Woodhall (2004) further indicates that there are considerable problems involved in measuring the opportunity cost of pupils' or students' time; it is necessary, for example to take account of unemployment when measuring the earnings forgone. It is sometimes assumed that the time of the young children has no economic value and that the concept of forgone earnings applies only to secondary or higher education students and not those of primary school age. The problem with estimating forgone earnings of primary school pupils is also due to the fact that most of their work is unpaid. Thus, some examples of cost-benefit analysis of education assume that earnings forgone by primary school pupils are very low or even nil, as opportunities for employment (and therefore earnings) are very limited. However, studies of primary school retention rates have shown that the time of quite young children does have economic value for their families. This is in accordance to the cost benefit study of education in India (2010) which pointed out that the forgone earnings of even six-year-olds have some significance; certainly they help to explain the high dropout rates in the early years of primary school (Blaug; Layard

and Woodhall, 1969:199). There was need to establish the level of earnings of pupils in Mbita sub-county in an attempt to provide explanation to the low transition rate in the sub-county.

More recently, increasing emphasis on the target of achieving Education for All (EFA) has led to renewed efforts to estimate and analyze the opportunity cost of pupils' time and its effects on primary participation rates, particularly in the case of girls, who represent well over half of all out-of school children (UNESCO, 2002). Studies such as Colclough with Lewin (1993) and Colclough, Al-Samarrai, Rose and Tembon (2003) confirm that the opportunity costs of school attendance are significant barriers to primary school participation for many families particularly the poorest households, as the value of earnings or domestic labour forgone is often much higher than the direct costs of schooling. Recent studies of the opportunity costs of attending primary school in several African Countries (Reported in Colclough et al., 2003) estimate the monetary value of children's time not only in terms of forgone earnings, for example petty trade, but also the loss of other forms of family income such as unpaid agricultural work and domestic chores and child care. When all these are taken into account, the opportunity cost of attending school is substantial and often higher for girls than boys, as the former are expected to spend time looking after younger children. This study therefore analyzed the opportunity costs in an attempt to explain the persistent low transition rate in Mbita Sub-County.

A study by Bon'go (2005) on effects of child labour on primary school enrolment and attendance in Suba District, case of Mfangano Division found that children engage in various type of work. Most children engage in fishing accounting to 58 per cent, 24 percent engage in trading most of whom are girls who sell firewood, dried fish and other wares within the centres and only 10.6 per cent engage in sand harvesting. The study further revealed that some children engage in activities such as herding and domestic house helps. The study also found that 88 per cent of the children earned their own salary while only 12 per cent had their Parents/Guardians receiving the money on their behalf. In both cases the income contributed to the support of the family. Financial constrains was cited as the main reason causing children to drop out of school and engage in child labour. The study did not estimate the monetary value of income earned by the school age population so as to establish its significance in influencing the decision continue with education from primary to secondary school. This study therefore sought to fill this

knowledge gap by establishing level of income of pupils which they forgo when deciding to pursue secondary education and its influence on primary to secondary education transition in the sub-county.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used in the study. The chapter comprises of seven areas: research design, location of the study, target population, study sample, sampling procedure, research instruments, validity and reliability, data collection and data analysis plan.

3.2 Research Design

This study made use of the descriptive and correlational survey design utilizing both qualitative and quantitative approaches. Descriptive survey design was found appropriate as it enabled the researcher to gather information on the head teachers' ,form one students' and dropouts' opinion on causes of low transition and main sources of forgone earnings in Mbita sub county within a short time. According to Orodho (2004) and Borg and Gall (1985) descriptive survey research studies are designed to obtain pertinent and precise information concerning the current status of a phenomenon and, whenever possible, draw valid conclusions from the facts discovered. Descriptive survey research gives statistical information about aspects of education. The design was chosen because the study involves a broad category of stakeholders in education. Correlational method describes in quantitative terms the degree to which variables are related. It involves collecting data in order to determine whether and to what degree a relationship exists between two or more quantifiable variables (Mugenda and Mugenda, 2003).Pearson Product Moment Correlation was therefore used to determine the influence of income of pupils on transition. The research design entailed drawing preliminary information through a pilot study followed by a systematic field survey. The field survey helped the researcher to find with primary data, issues on forgone earnings and its influence on transition and measures that can be used by different education stake holders to improve primary to secondary transition. The data was summarized, analyzed and conclusion drawn.

3.3 Area of Study

The study was conducted in Mbita Sub County, which borders Bondo Sub-county to the north, Homa Bay sub-county to the east and Suba sub-county to the south. Its associated Islands include Mfangano, Remba, Ringiti, Rusinga and Takawiri. It is located between longitudes

34°00'E and 34° 30'E and latitude 0° 15'S and 0°45'S, and has 5 main divisions (Mfangano Island, Rusinga Island, Kasungu, Gembe, Lambwe) and has a population estimated at 111, 409 (Appendix 11). In line with the new Kenyan constitution, Mbita Sub County is part of Homa Bay County. Though there are many development initiatives in Mbita, poverty is still a major challenge. More than three quarters of the population survives on less than 1 USD per day, the World Bank's definition of extreme poverty. The majority of the Mbita population and islanders live along the lake in beach communities as the main economic activity is fishing. In addition, the lake is used for washing clothing and dishes, bathing, washing cars, sand harvesting, and irrigating farmland. Farming is mostly subsistence-based, with major crops including sorghum, potatoes, cassava, beans and maize. Access to services like education, health communication are poor due to bad terrain and impassable road during rainy seasons which can contribute to low student access and retention rates among other factors in the study area. The sub county was chosen for the study because it has the lowest secondary enrolment rate in Homa-Bay County associated to its persistent low transition rate.

3.4 Study population

The target population for a survey is the entire set of units for which the survey data are to be used to make inferences (Jacobs et al, 2006). In the sub-county there are 111 public primary school Head teachers, 1391 dropouts, 1925 form ones students and 1 Sub-County Quality Assurance and Standards Officer that formed the researcher's target population. The 1391 dropouts was obtained by calculating the difference between class eight enrollments in 2017 and form one enrollment in 2018 in the sub-county. (Mbita Sub-County EMIS, 2015).

3.5 Sample and Sampling Procedures

Simple random sampling was used to select 43 public primary school Head teachers from 111 head teachers and 385 students from 1925 students who were in class eight in 2017 and transitioned to form one in 2018. Snowball sampling was used to select a total of 385 dropouts 1391 dropouts who were in class eight in 2017 but failed to join form one in 2018. Mbita has 1 SQASO who was also a respondent in the study. The sample size for the form one students was determined using Krejcie and Morgan's formula:

$s = X^2 NP (1- P) \div d^2 (N -1) + X^2 P (1- P)$, s = required sample size, X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841), N = the population size, P = the population proportion (assumed to be 0 .50 since this would provide the maximum sample size). d = the degree of accuracy expressed as a proportion (.05).

In public secondary schools in Mbita sub-county, there were 1925 form one students in the 32 public secondary schools in 2018hence the sample size was obtained as follows;

$$S=3.841 \times 1925 \times 0.5 (1-0.5) \div (0.05)^2 \times (1925-1) + 3.841 \times 0.5 (1-0.5) = 385 \text{ students.}$$

The same formula gave a sample size of 301 dropouts from a population of 1391 dropouts but the researcher used a sample of 385 dropouts an equal number to form one sample size easy comparison of their earnings at primary level.

The study sample size (n) for Head teachers was drawn from a population of 111 Head teachers through the use of Precision Rate and confidence level derivative at an estimated value of (e) within 5% of the true value and at a confidence level of 95%. The derivative $n=Z^2 p.q. N/e^2 (N-1) + Z^2 p.q$ was used to define a sample size of 43 schools for the study (Kothari, 2009). Where: Z =the values in the matrix represents area under normal curve at 95% confidence level, e = the estimated value of error, N = Total population p = Proportion of sample size from frequency distribution table, q = Deviation of proportion from the unit value and $q=1-p$, n is the desired sample size and is given by; $n= z^2 pqN / e^2 (N-1) + z^2 pq$

$$= (1.96)^2 \times 0.05 \times 0.9 \times 111 / (0.05)^2 \times (111 -1) + (1.96)^2 \times 0.05 \times 0.9 = 43$$

Table 3.1 Sample Frame

Respondents	Target population (N)	Sample Size (n)	Percentage (%)
Head teachers	111	43	38.74
Form ones	1925	385	20.00
Dropouts	1391	385	27.68
SQASO	1	1	100

3.6 Instruments of Data Collection

In social science research, the most commonly used instruments are questionnaires, interview schedules, observational forms and standardized tests (Mugenda and Mugenda, 1999). This study being a social science research used questionnaires developed by the researcher based on literature review to gather part of the required information. The questionnaires were sent to the primary school Head teachers and form one students while interview schedules were administered to dropouts and the Sub-County Quality Assurance and Standards Officer.

3.6.1 Questionnaire for Head teachers.

A questionnaire is an instrument used to gather data, which allows measurement for and against a particular view point. A questionnaire has the ability to collect a large amount of information in a reasonably quick space of time. The head teachers' questionnaire (Appendix 3) was formulated and was administered to the 43 head teachers randomly selected for the study by the researcher. It was self made by the researcher and was tested and validated during pilot study. It had both closed-ended and open-ended questions. The closed ended questions were used because they are easy to administer and analyze therefore were economical in terms of time and money and allowed for collection of data from a large sample of head teachers faster. The open ended question; on the other hand, are easy to formulate and helped to collect a more in-depth response from the head teachers. This questionnaire sought information on the main sources of forgone earnings and causes of dropout during primary to secondary education transition.

3.6.2 Questionnaire for form one students

The form one students' questionnaire (Appendix 5) was formulated by the researcher, tested and validated during pilot study. It had both open-ended and close-ended questions. The researcher saved a lot of time in using close- ended questions since he was able to collect information from many form one students faster. The open ended questions on the other hand helped the researcher seek the in depth opinion of the students. This questionnaire mainly sought information on income of pupils at primary school.

3.6.3 Interview schedule for dropouts

Mugenda and Mugenda (2003) points out that an interview is an oral administration of a questionnaire or an interview schedule. An interview schedule is a set of questions that the inter-

viewer asks when interviewing. Interview schedule for class eight dropouts (Appendix 4) was formulated by the researcher and validated by research experts at the university. It was used to collect information on income level of pupils in primary school and possible causes of dropout during transition. Interview method was appropriate as more information could be accessed in contrast to the questionnaire, and the researcher had time to clarify issues in the process of the interview.

3.6.4 Interview schedule for Sub-county Quality Assurance and Standards Officer.

This SQASO's questionnaire (Appendix 6) was made by the researcher and validated by research experts at the university. It was used to collect information on enrollment of standard eight pupils and form ones from 2013 to 2018, causes of dropout during transition and the sources income of pupils in primary school. The researcher found it appropriate since it allowed for clarification of issues during the interview.

3.7 Piloting

Before the actual study, the data collection instruments were pre-tested to determine their relevance. Four head teachers, twelve dropouts and twelve form ones were randomly selected from the population for the exercise. The selected head teachers, dropouts and form ones did not participate in the actual study. The purpose of the pilot study was to pre test the research instruments in order to validate and ascertain their reliability.

3.8 Instruments Validity

This is the degree to which results obtained from analysis of the data actually represents the phenomenon under investigation (Orodho, 2004). To enhance face and content validity the open ended questions in the instruments were established by the supervisors. Their comments such as ambiguous question, suggestions of questions that could have been forgotten and deficiencies in structuring of the questions were used to revise the instruments. The pilot study helped to reduce errors in the data to be collected. The researcher improved the quality of the instruments by replacing vague questions with more suitable ones.

