

**EFFECT OF SUBSIDIZED SECONDARY EDUCATION POLICY ON
ENROLMENT, RETENTION AND QUALITY OF EDUCATION IN PUBLIC
SECONDARY SCHOOLS OF RONGAI SUB-COUNTY, NAKURU COUNTY,
KENYA**

CYNTHIA BENTA AWUOR

**A Thesis Submitted to the Board of Post-Graduate Studies in Partial Fulfillment of the
Requirements for the Award of the Degree of Master of Research and Public Policy of
Egerton University**

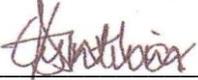
EGERTON UNIVERSITY

OCTOBER, 2018

DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for a degree or any other award in this or any other institution.

Sign  Date 26/10/2018

Awuor Cynthia Benta
Reg No: EM22/04072/14

Recommendation

This thesis has been submitted for examination with our approval as the University Supervisors.

Sign _____ Date _____

Prof. Dolphine Wanga
Department of Applied Community Development Studies
Egerton University

Sign  Date 30/10/18

Prof. Mark Okere
Department of Curriculum, Instruction, and Educational Management,
Egerton University

COPRIGHT

©2018 Cynthia Benta Awuor

All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system or transmitted in any form or by any means: electronic, mechanical, photocopying and recorded or otherwise without prior written permission from the author or Egerton University.

ABSTRACT

The Subsidized Secondary Education (SSE) was introduced in 2008 as part of Kenya's effort to attain Education for All (EFA) by 2015 as indicated in the Sessional Paper no. 1 of 2005. The Subsidized Secondary Education was implemented in February, 2008 by the Coalition Government to reduce the cost of education for parents, increase access to education, increase academic performance, increase class attendance and increase transition rates from primary to secondary school in line with the United Nations aim to achieve Sustainable Development Goals by 2030. However, the effect of the government subsidizing secondary education on enrollment, retention and quality of education has never been documented in Rongai Sub-County, Nakuru County. Therefore, this study sought to bridge the gap by determining the effect of subsidized secondary education on enrollment, retention and quality of education in Rongai Sub-County, Nakuru County. This study was guided by classical liberal theory of equal opportunity. The study used Convergent Parallel Mixed Methods research design. This involved collecting both qualitative and quantitative data simultaneously. The study population involved 39 principals each representing their school, 2 teachers from each of the 39 public secondary schools as well as the education officer of Rongai Sub-County. Purposive sampling was used to select two teachers from each school and the principal of each school in Rongai Sub-County. Data were collected using questionnaires and interview schedules. To ensure validity of the instruments, the research instruments were given to the research supervisors for expert judgement to cross check and evaluate content validity. Piloting of questionnaires was done in two schools from Nakuru Town West Sub-County. Cronbach's alpha was used to test reliability of the questionnaires that were used in the study and a correlation coefficient 0.823 obtained thus was considered acceptable. Data entry was conducted using SPSS software. Descriptive statistics such as mean, frequency tables and percentages were also used. Quantitative data obtained were then analyzed using paired sample t-test. Hypotheses were tested at 5% level of significance while qualitative data obtained by interview were analyzed through thematic approach. The results obtained from public secondary schools in Rongai Sub-County revealed that there was a statistically significant effect of SSE on student enrollment rates in public secondary schools in Rongai Sub-County. There also appeared to be no statistically significant effect of SSE on student retention rates in public secondary schools in Rongai Sub-County. It also came out that there are a number of socio cultural factors that affect the enrolment and retention of students and quality of education after the introduction of SSE policy. The findings from this study inform the National and County government of Nakuru and Kenya at large, on the need to; employ more teachers to reduce the workload and ease the burden on parents paying for B.O.G teachers, formulate policies that will require schools to come up with alternative sources of financing secondary education in order to break the overdependence on Subsidized Secondary funding that does not seem to be sustainable from the findings of the study and need to put in place mechanisms to ensure that each school is given a condition of raising a minimum threshold of income for financing secondary education, before it qualifies for the free day secondary funding among others.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION	ii
COPRIGHT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS AND ACRONYMS	x
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Purpose of the Study	4
1.4 Objectives of the Study	4
1.5 Hypotheses of the Study.....	4
1.6 Significance of the Study	5
1.7 Scope of the Study.....	5
1.8 Assumptions of the Study	5
1.9 Limitations of the Study	5
1.10 Operational Definition of Terms	6
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Introduction	8
2.2 Free Secondary Education in the Developed Countries.....	8
2.3 Free Secondary Education in Africa	9
2.4 Rationale of Subsidized Secondary Education.....	10
2.5 The Right to Education in Kenya	11
2.6 Socio-Economic and Socio-Justification for Investing in Secondary Education.....	12
2.7 Subsidized Secondary Education and Enrollment Rates in Kenya	12
2.8 Education as an Investment.....	14
2.9 Quality of Education in Subsidized Secondary Education.....	15
2.10 Theoretical Framework	16

2.11 Conceptual Framework	17
CHAPTER THREE	18
METHODOLOGY	18
3.1 Introduction	18
3.2 Research Design	18
3.3 Study Area.....	18
3.4 Population of the Study	20
3.5 Sampling Procedure and Sample Size.....	20
3.6 Instrumentation.....	20
3.7 Data Collection Procedure	21
3.8 Data Analysis	22
3.9 Ethical Considerations.....	23
CHAPTER FOUR.....	24
RESULTS AND DISCUSSIONS.....	24
4.1 Introduction	24
4.2 Respondents Response Rate.....	24
4.3 Demographic Characteristics of the Respondents.....	25
4.5 Analysis of the Data Obtained from Teachers	41
4.6 Discussions in Relations with Other Research Findings.....	48
4.7 Qualitative Analysis of the Interview with Rongai Sub – County Education Officer ...	50
4.8 Interviews with Principals.....	52
4.9 Thematic Analysis of the Interviews with Principals.....	62
4.10 Discussion	69
CHAPTER FIVE.....	72
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	72
5.1 Introduction	72
5.2 Summary of the Findings	72
5.3 Conclusions of the Study.....	72
5.4 Recommendations of the Study.....	73
5.5 Suggestions for Further Research	74

APPENDIX A: PRINCIPALS' QUESTIONNAIRE	79
APPENDIX B: TEACHERS' QUESTIONNAIRE.....	84
APPENDIX C: INTERVIEW GUIDE FOR COUNTY EDUCATION OFFICER	86
APPENDIX D: RESEARCH AUTHORIZATION DOCUMENT	88

LIST OF TABLES

Table 1: Distributions of SSE Funds by MoE (2009).....	3
Table 2: Data Analysis Matrix.....	22
Table 3: Respondents Response Rate.....	25
Table 4: Distribution of the Principals by Gender.....	25
Table 5: Distribution of the Educational Background.....	26
Table 6: Means After.....	28
Table 7: Means Before.....	29
Table 8: Effect of SSE on Gross Enrollment.....	29
Table 9: Effect of SSE on Student's Retention.....	30
Table 10: Teaching.....	31
Table 11: Assessment and Exams.....	32
Table 12: Healthcare.....	33
Table 13: Average mean scores on how sufficient the positive impact of the policy has been on the following aspects of quality of education.....	34
Table 14: Classroom.....	35
Table 15: Library.....	36
Table 16: Laboratory.....	36
Table 17: Dormitory.....	37
Table 18: School bus.....	38
Table 19: Staffroom.....	38
Table 20: Toilets.....	39
Table 21: Electric Supply.....	39
Table 22: Average mean scores on rating the adequacy of the physical facilities with the provision of SSE.....	40
Table 23: Gender.....	41
Table 24: Period Served as a Teacher.....	42
Table 25: Period at Current Station.....	42
Table 26: Adequacy of Textbooks.....	43
Table 27: Adequacy of Stationery.....	44
Table 28: Adequacy of Desks and Chairs.....	44
Table 29: Adequacy of Computers.....	45
Table 30: Adequacy of laboratory chemicals and apparatus.....	46
Table 31: Adequacy of Maps and Charts.....	46
Table 32: Adequacy of Exercise Books.....	47
Table 33: Average means scores on rating the adequacy of the instructional materials with the provision of SSE.....	47
Table 34: Factors affecting enrolment.....	64
Table 35: Factors affecting retention of students.....	65
Table 36: Factors affecting quality of education.....	67

LIST OF FIGURES

Figure 1: Conceptual Framework	17
Figure 2: Map of the Study Area	19
Figure 3: Period Served at Current Station	26
Figure 4: Type of School	27
Figure 5: Adequate number of teachers	27
Figure 6: Guidance and Counselling.....	32
Figure 7: Discipline.....	34
Figure 8: Dining Hall	37
Figure 9: Educational Background of the Teachers.....	41
Figure 10: Lessons in a Week.....	43

LIST OF ABBREVIATIONS AND ACRONYMS

CEO	County Education Officers
EFA	Education for All
FPE	Free Primary Education
IS	Interview Schedules
KSSHA	Kenya Secondary Schools Heads Association
MoE	Ministry of Education
MOEST	Ministry of Education, Science and Technology
SSE	Subsidized Secondary Education
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USE	Universal Secondary Education
UNDP	United Nations Development Programme
GoK	Government of Kenya

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is widely seen as one of the most promising paths for individuals to realize better, more productive lives and as one of the primary drivers of national economic development. Education is a human right in view of the observation that it does not only unlock and protect other human rights but it also helps individuals to secure good health, liberty, security, economic well-being, and opportunities (Mazur, 2006). Education plays a key role in human development, through the acquisition of skills and knowledge for the enhancement of people's capabilities to effectively improve their well-being so as to actively participate in Nation Building (United Nations Development Programme, (UNDP, 2002) with secondary education mostly aiming at promoting growth of the individual towards maturity and self-fulfillment as a useful and well-adjusted member of the society (MORAD, 2000).