3.9 Reliability of Questionnaires.

Reliability of an instrument is the degree to which it yields consistent results or data after repeated trials. The researcher used the test re-test technique to test for reliability. The researcher

administered the research instrument twice in the two primary and two secondary piloted schools. Two weeks was allowed between the first test and the second one. After the pilot study, the researchers calculated the reliability of the Head teachers' questionnaire and form ones' questionnaire using Pearson's Product Moment Correlation Coefficient (r) formula. The head teachers' questionnaire had a coefficient of 0.790 while the form ones' questionnaire had a coefficient of 0.834.

3.10 Data Collection Procedures

The researcher obtained permission to do a research study in form of a research permit (Appendix 8) from Maseno University Ethics Review Committee (MUERC). He then made an appointment for interview with the Sub-County Quality Assurance and Standards Officer. During the interview, note taking was used to record respondent's responses exactly as expressed. The interviewer also noted the non verbal communication portrayed by the respondent and commented on the same. The researcher visited the 43 Head teachers in their respective schools and delivered to them their questionnaires. The head teachers were then given one week to fill the questionnaires after which the questionnaires were collected by the researcher. The head teachers were also requested to give contacts of pupils who completed class eight in their schools in 2017 but failed to transit to form one in 2018. The researcher visited them in their homes and work places and interviewed them. The researcher then used snow ball sampling to reach other dropouts through their connections with the ones already interviewed. The researcher also visited all the 32 public secondary schools in Mbita Sub County and administered questionnaires to form one students during their break time, after prior arrangement with the principal and form one class teacher. Twelve form one students were randomly picked from each of the 32 public secondary schools to fill the questionnaires. An extra form one student was randomly picked from the school with the highest form one enrollment in the Sub- County in order to obtain the sample size of 385 form one students. They then handed them to their class teacher and were collected by the researcher after one week.

3.11 Data Analysis Procedures

Data analysis in descriptive and correlational survey studies involves a variety of descriptive and inferential statistics. The SPSS programme for MS windows was used to analyze quantitative data. This package is known for its ability to handle large amount of data. Quantitative data

on sources of forgone earnings and pupil income were first presented using frequencies distribution tables, percentages, histograms, and bar graphs. Frequencies and percentages were used as they easily communicate the research findings to majority of readers (Gay, 1992). Frequencies easily show the number of times a response occurred or the number of subjects in a given category. Percentages were used to establish proportion of pupils transiting to secondary education between 2013 to 2017 in Mbita sub-county, after which the results were displayed on a chart. The results were then interpreted to establish the trend of transition in the sub county. There searcher also used bar graphs and histograms to compare the distribution of earnings at primary level among pupils who were in class eight in 2017 and transited to form one in 2018 to those of their counterpart dropouts. Pearson Product- Moment Correlation Coefficient(r) was then computed and interpreted to determine the relationship between number of pupils transiting to form one and their corresponding income levels while in primary school. Similarly data on number of dropouts was correlated with their corresponding income levels at primary school.

Table 3.2 Interpretation of Pearson’s Correlation Coefficients (r).

Negative (-)	Positive (+)	Strength of the relationship
0.01 – 0.30	0.01 – 0.30	Weak/low/small
0.40 – 0.60	0.40 – 0.60	Moderate/ medium
0.70 – 0.99	0.70 – 0.99	Strong/high
1.00	1.00	Perfect relationship
0.00	0.00	No relationship

Source: Adapted from Elifson, Runyon and Haber (1990); Leedy and Ormrod (2005)

The Table 3.2 was used by the researcher to interpret the results of Pearson’s correlation so as to determine the influence of forgone earnings on transition.

Qualitative data, from both interviews and questionnaires on sources of forgone earnings and causes of low transition, were read carefully paying particular attentions to comments made the researcher. The field notes were edited, coded and written based on content and then analyzed deductively. The codes were then used to generate categories, themes, concepts and specific patterns which were then explained to yield conclusive results. The results were presented

through charts and graphs from which generalizations were made on causes of low transition and the main sources of forgone earnings in Mbita sub-county.

3.12 Ethical Considerations

The following issues were considered throughout the study: The researcher ensured that all participants in the research understood the process in which they were to be engaged, including why their participation was necessary, how it would be used and how and to whom it would be reported. All data were treated confidentially. The researcher secured participants' voluntary informed consent, before research got underway(Appendix 2).Participants were also informed of their right to withdraw from the research at any time for any or no reason and that their decision would be respected. All legal requirements in relation to working with school children or vulnerable young people and adults were adhered to. The researcher protected the integrity and reputation of the research by ensuring it is conducted to the highest standards.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The purpose of the study was to determine the influence of forgone earnings on primary to secondary education transition in Mbita sub-county. This chapter presents data analysis, findings, and presentation of findings and interpretation of findings. Data was analyzed using descriptive statistics where frequencies, percentages, as well as mean guided the researcher to interpret data. Inferential statistics was also used where Pearson Product moment Correlation was used to interpret relationship between variables. This chapter is presented according to the research objectives and also including demographic information and suggested measures to mitigate low transition. The following research questions guided the study.

- i. What is the proportion of pupils transiting from primary to secondary education from 2013 to 2017 in Mbita sub-county?
- ii. What are the sources of forgone earnings in Mbita sub –county?
- iii. How does income of pupils influence primary to secondary education transition in Mbita sub-county?

Data was collected from 814 respondents consisting of 1 Sub-County Quality Assurance and Standards Officer, 43 primary school Head teachers, 385 form one students and 385 dropouts.

4.2. Demographic information

This section presents the distribution of head teachers by their gender and age bracket; head teachers' highest academic and professional qualification; their teaching experience and length of time they have worked at their current station .This information provided a basis to authenticate their responses. The head teachers were asked to indicate their gender. Their findings are in Table 4.1 on page 30.

Table 4.1 Distribution of head teachers by their gender

	Number of head teachers	Percentage
Male	29	67.4
Female	14	32.6
Total	43	100.0

Table 4.1 indicates that out of the 43 head teachers randomly selected for interview, (67.4%) were male with only 32.6 % being female. This indicates that there is gender disparity amongst head teachers in Mbita Sub County. They were also asked to indicate their age bracket. Their Response are in Table 5.

Table 4.2 Distribution of head teachers by their age bracket

	No of head teachers	Percentage
20 – 30 years	4	9.3
31 – 40 years	9	21.6
41 – 50 years	24	55.8
Over 50 years	6	14.0
Total	43	100.0

Table 4.2 indicates that, 55.8% of head teachers are aged between 41 and 50 years while only 9.3% are 30 years and below. This implies that a vast majority of head teachers interviewed were aged over 40 years. Age of head teachers is important because it would indicate the level of experience in teaching that translates into the level of responsibility in molding pupils into the right social cultural environment. The head teachers were further asked to indicate their highest professional qualifications. Their responses are presented in Table 4.3 on page 31.

Table 4.3 Head teachers' highest academic qualification

	No of head teachers	Percentage
DIP	17	39.5
BED	20	46.5
MED	6	14.0
Total	43	100.0

Table 4.3 indicates that, 39.5% of head teachers have Diploma in Education while 46.5 % have a Bachelor Degree in education as their highest education. This implies that an overwhelming majority of head teachers interviewed were degree holders. Six head teachers had masters in education. The fact that most of the head teachers are degree holders is attributed to the fact that degree holders have higher chances than their counterpart diploma holders during appointment of head teachers. The head teachers were asked to indicate their teaching experience. Their responses are shown in Table 4.4 below.

Table 4.4 Distribution of head teachers by their teaching experience

	No of head teachers	Percentage
1 -5 years	0	0.00
6 - 10years	8	18.6
11-20 years	13	30.2
Over 20 years	22	51.2
Total	43	100.0

Concerning distribution of head teachers by their teaching experience, table 4.4 indicates that 51.2% of head teachers interviewed have been in teaching for over 20 years while 30.2% have 11-20 years teaching experience. None of the head teachers had experience of below 5 years in

teaching field. This shows that most of the head teachers interviewed have a lot of experience since they have served for a longer period of time.

4.3 Transition Trends by gender in Mbita Sub-County from 2013 to 2017

The first research question to be answered was; ‘What is the proportion of pupils transiting from primary to secondary education from 2013 to 2017 in Mbita sub-county?’ The Sub-County Quality Assurance and Standards Officer was asked during the interview to provide information on standard eight and form one enrollment in Mbita sub-county between 2013 and 2017. The data was used to calculate the transition rates and the results are summarized in Figures 4.1 and 4.2.

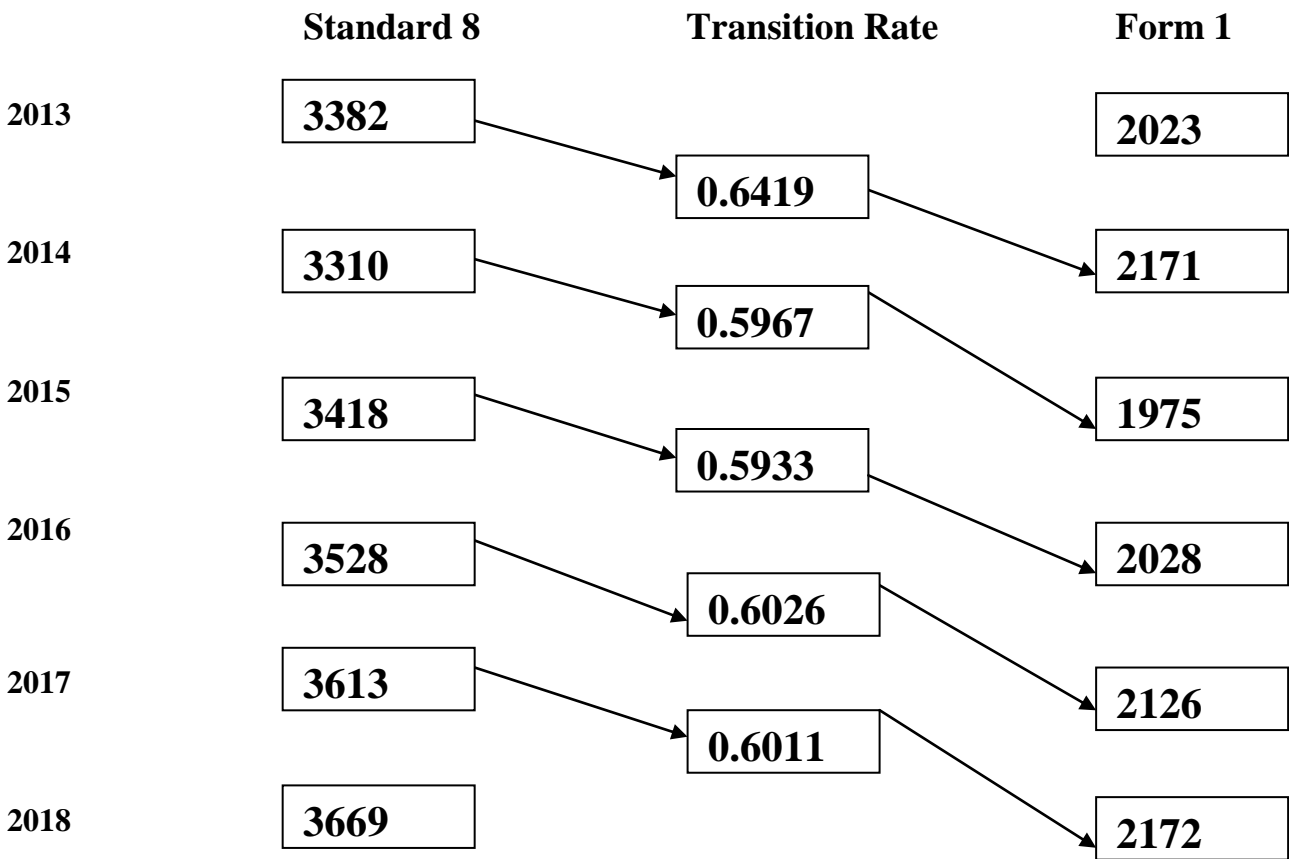


Figure 4.1 Transition rates from 2013 to 2017

Figure 4.1 shows class eight enrollment and their corresponding transition rates to form one between 2013 and 2017. The average of the transition rates in the sub county gives 0.6071, in-

dicating that 39.29% of pupils failed to join form one during the period under study. The transition rates above fall below the national rates of 64.5%,74.7%,76.1%,81.9% and 81.3% from 2012 to 2016 respectively (Economic Survey, 2017). This low transition is a waste of resources given that these children are beneficiaries of FPE and that the government is committed to pay their tuition at secondary level. These findings concur with the fact that in the past decade there has been tremendous increases in primary school access but the secondary school access remains low. In 2009, the secondary net enrollment rate was approximately 50% (World Bank, 2009), while the primary to secondary school transition rate was equally low at 55% (MOE, 2010). This is an indicator of unbalanced development in education as observed by Ebel (2009). Despite the recent reductions in secondary school fees, these fees still present a major financial obstacle.