Education helps to reduce poverty by developing productive skills of the citizens and by equipping people with the skills they need to fully participate in the economy and society. It creates self-awareness in an individual, giving him/her skills and attributes to cope intelligently with the fast-changing society and to improve his/her quality of life (World Bank, 1995). Education promotes health and nutritional status of families. Education also contributes to national development by equipping people with the skills with which they can participate in planning for development, providing managerial skills and promoting positive community image for national and societal unity (World Bank, 2012).

United Nations declared education as a human right by saying that everyone has the right to education. It also noted that education shall be free at least in the primary and fundamental stages for example primary education shall be compulsory while Technical and Professional education shall be generally available to all on the basis of merit (United Nations educational and scientific organizations (UNESCO, 2007).

In the world, quality education is indispensable for individual and national development alike. Secondary education provides a bridge between primary education, the labour market and tertiary education. As a bridge therefore, decision makers face a basic choice; whether secondary education is to be the weakest link of the education system or its cornerstone (Benavot, 2004). Investment in education has been the hallmark of all nations of the world. The benefits of

secondary education in a multiplicity of ways contributes to individual earnings, is associated with improved health, equity and social conditions. It buttresses democratic institutions and the quality of secondary education affects the level above and below it like primary and tertiary education (World Bank, 2005).

In Japan, the government policies provide for free education up to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaga, 2005). In the United States of America the Federal government supports Public education. The government is empowered by the constitution welfare clause, Article 1 section 8, to levy taxes and collect revenues for the support of education. However, the congress decides the extent of such support (Nyaga 2005). The situation in Kenya is not different from that of Japan and America as the government and the communities participate in the provision of the Education (Nyaga, 2005).

Kenya has been trying to achieve the goal of universal education since independence in 1963, with mixed successes. Various approaches which were seen as likely to augment resources and define strategies for education financing more closely adapted to social and economic realities have been suggested and attempted. The most notable (Elimu Yetu Coalition, 2003) was the cost sharing framework, by which the government was to meet salaries of teachers and education administration costs while parents provided tuition fees and textbooks; communities on the other hand were to be responsible for putting up physical facilities and ensuring their maintenance (Government Of Kenya, (GoK, 2008).

The differential economic endowment of regions and even social groups, disparities in access to education emerged. The disparities were cost related since not all groups could marshal resources on equal footing. These cost sharing arrangement made parents feel exploited by school committees which were considered unsympathetic due of the burdens they imposed on them (Munya,1995). It is estimated that the policy increased household expenditures on education by about 33% to 44% of their annual incomes, with about 37.3% of this being spent on indirect costs like uniforms, books, transport, stationery and pocket money (Republic of Kenya, 2003).

In 2003, the Government of Kenya, following the 2002 election campaign pledge, introduced the Free Primary Education (FPE) policy in order to universalize access to primary education and increase educational attainment in the country (Republic of Kenya, 2005). This policy was

followed later with the Subsidized Secondary Education (SSE) policy in 2008 which equally was aimed at accelerating enrollment and quality of secondary education in the country (Odhiambo, 2010). These policies had international backing and credibility, as these were part of the universally agreed Millennium Development Goals (MDGs), and other internationally agreed protocols (Orodho, 2013).

The introduction of Subsidized Secondary Education was aimed at providing the economically disadvantaged with an opportunity to benefit from government sponsored education provision seeing the demand for higher education triple. The Kenya Government announced the release of 2.9 billion for SSE and allocated Ksh. 10,265 to every child to cater for tuition and operational costs annually (Republic of Kenya, 2008). The table below shows how the SSE funds were expected to be distributed.

Table 1
Distributions of SSE Funds by MoE (2009)

VOTE HEAD	AMOUNT IN KSHS
Tuition	3600
Repairs, maintenance and improvement	400
Local Transport and Travel	400
Electricity, water and Conservancies	500
Activity	600
Personal Emoluments	3965
Medical	300
Miscellaneous	500
TOTAL	10625

Source: Ministry of Education (2009) on Government Subsidy to Schools

This amount does not however cater for the boarding fees; buying uniforms and the development of the school (physical facilities) hence the parents are expected to meet these other costs. The government should thus explain to the parents how Subsidized Secondary Education works (Abagi, 2008). Parents expect a lot from this program in terms of quality education, which means adequate supply of learning resources like more teachers, physical facilities and instructional materials (Republic of Kenya, 2005). The focus of this research was to examine the extent to which subsidized secondary education introduced in Kenya in the beginning of 2008 had influenced student's enrolment, retention and quality of education. A special focus was whether

children who previously could not access secondary school due to school fees had been able to enroll following the subsidy of fees, if they were completing secondary school and if there was quality education.

1.2 Statement of the Problem

Subsidized secondary education policy was introduced in 2008 as a result of Kenya's effort to attain education for all (EFA) by 2015. This was to reduce the cost of education to parents, increase access to education and to increase transition rates in line with the United Nations aim to achieve Millennium Development Goals by 2030. Despite the Kenya Government's effort to expand education opportunities for all, through the introduction of SSE Policy and the high government expenditure to sustain the programme, no empirical studies had been taken to determine the effect of Subsidized Secondary Education policy on enrolment, retention and quality of education in Rongai Sub – County. The focus of this study was therefore to determine the effect of subsidized secondary education on enrolment, retention and quality of education in public secondary schools in Rongai Sub-County, Nakuru County.