The 2005 Kenya Integrated Household budget shows that on average secondary school expenditures accounted for approximately 55% of annual per capita household expenditures. While the increased availability of bursaries (e.g. from CDF) have provided many families with financial assistance, the pressing burden of secondary school fees prevent many students from attending secondary schools. These financial barriers especially hinder transition of females and vulnerable groups such as orphans and the poor.

Despite the gains in primary school enrolments, Kenya still has low net enrolment rates in secondary schools estimated at 50% (World Bank, 2009). This is largely due to low primary to secondary transition rate, which is estimated at 55% (MOE, 2010). Of the 655,000 pupils who completed KCPE in 2004, only 230,000 (35%) completed KCSE four years later in 2008. These figures clearly indicate that primary to secondary education transition is a major bottleneck in education system. Using data from Western Kenya, Ozier (2011) suggests that relieving this bottleneck would result in significant human capital and labour market gains in terms of shifting individuals from informal to formal employment.

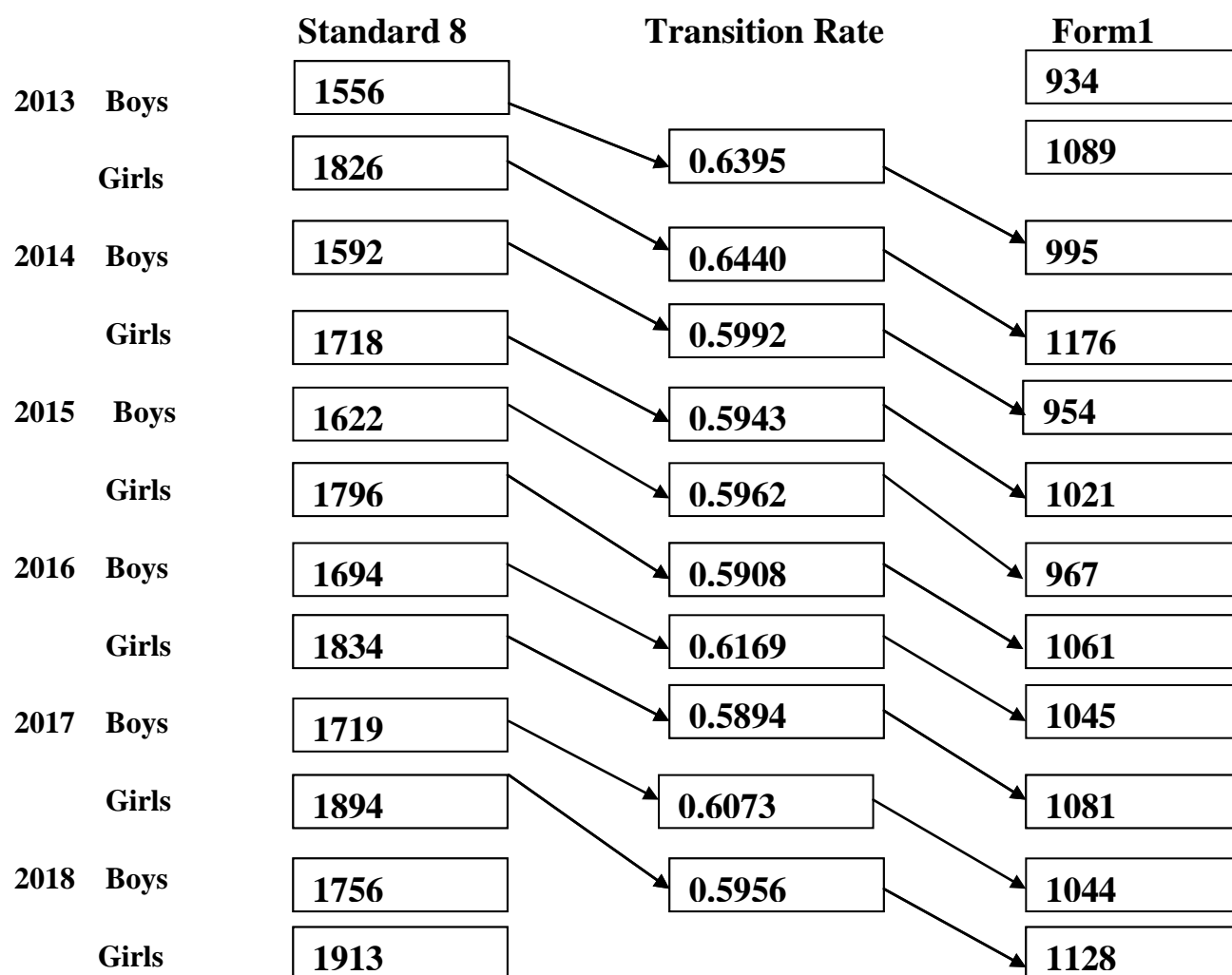


Figure 4.2 Transition Rates by Gender from 2013 to 2017

Figure 4.2 indicates that boys have high chances of joining form one in any given year than the girls. Figure 4.2 also reveals gender differences in transition rates among boys and girls. The average transition rate for girls was found to be 0.6028 which is lower by 0.009 points to that of boys 0.6118. Thus on average fewer girls (60.28%) transited to secondary school than boys (61.18%). This is despite the fact that the enrolment of girls in class eight (52.49%) was higher than boys (47.51%) for the period under study. This is a strong indication that girls require extra support to enroll in secondary schools than the boys in the sub-county. Other studies have also shown gender differences in transition rates among boys and girls (UNESCO, 2009). According to Kenya Education Profile (2014), a total of 41% of the 15-24 year olds have

not completed primary education in Kenya. It also observed that the percentage of out of school children in the country shows what proportion of children not currently participating in the education system and who are therefore missing out on the benefits of school. In Kenya 11% of children of official primary school age are out of school. Gender disparity was also recorded with approximately 13% of boys of primary school age are out of school compared to 10% of the girls of the same age .For children of primary school age in Kenya ,the biggest disparity can be seen between the poorest and the richest children.

According to MOEST (2005), gender basically means social interaction between males and females. The challenge for the head teacher is to put in place conditions which provide equal opportunities for both boys and girls. Empowerment for girls is viewed as a prerequisite for achieving effective development in schools and in the community. The disparities that arise at school are referred to as the gender issues in education and the head teacher is expected to address them in order to achieve equity.

The introduction of FPE in 2003 raised the National Gross Enrolment Ratio (GER) from 88.3% in 2002 to 102.8% (105.8% for boys and 100.5% for girls).By 2004 the GER rose further to 104.8% (108% for boys and 101.6% for girls).The implementation witnessed a widening of gender gap in favour of the boys. Gender disparities are evident in enrolment, completion, repetition, performance in KCPE and even transition to secondary level of education. According to Mworira (1993) cited in MOEST Journal (July, 2007),a girl child is expected to perform academically like a boy child .Unfortunately the girl child has so many responsibilities at their homes,i.e. domestic chores. This always deters them from doing their class work with ease hence affecting their performance and transition.

A report by UNESCO (2005) also variation in gender parity in Sub-Saharan Africa where difference between male and female transition rates is negligible except for two regions: South Africa and West and Central Africa. In South Africa girls are more likely to transit to secondary school; the transition rate is 89.5% for girls and 84.5% for boys. In West and Central Africa, the opposite can be observed; here the transition rate is 54.6% for boys and 49.4% for girls. Girls in the region are thus doubly disadvantaged. Not only do they have very low primary school enrollment rates, they are also less likely to continue their education to secondary level. (UIS, 2005).

4.4 Sources of forgone earnings in Mbita Sub-County

The second research question to be answered was; ‘What are the main sources of forgone earnings in Mbita sub -county?’ The primary school head teachers were asked to provide data on the leading source of earnings forgone by pupils while transiting from primary to secondary education. Table 4.5 shows their responses.

Table 4.5 Sources of forgone earnings

Sources of earnings forgone	No of dropouts	Percentage
Fishing	13	30.3
Peasant farming	5	11.7
Transport sector	6	14.0
Charcoal burning and selling	7	16.3
Trading on fruits and foodstuffs	4	9.3
Sand harvesting	1	2.3
Collecting and selling firewood	4	9.3
House maids/Shamba boys	2	4.8
Total	43	100%

From the above table it is evident that the major sources of forgone earnings are fishing (30.3%), charcoal burning and selling (16.3%), transport sector (14.0%) and peasant farming (11.7%) while trading on fruits and foodstuff (9.3%), collecting and selling firewood (9.3%), housemaids/shamba boys (4.8%) and sand harvesting (2.3%) form the minor sources of forgone earnings in Mbita sub-county. Fishing, transport sector and charcoal burning attracts many pupils because in these activities income is earned after a short duration ranging from a few hours to at most one week, the opportunities are readily available and the earnings are relatively higher compared to other income sources.

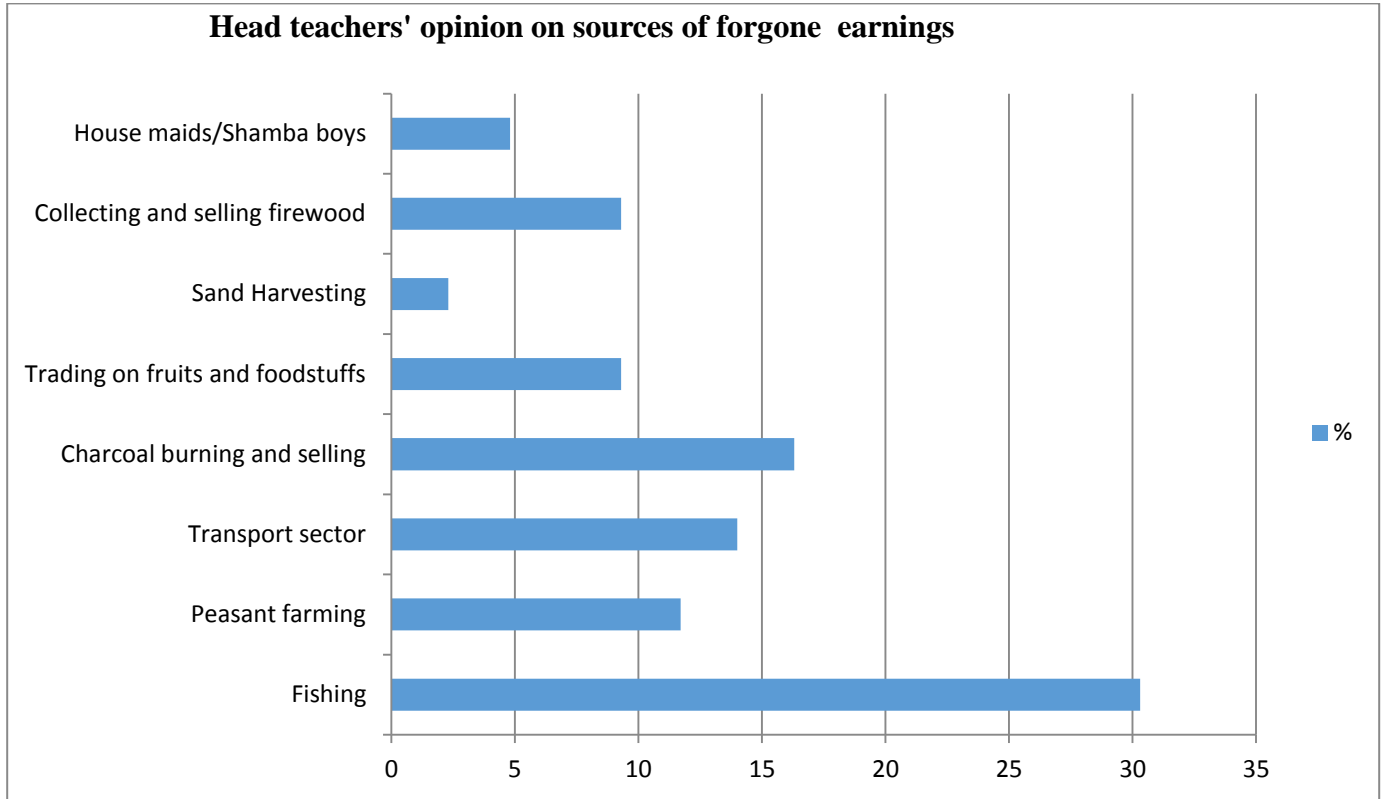


Figure 4.3 Head teachers' rating on sources of forgone earnings.