1.3 Purpose of the Study

The purpose of this study was to determine the effect of Subsidized Secondary Education on enrollment, retention and quality of education in Rongai Sub-County, Nakuru County.

1.4 Objectives of the Study

The following were the specific objectives of the study;

- i. To compare the students' gross enrollment rates five years before and five years after the introduction of SSE in Rongai Sub-county.
- ii. To compare the students' retention rates five years before and five years after the introduction of SSE in Rongai Sub-County.
- iii. To describe the quality of education five years before and five years after the introduction of SSE in Rongai Sub-County.

1.5 Hypotheses of the Study

The research hypotheses were developed in line with the research objectives .The research hypotheses are:

H₀1: There is no statistically significant effect of SSE on the students' enrollment rates five years before and five years after its introduction in Rongai Sub-County.

H₀2: There is no statistically significant effect of SSE on students' retention five years before and five years after its introduction in Rongai Sub-County.

H₀3: There is no statistically significant effect of SSE on the quality of education five years before and five years after its introduction in Rongai Sub-County.

1.6 Significance of the Study

One of the main goals of education is to promote social, economic, technological and industrial skills for national development; as this goes hand in hand in the achievement of vision 2030. Subsidized secondary education is the one way of ensuring that the poor and other vulnerable groups benefit from government supported education services. The findings of this study may be useful to Education managers and planners in developing policies that may effectively address the issues of subsidized secondary education offered. Policy makers and implementers may also benefit, since these findings may be key in unearthing other policy implications and requirements to sustain the education system effectively.

1.7 Scope of the Study

The study was carried out in Rongai Sub-County, Kenya. The study encompassed subsidized secondary education indicators: These were; tuition, repairs, maintenance and improvement, local transport and travel, electricity water and conservancies, activity, medical and personal emoluments. This study was conducted in public secondary schools which comprise boy schools, girl schools and mixed schools. The respondents comprised principals, teachers and the education officer in Rongai Sub-County.

1.8 Assumptions of the Study

For this study it is assumed that:

- i. The respondents were honest in their responses that were useful for the success of the study.
- ii. Data that were provided were accurate.
- iii. The sampled schools were a fair representation of the public secondary schools in Rongai sub-county.

1.9 Limitations of the Study

- i. This study targeted Secondary schools in Rongai Sub-County therefore; generalization of the findings to other sub-counties may be difficult.

1.10 Operational Definition of Terms

Access: A way to go into a place or to use something (Oxford, 2004). In this study it is used to mean the opportunity for all irrespective of their social economic backgrounds to participate in education.

Basic education: A basic education is an evolving program of instruction that is intended to provide students with the opportunity to become responsible and respectful global citizens, to contribute to their economic well-being and that of their families and communities, to explore and understand different perspectives, and to enjoy productive and satisfying lives (Oxford, 2004). In this study it means education offered to cover primary and lower secondary levels.

Cost sharing: This is the involvement of households to meet part of the cost of educating their children while the government meets the remainder of the costs (Farlex, 2003). In this study, the same meaning applies.

Effects: Refers to a strong impression or impact on something or somebody (Oxford, 2004). In this study, the same meaning applies.

Enrollment: Refers to the number of people enrolled at a school or college (Farlex, 2003). In this study it means the number of students enrolled at a secondary school.

Form: Refers to the visible configuration of something according to Free Dictionary (Farlex, 2003). In this study it means a set or category of students in the same class.

Gross: Mass or large number (Farlex, 2003). In this study it means the mass number of students.

Human Resource: The people who organize and impart knowledge on the learners like the teachers (Oxford, 2004). In this study, the same meaning applies.

Public secondary school: A school that is maintained at public expense for the education of the children of a community or district and that constitutes a part of a system of free public education commonly including primary and secondary schools (Oxford, 2004). In this study, the same meaning applies.

Quality Education: Refers to the outcomes of education that satisfy the needs of the society by focusing on the acquisition of relevant competencies, skills and knowledge (Oxford, 2004). In this study it is used to refer to human resource and infrastructure.

Retention: Refers to the action of absorbing and continuing to hold a substance (Farlex, 2003). In this study it is used to mean the action of absorbing and continuing to hold students.

School category: Classification of the schools based on whether it is single sex, (boy or girl) or mixed schools (both boys and girls) (Oxford, 2004). In this study, the same meaning applies.

Secondary Education: Post primary education which is covered from form one to four (Farlex, 2003). In this study, the same meaning applies.

Secondary schools: A school for pupils between the ages of 13 and 19 (Oxford, 2004). In this study, the same meaning applies.

Subsidized Secondary Education: In this study SSE refers to the waiver of tuition fees by the government for secondary school level. The parents are expected to meet other requirements like lunch, transport and boarding fees for those in boarding schools a besides development projects.

Transition rates: Refers to the proportion of graduates who transcend from one level of schooling to another (Oxford, 2004). In this study, the same meaning applies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature related to the right to free secondary education in the developed countries, free secondary education in Africa, rationale of subsidized secondary education, the right to education in Kenya, socio-economic and socio-justification for investing in secondary education, subsidized secondary education and, enrollment rates in Kenya, education as an investment and quality of education in subsidized secondary education. It also discussed theoretical and conceptual frameworks that guide this study.