These findings are consistent to those of Bon'go (2005) on Effects of child labour on Primary school Enrolment and attendance in Suba sub-county; neighbouring Mbita sub-county .He found that children engage in various type of work. Most children engage in fishing accounting to 58 per cent, 24 percent engage in trading most of whom are girls who sell firewood, dried fish and other wares within the centres and only 10.6 per cent engage in sand harvesting. The study further revealed that some children engage in activities such as herding and domestic house helps. The class eight dropouts were asked what they were currently occupied in and the corresponding monthly income from the same. Their responses were summarized in Table 4.6 on page 38.

Table 4.6 Mean Monthly earnings from sources of forgone earnings

Sources of earnings forgone	No of dropouts	Average income
(to the nearest '000)		
Fishing	117	8,000
Peasant farming	72	5,000
Transport sector	63	9,000
Charcoal burning and selling	38	4,000
Trading on fruits and foodstuffs	34	6,000
Sand harvesting	30	6,000
Collecting and selling firewood	18	4,000
House maids/Shamba boys	13	3,000
Average		Kshs 5,625

The results in Table 4.6 indicate that the most paying occupations are transport (kshs.9, 000) and fishing (kshs 8,000) sectors while employment as maids/shamba boys (kshs 3,000) and collecting and selling firewood (kshs 4,000) attract the least average income .The table further shows that fishing industry employs the largest number of dropouts (117) followed by peasant farming (72) and transport sector (63) which is consistent with the response from head teachers. On average class eight dropouts earn kshs 5,625 per month. Figure 4.4, graphically illustrates the above findings on where dropouts are currently employed and the average monthly income from the same. The height of the bars show the average monthly earnings in Kenya shillings per given source of forgone earnings.

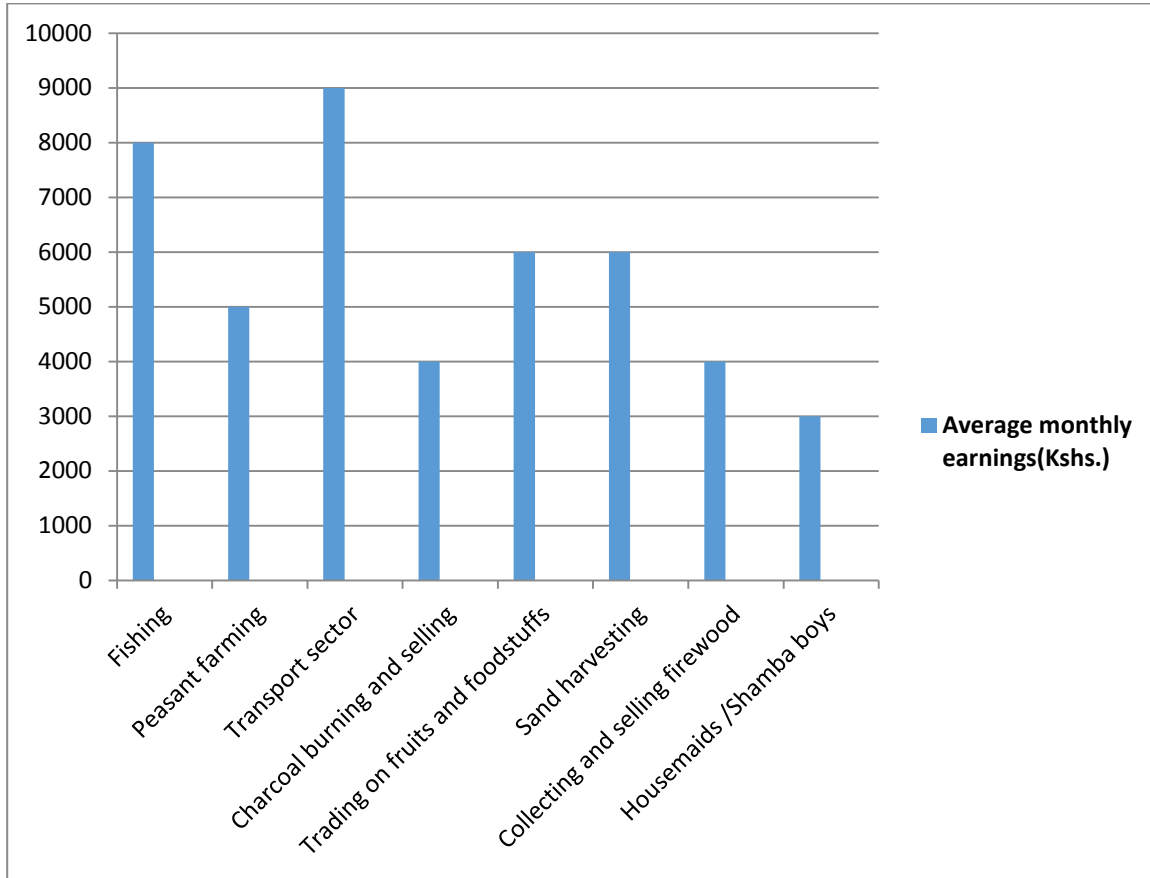


Figure 4.4 Dropouts’ opinion on their average monthly earnings.

In agreement with the above findings, Suba District Development plan (2008-2012) further observes that, apart from agriculture and fisheries being the main economic activities, the district also has potential for tourism and wildlife due to the untapped resources that could be used to establish a vibrant tourism industry. These include the Ruma National Park with rare species of roan antelope and other forms of impressive array of physical features with high aesthetic value including 16 islands, hills, water views and waterfronts. Other economic activities attracting the youth in the sub-county include, transport industry which include matatu, motor bike and water transport businesses, jua-kali Sector including sand harvesting, building and construction and many forms of small scale businesses. The pupils at primary level however, rarely access employment in the tourism industry since they lack academic and professional papers which are requirements for employment in this formal sector.

4.5 Influence of income of pupils on transition in Mbita Sub County

The third research question to be answered was; ‘ How does income of pupils influence transition in Mbita sub-county’. The dropouts and form one students were asked questions on the level of their earnings while in primary school. The table 4.7 below shows their responses.

Table 4.7 Descriptive statistics for income of pupils and transition.

Earnings				
(Kenya Shillings)	(to the nearest ‘000s)Frequency		Percentage (%)	
	Dropouts	Students	Dropouts	Students
Absence of Earnings (0)	0	164	0.0	42.6
1,000	0	120	0.0	31.2
2,000	3	39	0.8	10.1
3,000	6	15	1.6	3.9
4,000	17	21	4.4	5.4
5,000	59	10	15.3	2.6
6,000	39	6	10.1	1.6
7,000	32	7	8.3	1.8
8,000	116	3	30.1	0.8
9,000	88	0	22.9	0.0
10,000	25	0	6.5	0.0
Total	385	385	100	100

The data in Table 4.7 shows that most of the dropouts interviewed (93.2 %), earned abovekshs.4,000 per month before dropping out of primary school while only 12.2% of the

form ones earned kshs.4,000 and above before transition to secondary education. Majority of form one students interviewed (42.6%) had no earnings during their primary education. It is also clearly evident that only a few form one students (6.8%) earned above kshs.4, 000, while the number of dropouts who earned below kshs 4,000 at primary level were also very low at 2.4%. The same findings are graphically illustrated in Figure 4.5below. The height of the bars indicate the number of dropouts and students per given income level in Kenya shillings.

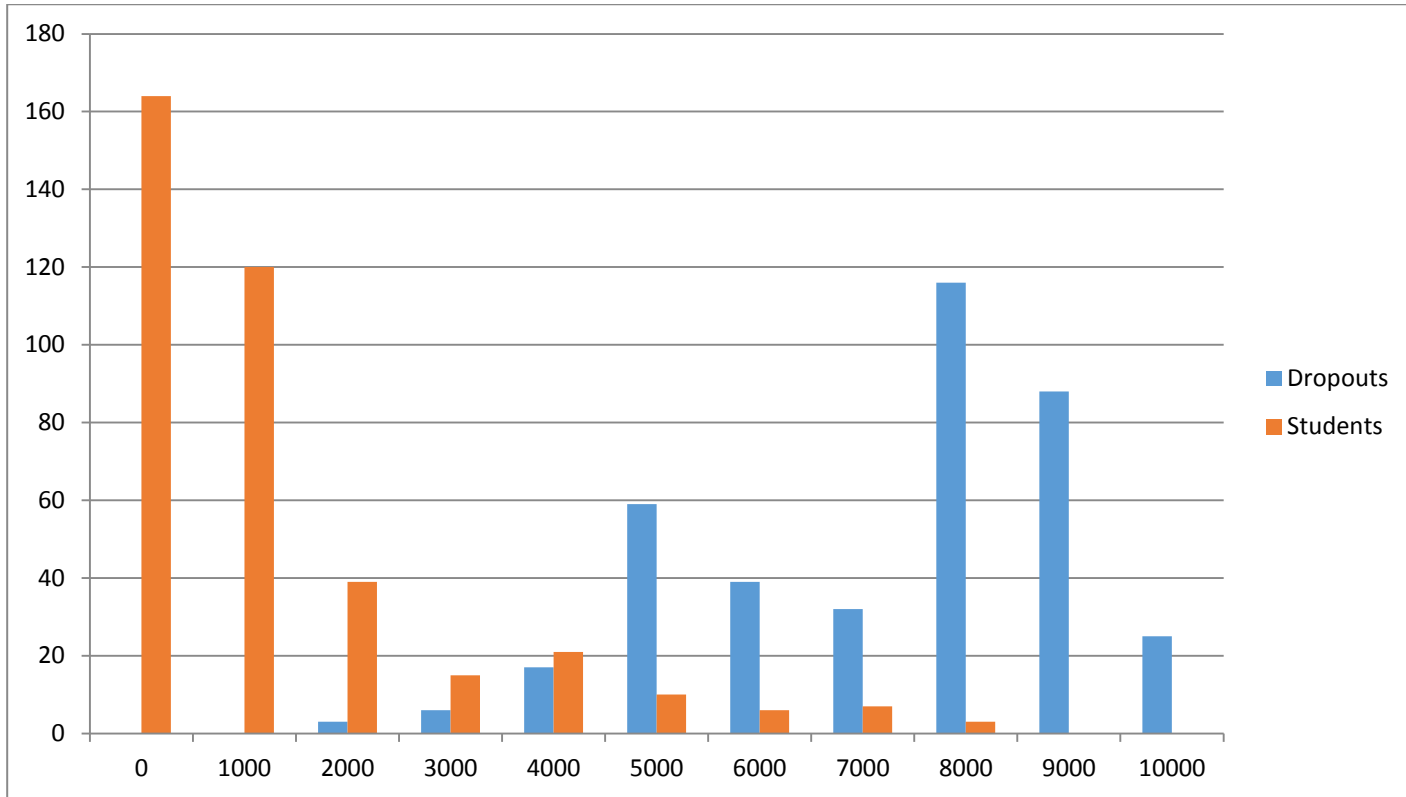


Figure 4.5 Income levels among form one students and dropouts.