2.2 Free Secondary Education in the Developed Countries

Since the World Bank first began to finance educational investment in 1962, it has contributed to a sustainable increase in educational provision in developing countries, to an improvement in the geographical and social distribution of education opportunities, and to a raising standards of quality of Education in many countries). Poor families will certainly find it difficult to pay fees, out- of pocket expenses for cloths, travel, books or materials. Moreover, poor families on average tend to have more school age children than higher income families hence the person will even have to look after the many children in the family (Psacharopoulous, 1995).

The vocational approach to secondary schooling developed rapidly in Eastern Europe. By the 1960s and 1970s education was linked more to primary than to tertiary education. The extension of compulsory education had entirely changed the concept, as well as the duration, of basic education, to the point that basic education usually included lower secondary schooling. Arising average level of schooling was seen as an important objective and as a measure of the success of education reforms. Many other countries have embraced the goal of extending and expanding the notion of basic education to encompass much of what used to be restricted-access, elitist secondary schooling (World Bank, 2002).

In Kenya the introduction of both the free primary education and subsidized secondary education are government initiatives toward creating open access to education for all citizens. In developed countries education beyond the compulsory level was unusually financed in part and sometimes wholly by the government. Parents are only required to ensure that children attend school (Moon & Mayes, 1994).

In Britain, Education Authority and Central Government are required by Section 7 of the 1944 Act to make education facilities available. This enables parents to carry out their legal duty. Parents are seen as the school's prime legal clients until the child is 16 years of age. Section 36 of the Act states that it shall be the duty of the parent of every child of compulsory school going age to cause him to receive full-time education suitable to his age, ability, and aptitude, either by regular attendance at school or otherwise (Moon & Mayes, 1994).

In Japan, the government fiscal policies provide for free education up to secondary school level. Those of school going age have no option other than attend school to acquire education that is fully funded by the government (Nyaga, 2005). In the United States of America, the Federal Government supports public education. The government is empowered by the Constitution Welfare Clause, Article 1 Section 8, to levy taxes and collect revenues for the support of education. However, the Congress decides the extent of such support (Nyaga, 2005).

In Canada, school fees are an integral part of education system. Parents are asked to contribute to their children's education through payment of fees (Nyaga, 2005). However, the government recognizes that some parents are sincerely not in a position to pay so the government makes provisions to ensure that a child is not denied access to education because of an honest inability to pay fees. The department of education in Canada works with school boards, parents, teachers, and other partners to ensure that policies governing school fees are implemented consistently in all the provinces (Nyaga, 2005).

2.3 Free Secondary Education in Africa

In Mauritius, Free secondary education was introduced in 1977. Prior to 1977, only scholarship winners of primary school-leaving examinations were entitled to free education in state schools. Non-Scholarship winners are allocated a few places with a moderate fee ranging from Rs 10 per month for form one to Rs 40 per month for form four. The government promoted basic education as part of its social-economic development strategy. The education is tuition free with parents paying for extra tuition, uniform and textbooks, fifty two per cent of the children receive secondary education which takes 7 years (Suddho, 2001).

Sri Lanka has achieved free education due to its widely distributed schooling facilities throughout the island. The quality of education has been enhanced by free textbook scheme for all children up to junior secondary, innovative curriculum development and high quality teacher

training and in-service programmes, (Colelough and Lewin, 1993). In Zimbabwe, resources are allocated to schools for payment of teachers' salaries and purchase of school books and equipment on the basis of the number of subjects and topics are rationalized, examinations localized and science teaching improved. The government provides for construction of school buildings, maintenance, salaries of all staff and all other materials and running expenses thus the free education programme is 80% successful (World Bank,2006).

Financing of education in Egypt depends mainly on the state budget. The Egyptian constitution article number 20 stipulates that education in state schools is free on all different levels; while pre-university education is stipulated in the education law number 139 article 2 of 1981 education is a right to all citizens to be obtained in state schools for free. Students should not be asked to pay fees unless they are provided with educational or learning services. Secondary education in Egypt comprises academic and technical education (World Bank, 2006).

In South Africa, user fees are identified as a barrier to education (Veriava, 2002). While school budgets are funded by allocations from state revenue, school fees are required to supplement these budgets so that schools are able to run smoothly. The South Africa School Act provides that a majority of parents at a public school may determine whether or not school fees are charged and the amount to be paid. There was however exemptions from paying school fees for parents who could afford to meet the cost. Exemption is extended to parents whose income is less than 30 times, but not more than 10 times the amount of fees (Veriava, 2002).

2.4 Rationale of Subsidized Secondary Education

Subsidized Secondary Education is perceived as a potential strategy to expanding education opportunities by many countries to their citizens especially the poor and the disadvantaged. Many governments were considering ways to make the poor and marginalized gain access to secondary education given the social, political and economic benefits associated with secondary education (World Bank 2005). The lack of access to secondary education was seen to constrain countries' abilities to pursue effective economic growth and development strategies. This then led to governments and donor community placing increasing emphasis on the expansion of Secondary Education (UNESCO, 2001).

The provision of subsidized secondary education was an attempt to fulfill the Jomtien Declaration of 1990 (EFA) in which citizens are given an opportunity to explore their abilities to

ensure equitable distribution of development. The initiatives saw two conferences being held in 1990, the Jomtien, Thailand followed by another in 2000 in Dakar Senegal. These both advocated for suitable access to education as a development strategy and considered a literate population the key to overall development to any nation. The declarations gave the impetus to education in many countries to ensure that learning of all young adults were met through equitable access to appropriate learning and life skills programme (MoEST, 2003).

To implement the declaration of education as a basic human right, the United Nations established UNESCO and UNICEF. The two United Nation's agencies have over the years conducted conferences and workshops to promote awareness. The Convention on the Rights of the Child reaffirms the right to free and compulsory basic education and access to higher levels of education by saying that secondary education in its different forms including technical and vocational secondary education shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education. The availability and adequacy of learning resources such as teaching force, physical facilities and instructional materials influence quality of education (Orodho, 2003).

2.5 The Right to Education in Kenya

Education is a fundamental human right guaranteed by the Constitution of Kenya [Article 43 (1) (f), Article 53 (1) (b)] and the various international instruments that Kenya is party to, specifically the International Convention on Economic, Social and Cultural Rights. Since independence, Kenya has had the goal of attaining universal education which was and still is perceived as one of the gateways of eradicating ignorance, disease and poverty. The interdependence between the three factors cannot be undermined hence making education the key that would unlock the door to living a dignified life (World Bank, 2005).

The right to education ensures access to quality schools and to an education that is directed towards the full development of the human personality. According to National Economic and Social Rights Initiative (2001), it uses six priority human right principles in our work that are fundamental to guaranteeing the right to education and are of particular relevance to education reform efforts.

- i. Individual rights-: Every individual child must have equal access to a quality education adapted to meet his or her needs.

- ii. Aims of Education-: the aims of education must be directed toward the development of each child's personality and full potential ,preparing children to participate in society and to do work that is rewarding and reasonably remunerative and to continue learning throughout life.
- iii. Dignity-: schools must respect the inherent dignity of every child creating an environment of respect and tolerance in the classroom, preventing practices and disciplinary policies that cause harm or humiliation to children and promoting self-confidence and self-expression.
- iv. Equity-: There must be equitable distribution of resources in education across communities according to need.
- v. Non-Discrimination-: The government must ensure that the human rights to education will be exercised without discrimination of any kind as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.
- vi. Participation-: Students, parents and communities have the right to participate in decisions that affect their schools and the right to education.

2.6 Socio-Economic and Socio-Justification for Investing in Secondary Education

Provision of good quality secondary education is a critical tool in generating opportunities and benefits of social and economic development (World Bank, 2005).Educating people means putting opportunities into their hands and it is recognized as one of the best anti-poverty strategies. It is also one of the best ways of ensuring a country's economic prosperity and competitiveness. It is estimated that average earning increase by 11% with each additional of education (Ndichu, 2003). Each additional year of maternal education reduces childhood mortality by about 8% (World Bank, 2005).

2.7 Subsidized Secondary Education and Enrollment Rates in Kenya

Kenya officially introduced the Free Secondary Education policy on Monday, 11th February 2008.The government was to pay tuition fees students while parents met boarding fees. While launching the program the former president stated that the program marked an important milestone in his government's effort to secure a bright future for the children and youth of Kenya. President Kibaki explained that the rationale for the introduction of the policy as follows:

“Primary education is not sufficient to provide the quality of skilled human resource necessary for our country’s sustainable development. Primary school children complete eight years of schooling when they are too young to engage in productive activities and contribute meaningfully to nation building .in addition, children from poor families who fail to join secondary schools for lack of fees often revert to illiteracy, thus reversing eight years of investment in their primary education. It is for this reason that my government undertook to implement the Subsidized Secondary Education program beginning this year.” (East African Standard 2008, 12th February).

The program, the president said will ensure that at least 70% of those completing eight years of primary education join secondary schools. Before the cost sharing policy by the government, secondary schools used to be provided with funds from the central government. Parents spent over Kshs. 25,000 per student per year, while the government spent Kshs. 22,000. It costs a parent Kshs. 30,000 to educate a child in boarding school and Kshs. 20,000 in a day school (MoE, 2003). The provision and expansion of quality secondary education continued to escalate as resources dwindled and that majority of parents were unable to meet the cost of secondary education by unnecessary high indirect costs required by schools (Onsomu, 2006).

Government of Kenya (2005) outlines some of the policies adopted by the Kenyan Government in order to reduce the fees burden which included:

- Integrating Secondary education as part of basic education
- Promoting development of day schools to expand access and reduce costs to parents.
- Providing targeted instructional materials to needy public secondary schools while encouraging parents to provide infrastructure and operational costs.