From figure 4.5, it can be observed that the number of dropouts increase as forgone earnings rise from a minimum of kshs 1,000 to a maximum of kshs.10,000 while the number of students transiting to form one decrease with increase in forgone earnings. This gives evidence that forgone earnings is inversely proportional to number of pupils transiting to secondary education provided intervening variables like teenage pregnancies, early marriages, parental attitudes and extra levies are kept constant.

Pearson's r was further used to establish the strength and nature of the relationship between forgone earnings and transition to secondary education. The results were shown in Tables 4.8

and 4.9 .From Table 4.8; it can be observed that there is a negative and strong relationship between forgone earnings and transition to secondary education. The relationship was significant as signified by the calculated p-value of 0.004 which was less than the set 0.05.This means that an increase in forgone earnings would decrease students’ transition from primary to secondary school. From table 4.9, it can be observed that there was a positive and strong relationship between forgone earnings and dropouts. The relationship was significant as signified by the calculated p-value of 0.009 which is less than the set p-value of 0.05.This means that an increase in forgone earnings increases dropouts during transition to secondary education.

Table 4.8 Correlation between Forgone Earnings and transition of pupils

		Student transition	Forgone Earnings
Pearson’s correlation		1	-0.789
Forgone earnings	Sig. (2-tailed)		0.004
	N	11	11

Correlation is significant at the 0.05level (2-tailed)

Table 4.9 Correlation between Forgone Earnings and Dropouts

		Dropouts	Forgone Earnings
Pearson’s correlation		1	0.738
Forgone earnings	Sig.(2-tailed)		0.009
	N	11	11

Correlation is significant at the 0.05 level (2-tailed)

The above findings are in agreement with studies such as Colclough with Lewin (1993) and Colclough, Al-Samarrai, Rose and Tembon (2003) which confirm that the opportunity costs of school attendance are significant barriers to primary school participation for many families particularly the poorest households, as the value of earnings or domestic labour forgone is often

much higher than the direct costs of schooling. Recent studies of the opportunity costs of attending primary school in several African Countries (Reported in Colclough et al., 2003) estimate the monetary value of children’s time not only in terms of forgone earnings, for example petty trade ,but also the loss of other forms of family income such as unpaid agricultural work and domestic chores and child care. When all these are taken into account, the opportunity cost of attending school is substantial and often higher for girls than boys, as the former are expected to spend time looking after younger children. This explains why the average transition rate for girls (60.28%) was lower than that of their counterpart boys at (61.18%) in Mbita sub county during the period of study from 2013 to 2017. More recently, increasing emphasis on the target of achieving Education for All (EFA) has led to renewed efforts to estimate and analyze the opportunity cost of pupils’ time and its effects on primary participation rates, particularly in the case of girls, who represent well over half of all out-of school children (UNESCO, 2002).

4.6 Causes of low primary to secondary education transition in Mbita sub county.

The reviewed literature revealed that there are apart from forgone earnings, there are other variables that directly influence transition from primary to secondary education. It was therefore necessary to seek the respondents’ opinion on the extent to which each variable influence transition. A sample of 43 Primary school Head Teachers were therefore asked questions on the main causes of dropouts during primary to secondary education transition in order to help control for the intervening variables .Their responses were as shown in Table 4.10 below.

Table 4.10 Causes of Low transition in Mbita sub county.

Causes of Low transition	No of head teachers	Percentage
Lack of fees	22	51.0
Forgone earnings	8	18.6
Poor attitude of parents	6	14.0
Poor performance	1	2.3
Teenage Pregnancies	2	4.7
Early Marriages	4	9.4
Total	43	100

From above it can be observed that lack of fees (51%) and earnings forgone by primary school pupils (18.6%) are the main causes of low primary to secondary education transition in Mbita sub-county. This reveals that monetary factor is the greatest contributor to low transition rates from primary to secondary school in the sub county. This may be associated to high poverty levels in the sub county. According to constituency rating on poverty index the sub-county was rated among the poorest in the country (GOK, 2016). This indicates the need for the government to enhance poverty eradication strategies in order to address the problem of low transition from primary to secondary in the sub-county. The two factors have a direct relationship with cost of education as observed by Ayodo (1991) who argues that the most important factor which influences the quantity of demand for a given level education is the total cost of education. This total cost includes fees and other direct costs such as expenditure on books or materials, uniform and meals as well as the indirect cost component: opportunity cost. The total cost influences to a great extent the level of demand from individuals. If the costs are so high that only the rich can afford them, the quantity of demand for education decreases. Conversely, if the cost decreases and becomes affordable by many, then the quantity of demand increases.

A similar observation was made in a study by Woodhall (2004), who argues that although the words 'cost of education' are often loosely equated with expenditure on education, for purposes of cost-benefit analysis of an investment, it is necessary to define costs in terms of the total opportunity cost of the project; that is, all real resources that are used in the project. These are all called the opportunity cost, as each investment represents the sacrifice of the alternative opportunities to use the resources, either for present consumption or for some other form of investment. Thus money expenditures are significant only because they represent purchase of teachers' labour, school buildings and equipment or other goods and services, which have alternative uses. At the same time the education system uses up other resources with alternative uses, even though these are not reflected in the normal expenditure on education. The most obvious example is the time of pupils and students themselves, who deprive the labour market of their services by choosing to continue their education. This represents a loss of productive capacity and thus loss of current output for the economy as a whole as well as a loss of earnings for the individual. This opportunity of current output or income is forgone in the expectation that education will increase the productive capacity of students in the future output. However, this loss of present income must be counted as one of the opportunity costs of education as it does repre-

sent a sacrifice of real resources, even though the time of students is not reflected in actual expenditure and thus appears at first sight to be 'free' good. Similarly, other apparently free goods or service used in the educational process do, in fact represent a sacrifice of alternative opportunities. Thus measurement of costs of education for the purposes of cost benefit analysis involves more than a simple calculation of money expenditures. It also involves the total cost of the investment in education in terms of alternative opportunities forgone either by society as a whole or by the private individual.

The results also indicate low percentage of dropouts due to poor parental attitude (14%) and early marriages (9.4%) possibly because these are cultural factors which take long to change. It can be seen that the policy on automatic transition regardless of performance and affirmative action that allows pregnant girls to be in school until delivery has almost succeeded in mitigating for dropout cases due to poor performance (2.3%) and teenage pregnancies (4.7%). The problem of early marriage seems also to dog the sub county despite the enactment of the children's Act in 2001. This has been a major problem also associated with poverty where parents marry off their daughters to gain wealth. The factor is the fourth rated contributor (9.4%) to low transition rate. Other studies (UNICEF, 2001) have also cited earlier marriages as a major contributor to low transition rates in school. UNICEF (2001) argues that where poverty is severe, a young girl may be regarded as an economic burden where one less daughter is one less mouth to feed. The above findings are illustrated in the pie-chart below.

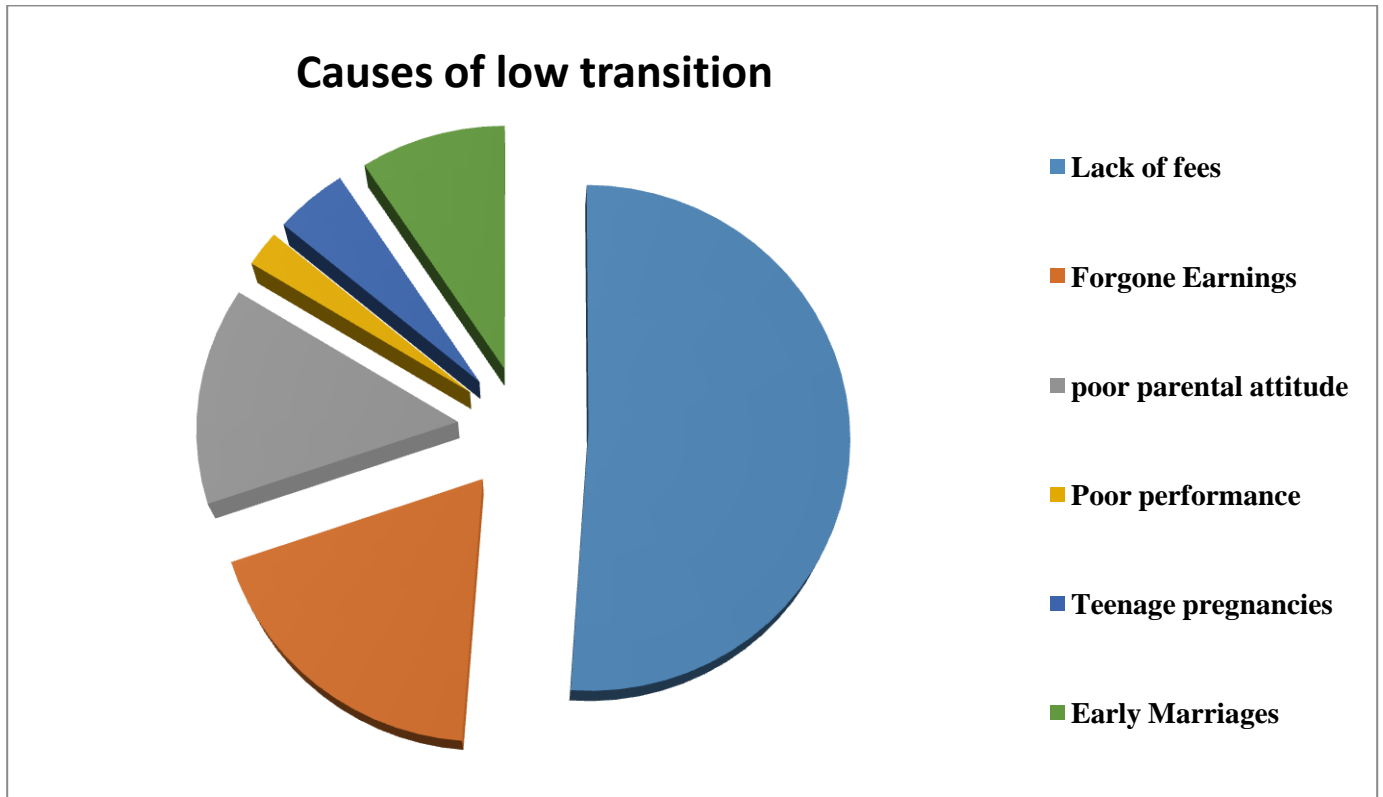


Figure 4.6 Causes of low transition in Mbita sub county.

In agreement with the findings of this study, Werunga, Musera and Sindabi (2011) observed that a good number of parents found that the opportunity cost of education was too high and hence engaged their daughters in income generating activities such as cooking and other domestic chores (20.4%) as well as being hired by others as house help (13.0%). Other money-making activities children engage in included farming (24.6%), Selling in market centres (21.0%), and hawking (14.0%). This to parents contributed more towards raising the family’s standard of living as compared to schooling of the girls. According to the World Bank (2008) study in Eritrea, girls are given various household chores as compared to boys, which often prevent them from accessing and participating in secondary education. A project of buying donkeys to help girls save on their energy and time for secondary school studies was then started in Eritrea.