The Ministry of Education (2007) adopted the above policies through provision of teachers, issue of bursary funds and promotion of development of day schools to expand access and reduce the cost to parents. The government has been providing instructional materials to needy public secondary schools while encouraging parents and communities to provide infrastructure and operational costs. Bursary funds are also provided to support the needy and bright children. According to the MOE (2003), the Gross Enrolment Rate for secondary schools declined from 29.4% to 22.2% between 1990 and 2000. This is attributed to high cost of teaching materials, school uniforms, transport and development levies and extra expenses for private tuition,

unfriendly school environment and poverty at the household level, HIV and AIDS pandemic, among others.

In a speech delivered at an annual Heads' Conference on 27th June 2007, the then Kenya Secondary Schools Heads Association(KSSHA) Chairman, disclosed that the secondary institutions in the country were owed over Kshs. 15 billion in unpaid fees by parents. He revealed that 90% of the parents who had failed to clear their debts were genuinely poor but insisted that head teachers had nothing better to do to help out but to send the students home.

The Kenya Education Sector Support Programme (KESSP, 2005-2010), observed that the massive increase in enrolment in primary schools with the introduction of FPE was already putting pressure on the demand for access to secondary education. The immediate challenge therefore, was how access to secondary can be expanded at a relatively low cost while improving the quality of education at the same time. MoEST, (2007) observed the need to put in place an equitable system with resource allocation to ensure 70% transition rate from primary to secondary in 2008 with a target of 80% in five years.

The transition rate from primary to secondary increased from (45.8%) in 2003 to (64.1%) in 2008. The launch of Subsidized Secondary Education in February 2008 was therefore a bold move by the coalition government in Kenya as it can be justified by the continued increase in the transition rate from primary level to secondary school level.

2.8 Education as an Investment

Education, like other forms of investment in human capital, can contribute to economic development and raise the incomes of the poor just as much as investment in physical capital such as transport, communications, power and irrigation. The World Bank, which provides financial and technical help for the development of poor countries, has long recognized the importance of investment in Education and has been active in this field since 1962. Since resources are limited, some opportunities have to be sacrificed when investment decisions are finally made. These lost opportunities can be regarded as part of the cost of the investment in health, industry or agriculture (Gatheru, 2008). This means that investment choices must be based both on cost- benefit analysis, which is concerned with external efficiency and the cost effectiveness analysis, which measures internal efficiency.

2.9 Quality of Education in Subsidized Secondary Education

Planning for material resources involves the identification of the resource requirements, assessing quality in terms of the needs, establishing criteria for standards, determining the cost per unit and the use of the materials whether by individuals or groups (Onyango, 2001). With the introduction of SSE, schools could have registered over-enrolment, which means that the resources available in schools are constrained.

The management of material resources entails planning, acquisition, allocation, distribution and controlling the use and maintenance of the materials. Bell and Rhodes (1996) noted that school facilities include the administrative office, staff rooms and offices, classrooms, laboratories, workshops, equipment, stores libraries, hostels and the school grounds. In order for a school to advance the learning opportunities offered to the students, it has to adequately utilize the facilities available. It is the responsibility of the head teacher to ensure that there is adequate classroom space to enable the teaching-learning process take place without any hitches.

Increases in public spending will be inadequate to generate increases in education attainment and learning achievement unless accompanied by reforms that aim at a more efficient use of available resources and find sources of additional funding (Verspoor, 2008). He advises that well-structured Public-Private Partnerships can help diversify the sources of financing and provision. Human resource is the most important resource in a school organization. Teachers comprise the most important staff in the school. However, the contribution made by other staff members such as secretaries, bursars, accounts clerk, matron, nurses, messengers and watchmen is also important.

With the implementation of SSE, teachers are expected to have heavy workloads that could negatively impact on curriculum implementation. A recent study by Gatheru (2008) on challenges related to the implementation of FPE in Narok District established that due to the rising number of pupils enrolling in schools, teachers were sometimes overwhelmed and not able to give individualized attention to pupils. Teachers could not mark pupils' assignments and this contributed to a decline in academic performance. This study determined the effect of SSE policy on students' enrollment, retention and the quality of education in public secondary schools of Rongai Sub-County.

2.10 Theoretical Framework

This study is based on the classical liberal theory of equal opportunities advanced by Sherman and Wood (1982) who expressed the view that there should be equal opportunities in education for all. The theory states that social mobility will be promoted by equal opportunity to education. It asserts that each individual is born with a given amount of capacity. According to this theory, educational systems should be designed with a view to removing barriers of any nature for example, barriers based on socio-economic factors, socio-cultural factors, and geographical factors, school-based factors which prevent learners from accessing education. The theory demands that opportunities be made available for individuals to go through all levels of education (Primary, secondary and tertiary) to which participation will not be determined by the special needs of the learners but on the basis of individuals' capability. In this way, education would at least provide equality of economic opportunities where all classes, races and gender could benefit economically from excellent academic performance (Sherman & Wood, 1982). The theory further states that social mobility will be promoted by equal opportunity for all citizens to education. Many economists have supported the policy on Free Primary education (FPE) in 2003 and Subsidized Secondary Education (SSE) started by the government in 2008 which advocates for a radical reform of the schools in terms of curriculum, assessment, pedagogy and groupings of students and pupils. The theory also holds the view that all human beings are created equal and hence the social institutions such as education should in some sense treat people equally hence this reveals why the government of Kenya decided to introduce subsidized secondary education so that even the poor will have an equal opportunity to education. Education systems are looked at as the principal of equality thus be designed to remove barriers of any nature that can prevent bright students from lower economic backgrounds from developing their own talents. This theory is applicable in this study because it broadly explains the need to making education equal for all and also why it is important in ensuring that every child has an equal opportunity to access secondary education regardless of his/her socio-economic, socio-cultural and geographical factors.