According to the World Bank (2005), financing secondary education has been a big challenge to both the governments and households in Africa. TRANSE Group (2005) observes that household burden in financing secondary education is high. It further notes that in Kenya,

whereas households meet only 20% of primary and 8% of university education costs, the government shoulder 60% of secondary education costs. Thus, cost is a key barrier to transitioning to secondary school for the poor, who form the majority in sub-Saharan Africa. This is consistent with the findings of the study where head teachers' rated lack of funds for extra school levies (transport, extra tuition, meals and school uniforms among others) as the main reason for low transition to secondary schools. This has been a problem before and after the introduction of free secondary tuition where the government has continued to fail to address the problem of school levies secondary schools charge. Forgone earnings constitute indirect cost of education, the opportunity cost further raising the cost of secondary education to levels deemed expensive for the poor families hence they opt to dropout and continue earning income to their families. A study by Warimi and Waiyego (2016) on Learners' transition rates from primary to secondary schools in Kenya, similarly established that the major factors that influenced pupils to fail were poverty, lack of parental support and indiscipline. Other factors mentioned included, child labour, lack of role models in the society and peer pressure.

In line with the findings of this study, Mbiti (2007) argues that family is the first medium, for transmitting culture to the children. The family is a whole world for all young children and its members basically teach a child what matters in life. Desires of achievement and motivations to excel in school are passed on from parent to child. The behaviours that adults encourage or discourage and their provision of discipline affect the child's academic performance. Many children do well in school because their home and family environment have provided them with good preparation for succeeding. Others do poorly because they have not been well prepared and schools have not succeeded to mitigate this disadvantage. This explains why parental attitudes still has a significant influence (14%) on transition.

4.7 Measures to mitigate low transition in Mbita Sub County

The head teachers form one students, dropouts and the Sub-county Quality Assurance and Standards Officer were asked to give suggestions on measures to help mitigate on low transition in Mbita Sub County. Their suggestions were read and summarized in accordance to the themes below. They observed that since the Kenyan education system insists on a free and compulsory primary education as well as a subsidized secondary education, the government should:

- i) Instigate effective machineries to ensure that no learner is blocked from transiting to secondary school because of fees and other levies.
- ii) School management committees should ensure an integrated programme that encourages parents/guardians to closely monitor the performance of their children in schools
- iii) Ministry of education should develop and enhance firm policies that protect learners from negative social cultural factors including child labour, learners' pregnancy and socio-cultural mistreatments.
- iv) There should be well enhanced and effective curriculum programmes that enhance smooth learning for children with difficulties. The curriculum should also be integrated with life skill programmes that are part of early child developments. This would enhance transition from public primary schools.
- v) The government should increase the FTSE allocation to include uniforms and meals and medical care.
- vi) Secondary schools should enhance income generating activities that provide work study programmes to needy students.
- iv) More emphasis should put on talents as opposed to learners academic abilities to make secondary schools more learners friendly even to low achievers.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION.

5.1 Introduction

This chapter presents the summary of the study, conclusions, recommendations as well as suggestions for further studies.

5.2 Summary of the study

The purpose of the study was to determine the influence of forgone earnings on primary to secondary education transition in Mbita sub-county. Specifically, the study was to establish the proportion of pupils transiting from primary to secondary education between 2013 to 2017, establish the main sources of forgone earnings, determine the influence of income of pupils on primary to secondary education transition as well as to suggest possible ways of curbing the problem of low transition in the sub-county. The study employed a descriptive survey and correlation research designs where the target population consisted of all the 111 head teachers of the public primary schools in Mbita sub-county, 1391 dropouts, 1925 form ones students and 1 Sub-County Quality Assurance and Standards Officer. Simple random sampling method was used to select 43 head teachers and 385 form one students and 385 dropouts. The researcher used questionnaires and interview schedule as the instrument for the study. The study had two sets of questionnaires, which were used to collect data from primary school head teachers and form one student and interview schedule to dropouts and SQASO.

After getting introductory letter from the university (Appendix 1) and research permit (Appendix 8) from Maseno University Ethics Review Committee (MUERC), the researcher visited the Mbita sub-county Director's office and requested for an introductory letter to the target respondents. Qualitative data obtained from personal interviews and open-ended questions were analyzed qualitatively through content analysis and organized into themes and patterns corresponding to the research questions. Descriptive statistics such as frequency distribution, means and percentages were run on all quantitative data. Inferential statistics, particularly Pearson product moment correlation coefficient was also used to analyze the quantitative data. The findings of the study were summarized as per the three objectives of the study.

5.2.1 Proportion of pupils transiting to secondary school between 2013 and 2017

From the findings, an average of 39.29% of the pupils enrolled in standard eight failed to transit to secondary education between 2013 and 2017. This constitutes to 60.71% overall pupil transition rate, with girls having 60.28%, slightly lower than that of their counterpart boys at 61.18%. This is because the intervening variables, early marriages, teenage pregnancies and poor parental attitudes mainly affect the girls, while independent variable forgone earnings affects both gender. The study indicates that the main cause of low transition is high cost of secondary education forcing many pupils from low income families to fail to go to secondary school due to lack of fees. This cost of education is raised further to unbearable level by the fact that those pupils from low income backgrounds engage in income generating activities to boost family income and assist in meeting basic needs. During transition to secondary education these pupils have to make a difficult choice of having to forgo their earnings in order to join secondary school. The more the earnings to be forgone the higher the opportunity cost of secondary education and this makes the affected pupils to choose to continue with their earnings rather than join an expensive level of education. Therefore presence of forgone earnings is the reason for continued high cost of secondary education even in the era of FTSE.

5.2.2 Sources of forgone earnings in Mbita sub-county

The researcher found that the main sources of forgone earnings are Fishing (30.3%), Charcoal burning and selling (16.3%), Transport sector (14.0%) and peasant farming (11.7%) while Trading on fruits and foodstuff (9.3%), Collecting and selling firewood (9.3%), Housemaids/Shamba boys (4.8%) and Sand Harvesting (2.3%) form the minor sources of forgone earnings in Mbita sub-county. Fishing is topping the list since Lake Victoria offers ready job opportunities in both fishing and marketing of fish and fish products and the earnings are in most cases realized daily and making the sector quite attractive to young people. Charcoal burning and peasant farming are the next sources that attract quite a good number of pupils and in most cases they assist their parents who are employed in these activities. Most pupils also find it easy to get employment as pikipiki riders and earn money over a short period of time. The other sources of income like collecting and selling firewood, sand harvesting and employment as shamba boy/housemaids do not attract many pupils due to the lower earnings from them.

5.2.3 Influence of income of pupils on transition in Mbita sub-county

The results from the Pearson's correlation, showed a correlation coefficient (r) of -0.789 , revealing a strong negative relationship between forgone earnings and transition from primary to secondary education. The relationship was significant as signified by the calculated p -value of 0.004 which was less than the set 0.05 . This means the number of pupils transiting from primary to secondary level of education would increase with decrease in the income of pupils at primary level. The income of pupils at primary level is an opportunity cost which raises cost of secondary education making it difficult for pupils to afford, especially those from poor families. Therefore, they decide to continue earning income instead of joining an expensive education.

5.4 Conclusions

This study on influence of forgone earnings on primary to secondary education in Mbita sub-county was prompted by the fact that despite the implementation of FTSE in Kenya since 2008, the number of pupils who enroll in form one was not matching with the available chances. This was mainly due to the low primary to secondary education transition. From the findings of the study the following conclusions were made based on the objectives of the study.

The study indicates an average transition rate of 60.71% , meaning 39.29% of pupils still failed to transit to secondary education during the period of study. The findings further revealed gender differences in transition rates among boys and girls. The average transition rate for girls was found to be 0.6028 which is lower by 0.009 points compared to that of boys at 0.6118 . Thus on average fewer girls (60.28%) transited to secondary school than boys (61.18%). This is despite the fact that the enrolment of girls in class eight (52.49%) was higher than boys (47.51%) for the period under study. Many pupils majority being girls are still missing out on secondary education due to failure to transit from primary to secondary education. This reveals inefficiency in provision of secondary and therefore wastage of education resources meant to educate these dropouts. Though there is a slight increase in transition rate over the years due to improvements in the implementation of FTSE programme, 100% transition rate is far from being realized. It is therefore necessary to address the factors, not covered by FTSE policies that still hinder pupil transition.

The study also concluded that some parents prefer their children, mostly to work in fishing industry, farms, transport sector and burn/sell charcoal instead of transiting to secondary school. This is because they feel that engaging in economic activities is more rewarding than schooling. The researcher found out that most parents in the sub-county have large families and are also subsistence farmers, thus, what is produced in the farms is largely used for consumption in the household with no surplus remaining to help finance the education of their children. The expenditure on educating the children is thus a big strain to the household incomes. Children form an important 'stock' to the household in terms of labour and income they produce towards the household needs. By engaging in money making activities and providing household labour, the direct costs spent on children in education normally involves difficult choices on the parents hence for peasant farmers and fishermen, there are high opportunity costs to be borne in terms of the labour not done and the income not earned envisaged against the high direct educational costs whose returns are not immediate as compared to the needs of the household. Most secondary schools did not offer an alternative to those willing but could not effectively demand education such that there were large numbers of pupils out of school simply because their parents could not meet the costs of maintaining them in school due to lack of finances. At the same time, lack of finance was the major problem facing the secondary schools due to low economic endowment of the surrounding community who in the real sense are supposed to maintain these local schools. The cost of secondary education therefore still remains high for the poor families despite FTSE funding and government bursaries, so long as the pupils have not found a way of meeting the cost sacrificed due to forgone earnings. This explains why primary to secondary education transition rates have almost stagnated at a low value of about 60% from 2013 to 2017. These financial barriers especially hinder transition of females and vulnerable groups such as orphans and the poor.

5.5 Recommendations.

The study recommends the following based on the findings of the study.

1. Ministry of education should organize stakeholders' sensitization meetings to educate the public on the need to give equal chances for both boys and girls to continue with secondary education. The law should also be enforced on those parents who marry off their children at a tender age in the sub-county.

2. Secondary school Boards of Management should enhance income generating activities to lower cost of running secondary schools and also provide work study programmes as alternative sources of income for needy students.

3. The government should instigate effective machineries to mitigate the persistent high cost of secondary education. This should include giving incentives to parents in terms of food stipends to parents and additional bursary allocations to lower the cost of settling a child in secondary school. FTSE fund should also be increased to cater for costs currently borne by parents such as student uniforms and meals. Long term strategy would be to initiate poverty eradication projects that will empower the locals financially.

5.6 Suggestions for further study.

Given the scope and limitations of this study, the researcher recommends the following as areas for further studies:

- i. A comparative study should be carried out within the context of pre-schools in order to draw comprehensive policy recommendations on transition from both the pre-school and primary school.
- ii. A replica of the study should be carried out incorporating more variables that possibly influence transition from primary to secondary schools. These variables also include institutional factors as well as environmental factors.
- iii. An analysis of the actual cost of secondary education.
- iv. A study to establish whether all secondary schools give equal chances to class eight graduates to join secondary school.
- v. A study on the influence of forgone earnings on retention rate in secondary schools.

REFERENCES

- Abagi O & Oanda O.I (2014). Fifty years of Education Development in Kenya. Nairobi: Jomo Kenyatta Foundation.
- Akinikunle H.O (1977). Career and Education aspirations of secondary school students in Nigeria. 'An analysis of selected career decision making variable in relation to education provision and man power.' Unpublished Doctoral dissertation. North Illinois University, Michigan.
- Al – Sammaria S. (2003). *Can Free Primary Education Meet the Needs of the Poor? Evidence from Malawi*. Int. J. Educ. Dev., 23: 501-516.
- Alarya V., Corniauxband C. & Gautierc D. (2011) Livestock, a Contribution to Poverty.
- Alex A.A (2004). *A Report on Universal Primary Education by African Network Campaign on Education For All*. GB: Oxfam. Alleviation: How to Measure It? World Development, forthcoming.
- Amunga J., Amadalo M.M & Maiyo J.K (2010). The influence of Schools' Performance Index Enrolment in Kakamega South District Secondary Schools. *Kenya Journal of Education Planning, Economics and Management* Vol. 2 ISSN 2074-5400 (pg. 76).
- Andersson D. A. (2012a). Seasonality and farm/non-farm interactions in Western Kenya.
- Andersson D. A. (2012b). African re-agrarianization? Accumulation or Pro-poor Agricultural Countries in a Globalizing World: *A Comparative Analysis of Rural Change. Final Report of the Rural Structural Program*, Revised Version. Washington, DC: World Bank *.Development*, 29(3):497-508.
- Aroni M.R (2013). Effects of Subsidized Secondary Education on Access to Public Secondary Schools in Nyamache Division, Kisii County, Kenya. Unpublished M.ED Research Project, Kenyatta University.
- Ayodo T.M.O (1991). Educational Economics.
- Ebel B.A (2009). Repetition and Retention. Grafton company .Illinois.

- Elimu News (December, 2007).A Newsletter of the Ministry of Education; Government printers, Nairobi,Kenya.
- Barrett C. B. & E. Mutambatsere (2005). "Agricultural markets in Developing Countries". In Blume L.E. and S. N. Durlauf (eds.), *The New Palgrave Dictionary of Economics*, 2nd Edition. London: Palgrave Macmillan.
- Barrett C. B., M. Bezuneh, D. C. Clay and T. Reardon (2008). *Heterogeneous Constraints*, Barrett C.B., Reardon, T., & Webb P. (2001). "Non-agricultural income diversification and
- Bold T, Kimenyi M, Mwabu G.X & Sandefur J. (2010). *Does Abolishing Fees Reduce School*.working paper WPS /2011-04.www.case.ox.uk.
- Bon'go O.D (2005): The effect of Child Labour on Primary School Enrolment and attendance :The case of Mfangano Division ,Suba District.
- Chabari E.B (2010).Challenges Facing Effective Implementation of Free Secondary Education in Public Secondary Schools in Kangundo District, Kenya. Unpublished Master's Thesis. Chuka University College.
- Chamberlin, J. & T.S. Jayne. (2012). Unpacking the Meaning of 'Market Access': Evidence
- Children's Bill, No.8 of 2001.*National Council for Law Reporting with the Authority of the Attorney General*. Revised Edition 2007 (2001) pg. 153
- Djurfeldt G., Larsson R., Holmquist B., Jirström M.&Andersson A. (2011). African farmdynamics and the sub-continental food crisis – the case of maize. *Food Economics –Acta Agriculturae Scandinavica*, Section C, 5:2, 75-91
- Elifson K.W, Runyon R.P & Haber A. (1990). *Fundamental of Social Statistics*. MC GrawHill.New York.
- Escobal J. (2001). The determinants of Non-farm Income Diversification in Rural Peru. *World from Rural Kenya*.
- Forajalla S.B (1993).Educational planning for Development.

GIGA (2007).Securing Household Income among Small-scale Farmers in Kakamega District:

First Homa Bay County Integrated Development Plan 2013-2017

Gogo J., Ayodo T.M.O & Othuon L.A (2010).The Impact of Cost Sharing Strategy on Access, Equity and Equality of Secondary Education in Kenya.

Gogo J.O (2003). *Impact of Cost Sharing Strategy on Access, Equity and Quality of Secondary Education: A Case Study of Rachuonyo District*. Unpublished M.Ed thesis, Maseno University growth? *World Development*,

<http://dx.doi.org/10.1016/j.worlddev.2012.06.013>

Holla,Alaka,Kremer (2008).Pricing and Access: Lessons from Randomized Evaluation in Education and Health. ‘What works in Development; Thinking big and thinking small, eds.William Easterly and Jessica cohen,Washington D.C; Brookings Institution press.

Homa Bay, EMIS (2012). Annual Educational Assessment and Evaluation Reports. Unpublished Journal of education. Homa-bay District, Kenya. Educ. Res 2012 Vol. 2(12): 1821-183

Jeynes &William H. (2002).Examining the effects of parental absence on the academic achievement of adolescents: the challenge of controlling for family income. *Journal of Family and Economic Issues* 23(2).*Journal of Modern African Studies*, 50(1): 1-23

Kandker S.R. & Koolwal G.B. (2010) How Infrastructural and Financial Institutions Affect

Karagu M.A, Oanda O.I& Sifuna D.N (2006). Themes in the study of the Foundations of Education. Nairobi; Jomo Kenyatta Foundation.

Kariuki P.J(2006).Gender on Education and occupational aspiration. Unpublished PhD Thesis.

- Karimi J.K & Waiyego N.B (2016) .Learners' transition rates from primary to secondary in Kenya.International Journal of Humanities, Social Sciences and Education (IJH SSE).
- Kenya Educational Planning, Economics Management. (June, 2010). *Journal of Educational Administration and Management*. Vol. 1(1): 001-006.
- KIHBS(2006).kenya integrated household budget survey.
- Kimitei J.W (2010). Determinants of Transition Rate to Secondary Education among Primary School Girls in Kenya: A Case of Keiyo District. Unpublished M.Phil Thesis. Moi University.
- Koff D.R (1969).Education and Employment of Kenya Primary school Graduates. London.
- Kothari C. (2009). Research Methodology: Methods and Techniques New Delhi: New Age International.Legget (2001). Continuity and Changes in Primary Education in the Pastoral Districts of Kenya: A Case Study of Wajir District.
- Kothari C.R& G. Garg (2014). Research methodology: Methods and Techniques. Third Edition
- Krejcie R.V & Morgan D. (1970). Determining Sample Size for Research Activities, *Journal of Educational and Psychological Measurement*, Vol. 30, No 3. Quoted in Mulusa, I. (1988). *Evaluating Education and Community Development Programmes*. Nairobi: Deutsche Stiftung for Internationale Entwicklung and College of Adult and Distance Education, University of Nairobi.
- Krishna A. & Shari A. (2011) The Irrelevance of National Strategies? Rural Poverty
- Lewin K.M (2008). *Strategies for Sustainable Financing of Secondary Education in Sub-Saharan Africa*. Washington D.C: World Bank.
- Losch B., S. Freguingresh & E. White. (2011). Rural Transformation and Late Developing
- Mbai Q.A. (2004). Dropout among students from secondary schools in Homa bay District. Unpublished M.Ed thesis University of Nairobi.

- Mbita Sub-County (2014). *Child Enrollment Returns*. Unpublished.
- Mbiti D.M.(2007). *Foundation of schools Administration*, Oxford University Press.Nairobi,Kenya.
- Ministry of Education (2004). *Education in Kenya: Challenges' and Policy Responses. Paper Prepared for the presentation at the Council on Foreign Relations Washington D.C.*
- Ministry of Education (2007). *Report of the Task Force on Affordable Secondary Education. Nairobi; Shrend Pub.LTD.*
- Ministry of Education (2009). *Education Facts and Figures. EMIS; Ministry of Education, Kenya.*
- Ministry of Education (2010). *Educational Statistical Booklet 2003-2007, Government Printers, Nairobi, Kenya.*
- Ministry of Education (2012). *Task Force on the Re-Alignment of the Education Sector to the Constitution of Kenya 2010. Nairobi; Government printer.*
- Ministry of Education Science and Technology (2005). *Challenges of Implementing FPE .Government Printers, Nairobi ,Kenya.*
- Mugenda O.M, Mugenda A.G (2003). *Research Methods: Quantitative and qualitative approaches, Nairobi: lab graphics services Ltd publishers.*
- Munda S.W & Odebero S. (2014). *The Influence of Education Costs on Students' Academic Performance in Kenya: An Empirical study of Bungoma County Secondary Schools. Asian J. of Edu. Res. Vol. 2(1):2014.*
- Munda S.W, Tanui E.K & Kaberia L. (2010). *Relationship between Selected Education Facilities and students' Academic Performance in Secondary Schools in Bungoma District, Kenya. EMSK Journal vol.2 ISSN 2074- 5400 (pg. 97)*

- Mworia R.N. (1993) .Performance in Kenya Certificate of Primary Education (KCPE).A case study of Central Imenti District.Nairobi, Unpublished research paper .Kenyatta University.
- Ndolo A.M, Simatwa E.M.W & Ayodo T.M.O (2011). Effects of School Based Investments on access and financing of Secondary Education in
- Ndolo M.A (2011). Effects of School Based Investments on Access and Financing of Secondary Education in Homa Bay District, Kenya. Unpublished M.ED Thesis, Maseno University.New Age International Publishers, New Delhi.
- Ngeno C.V & Simatwa E.M.W (2015a). Influence of Free Policy on Gender Parity Index Repetition, Dropout, Wastage and Students Academic Achievement in Kericho County. Unpublished PhD Thesis, Maseno University.
- Ngeno C.V & Simatwa E.M.W (2015b). Influence of Free Secondary Education Policy on Dropout Rates in Kenya: A case Study of Kericho County. *Greener J. of Edu. Res.* 2015 Vol. 5(4): 152-175.
- Ngeno C.V, Simatwa E.M.W & Ayodo T.M.O (2014). Impact of Free Secondary Education Policy on Gender Equity in Secondary Schools Education in Kenya: A Case study of Kericho County. *Greener J. of Edu. Res.* Vol. 5(3):83-97.
- Ngware M, Abuya B, Admassu K. & Oketch M. (2009).Quality and Education in Urban Informal Settlement in Kenya.
- Nyaegah O.J (2011). Education and Millennium Development Goal Challenges Facing Management of FPE in Nyamira County-Kenya. *Proceedings of the International Conference for EMSK.* Held at University of Nairobi: EMSK.040 Educ. Res
- Ogolla J.O (2013).Factors influencing transition rate of learners from primary to secondary schools in Kenya. University of Nairobi press.
- Ohba A. (2009). *Does Free Secondary Education enable the poor to gain access, Nairobi: CREATE.*

- Oketch M. & Somerset A. (2010). Free Primary Education and after in Kenya: Enrolment Impact, Quality Effects and the Transition to secondary School. Create Pathways to Access Research monograph No. 37. Retrieved February 22nd February, 2014 from http://www.create_rpc.org.
- Okidi A.J, Ssewanya N.S & Angemi D. (2004). Understanding the determinants of income equality in Uganda.
- Okuom H., Simatwa E.M.W, Olela M. & Wichenje K.M (2012) *Assessment of factors that contribute to repetition and dropout of pupils in primary schools in Flood Prone Areas of Nyando District, Kenya: an analytical study.*
- Onditi K. (2007). Factors that influence primary school pupil drop out in Suneka Division Kisii Central District, Kenya. Unpublished Master of Education .Maseno University.
- Otaala B. (1976). Prospects of Uganda Primary school children. An exploratory study .Unpublished paper. Nairobi.
- Owiye D.O (2005). Trends in and factors affecting wastage in primary education in Siaya. Masters of Education Thesis. Education Management and Foundations. Maseno University. Possibilities and Limitations of Diversification.
- Ozier & Owen (2011). The Impact of Secondary schooling in Kenya .A regression Discontinuity Analysis; University of California Working Paper.
- Psacharopoulos G. & Woodhall M. (1985, b). *Education and Development: An Analysis on Investment Choices.* New York, Oxford University Press. Publishers.
- Republic of Kenya (1999). *Totally Integrated Quality Education and Training. Report of the Commission of Inquiry into the Education System of Kenya.* Nairobi: Government Printer.
- Republic of Kenya (2003). *Report of the Sector Review and Development Direction.* Nairobi, Government Press.

- Republic of Kenya (2005). *Sessional Paper No.1 of 2005 on A Policy Framework for Education, Training and Research* Nairobi: Government Printer.
- Republic of Kenya (2010). 2009 Kenya Population and Housing Census. Nairobi; Government printer.
- Republic of Kenya (2010). Primary School Enrollment Retention and Completion Rate: *Economic Survey*. Nairobi: Government Printers.
- Republic of Kenya (2010a). *2009 Kenya Population and Housing census*. Nairobi; Government printer.
- Republic of Kenya (2012). Ministry of Education Sessional Paper No. 14 of 2012, A Policy Framework for Education Training.
- Republic of Kenya (2013). The Basic Education Act 2013. Nairobi: Government Printer.
- Republic of Kenya (2015). Economic Survey 2015. Nairobi: Government printer.
- Republic of Kenya (2015). *Economic Survey*. Kenya National Bureau of Statistics.
- Republic of Kenya (2005). Sessional paper No 1.
- Republic of Kenya, (1999). Totally integrated Quality Education and Training TIQET. Report of the Commission of Inquiry into the Education System of Kenya. Nairobi: Government Printer.
- Republic of Kenya. (2012a). *Task Force on the Re-Alignment of the Education Sector to the Constitution of Kenya 2010*. Nairobi; Government Printer.
- Republic of Kenya. *National Development Plan 2002 – 2008*. Nairobi:
- Republic of Kenya. *National Development plan 1980-1984* .Nairobi: Government printer.
- Rural Income and Poverty: Evidence from Bangladesh. *Journal of Development Studies*, Vol.46, No.6, pp.1109-29.

- Saitoti G (2004). Education in Kenya: Challenges and Policy responses. Paper prepared for presentation at the Council on Foreign Relations. Washington DC.
- Sifuna D.N (1990). *Development of Education in Africa; the Kenyan experience, Nairobi: Initiative.*
- Sifuna D.N & Oanda O.I (2014). Historical and Contemporary Trends in the Development of Education in Kenya. Nairobi. Jomo Kenyatta Foundation.2015) Southern Africa. *Food Policy*, 33:299–317
- Steve O.& Jialu L. (2011).Determinants of Income Poverty in Rural Africa: Empirical Evidence from Kenya and Nigeria.
- Suba District Development Plan 2008-2012
- Todaro P.M (1994). Economics of a Developing World. London: Longman publication.
- UNESCO (2005 a). *Children out of School: Measuring Exclusion from Primary Education.* UNESCO Publication.
- UNESCO (2005 b).*Challenges of Implementing Free Primary Education in Kenya. Assessment Report.*UNESCO, Nairobi Office.
- UNESCO (2008). *Flagship on Education For All and the Rights to Education for Persons with Disability: Towards Inclusion.* Paris: UNESCO Publication.
- UNESCO (2009). *Education Statistics in the Developing Counties.* Washington D C: UNESCO.
- UNESCO(2009).*Overcoming inequalities. Why governance matters; regional overview of Sub-Saharan Africa.* International Institute of Educational Planning.UNESCO.Paris.
- UNESCO (2011).*Global Education Digest 2011: Comparing Education Statistics Across the World. Montreal.* UNESCO.Retrieved on 22ndJanuary 2017 from <http://www.uis.unesco.org>.

UNESCO (2014). EFA Global Monitoring Report 2013/4: *Teaching and Learning: Achieving quality for all*. 7, Place de Fontenoy, 75352 Paris 07 SP, Rates from public primary schools to France.

University of Nairobi (2012). Factors Influencing Transition Secondary school level in Murang'a East District, Kenya. Department of Education Administration and Planning. Retrieved on 22nd February 2014 from <http://eap.uonbioac.ke/node/863>.

Wanja H.W (2014). An understanding of the Trends in the Free Secondary Education funding policy and transition rates from primary to secondary education in Kenya. *J. of Education and Social Research*. Vol. 4 No. (1): 133-142.

Woodhall, M. (2004) *Cost-Benefit Analysis in Educational Planning*. Paris: UNESCO.

World Bank (2008). World Development Report.

World Bank (2007). Agriculture for Development. World Development Report 2008, Washington

DC: World Bank.

World Bank (2009). 'Youth and employment in Africa: The potential, the problem, the promise,' Washington DC.

APPENDIX 1

LETTER OF INTRODUCTION

I am a student of Maseno University, pursuing a master degree in Planning and Economics of Education. As a requirement of this course I am undertaking a research project on **“Influence of Forgone earnings on Primary to Secondary Education transition in Mbita sub-county, Kenya.”** Towards this end, I am conducting a survey among primary and secondary schools in Mbita sub -county. I will be glad if you spared a few minutes and filled the attached questionnaire.

I assure you that the answers provided will be used only for the purposes intended in the framework of this survey. In the description of results of this survey, no identification of the individual persons will be possible. YOUR INFORMATION WILL BE TREATED WITH STRICT CONFIDENCE.

Thanking you in advance.

Steve Biko Okul

September, 2018.

APPENDIX 2

RESEARCH CONSENT FORM

Please read and complete this form carefully. If you are willing to participate in this study, tick the appropriate responses, sign and date the declaration at the end. If you do not understand anything and would like more information, please ask.

I have had the research satisfactorily explained to me in verbal and/or in written form by the researcher.	YES	NO
I understand that the research will involve an interview schedule taking about 40 minutes or filling in of questionnaire within a period of 1 week.	YES	NO
I understand that I may withdraw from this study at any time without having to give an explanation and that my decision will be respected.	YES	NO
I understand that all the information about me will be treated with strict confidence and that I will not be named in any written work arising from this study.	YES	NO
I understand that you will be discussing the progress of your research with research experts at Maseno University.	YES	NO
I understand that I will receive no payment for taking part in this study.	YES	NO

I freely give my consent to participate in this research study and have been given a copy of this form for my own information.

Signature.....

Date.....

APPENDIX 3

HEAD TEACHERS' QUESTIONNAIRE.

This questionnaire is aimed at collecting data on the Influence of Forgone earnings on Primary to Secondary education transition. The researcher would like to assure you that the information you provide will be treated in utmost confidence and only for academic purposes. The questionnaire is divided into three sections A,B and C. Please respond to all items as honestly and precisely as possible.

SECTION A:BACKGROUND INFORMATION

1. a) Gender: Male Female

b) Age: 20-30 years 31 – 40 years Over 50 years

2. What is your highest academic qualification?

DIPLOMA BED MED ,Any other (*specify*)_____

3. Teaching experience:1 -5 years , 6 - 10years ,11-20 years over 20 years

4. How long have you worked at your current station?

1 – 5 years 6 – 10 years 11 – 20years over 20years

SECTION B: FORGONE EARNINGS.

1. Are there pupils from your school who engage in income generating activities after school, during weekends or holidays? Yes , No

2. If your response is yes to question (1) above, state which economic activities they participate in.

(i).....

(ii).....

(iii).....

3.(a)Have you had pupils dropping out of school upon graduation from your school in the last 5 years. Yes[],No[]

(b)If your response to (a) above is yes, which economic activities (if any) are they engaged in?

(i).....

(ii).....

(iii).....

SECTION C: TRANSITION

1. What is the approximate average rate at which pupils are transiting from your school to secondary education in the last 5 years.

Very high [80%-99%], High[70%-89%],Moderate[50%-69%],Low[30%-49%],

Very Low[10%-29%]

2.Which factors do you think may make a child fail to transit to secondary school upon graduation from your school.

(i).....

(ii).....

3. (a)Do you think some pupils who graduate from your school may be forced to forgo earnings when transiting to secondary education? Yes [],No[].

(b)If you response to 2(a) above is yes, how does earnings to be forgone by pupils influence their decision to either continue with schooling or dropout after graduation from your school.

.....

4. What measures do you think should be taken to improve primary to secondary education transition in your school.....

Thank you for your cooperation.

APPENDIX 4

INTERVIEW SCHEDULE FOR DROPOUTS.

1. How many marks did you score in KCPE
2. (a) Were you doing any income generating activity(s) when you were in primary school, after school, during weekends or holidays. What is the approximate total monthly earnings that you could realize from the activity(s).
3. What other non-paid duties /responsibilities/chores did you have in your family during your primary education.
4. What was/were the reason(s) for your failure to proceed to secondary school.
5. Did the fact that you were to forgo earnings/opportunities by pursuing secondary education influence your decision to drop out of school.
6. Are you currently doing any income generating activity(s).How much do you earn from that activity every month.
- 8 .What measures in your opinion do you think government, parents and community, teachers and pupils themselves can take to minimize pupil dropout upon graduation from primary school.

APPENDIX 5

QUESTIONNAIRE FOR FORM ONE STUDENTS.

1. What is the income level of the person who pays your school fees.

Very low[],Low[],Moderate[],High[],Very high[]

2. (a) Were you doing any income generating activity(s)when you were in primary school.

Yes[],No[]

(b)If yes, what is the approximate total monthly earnings you could obtain from the activity(s).Kshs.....

3.(a)Did you forgo any earnings/opportunities in order to join secondary school.

Yes[],No[]

(b)If your response to (c) above is yes, did you find difficulty when deciding to continue with schooling while leaving the earnings/opportunities? Yes [],No [].Explain your response?

.....
.....

4. (a) Are there pupils with whom you did KCPE who never joined secondary school?

Yes [],No [](b)If yes, what were the reasons for their dropout.

i.....

ii.....

5. What measures do you suggest should be taken by education stakeholders to increase number of pupil transiting from primary to secondary education

.....

Thank you for your cooperation.

APPENDIX 6

INTERVIEW SCHEDULE FOR SQASO

1.a. What is the trend of standard 8 enrolments in Mbita Sub-County in the last 5 years

YEAR	GIRL	BOY	TOTAL
2013			
2014			
2015			
2016			
2017			

b. What is the trend of Form one enrolment in Mbita sub-county in the last 5 years .

YEAR	GIRL	BOY	TOTAL
2014			
2015			
2016			
2017			
2018			

2. Which factors do you think explain the current rate of transition in your sub-county.

3. Standard eight graduates may need to forgo some earnings/opportunities when deciding to pursue secondary education. Do you think this is true of your sub-county.

4. Do you think earnings forgone by pupils transiting to form one or earnings that could have been forgone by dropouts if they continued with schooling have an influence on the state of transition in your sub-county. Explain.

5. What measures in your opinion do you think the stakeholders in education to improve transition in Mbita sub-county.

APPENDIX 7

PROPOSAL APPROVAL LETTER



MASENO UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Office of the Dean

Our Ref: PG/MED/00008/2013

Private Bag, MASENO, KENYA
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Email: sgs@maseno.ac.ke

Date: 06th June, 2018

TO WHOM IT MAY CONCERN

**RE: PROPOSAL APPROVAL FOR STEVE BIKO OKUL —
PG/MED/00008/2013**

The above named is registered in the Master of Education in Planning and Economic Programme in the School of Education, Maseno University. This is to confirm that his research proposal titled "Influence of Forgone Earnings on Primary to Secondary Education Transition in Mbita Sub-County, Kenya" has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.


Prof. J.C. Agure
DEAN, SCHOOL OF GRADUATE STUDIES



Maseno University

ISO 9001:2008 Certified



APPENDIX 8

RESEARCH PERMIT



MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 6th September, 2018

TO: Steve Biko Okul
PG/MED/008/2013
Department of Educational Management and Foundations
School of Education, Maseno University
P.O. Box Private Bag, Maseno

REF: MSU/DRPI/MUERC/00577/18

RE: Influence of Forgone Earnings on Primary to Secondary Transition in Mbita Sub-County, Kenya. Proposal Reference Number MSU/DRPI/MUERC/00577/18.

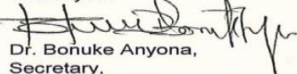
This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues raised at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 6th day of September, 2018 for a period of one (1) year.

Please note that authorization to conduct this study will automatically expire on 5th September, 2019. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 15th August, 2019.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 15th August, 2019.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advise MUERC when the study is completed or discontinued.

Thank you.


Dr. Bonuke Anyona,
Secretary,
Maseno University Ethics Review Committee



Cc: Chairman,
Maseno University Ethics Review Committee.

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED



APPENDIX 9

MAP OF MBITA SUB-COUNTY