2.11 Conceptual Framework

INDEPENDENT VARIABLES

DEPENDENT VARIABLES

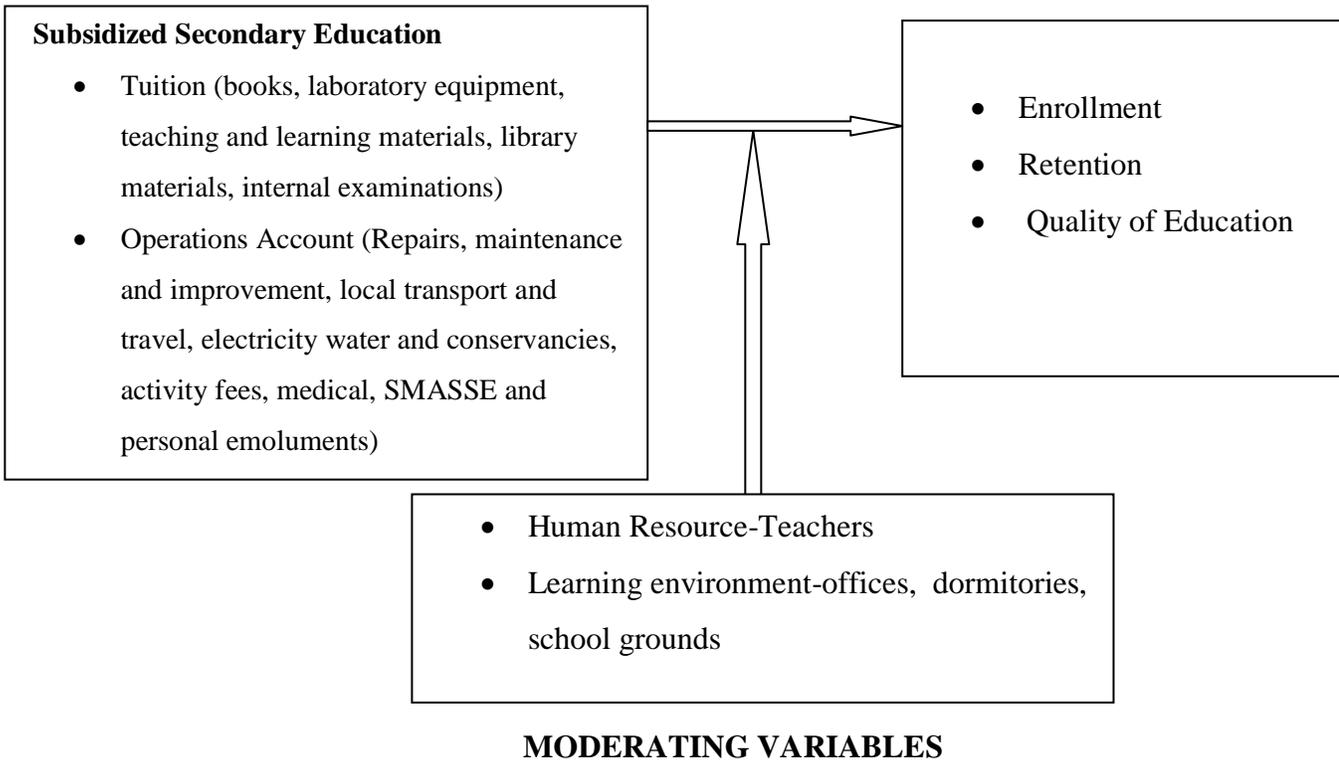


Figure 1: Conceptual Framework

In the above conceptual framework, SSE was the independent variable that was being evaluated if it was effective or not on the dependent variables which were students' enrollment, retention and quality of education. SSE had some indicators which were used to measure its effects. In this case such indicators included; tuition (books, laboratory equipment, teaching and learning materials, library materials, internal examinations) and operations Account (Repairs, maintenance and improvement, local transport and travel, electricity water and conservancies, activity fees, medical, SMASSE and personal emoluments). To evaluate the effect of SSE on the dependent variables, there were some variables that if present would influence that. Such variables are called moderating variables and in this case include; Human Resource-Teachers, dormitories, school grounds. The schools in Rongai Sub County are similar in terms of infrastructures. Therefore, the moderating variables are expected not to vary so much.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines research design, population of the study, sampling procedure and sample size, data collection instruments, data collection procedure, data analysis, data analysis matrix table as well as ethical considerations.

3.2 Research Design

The study used Convergent Parallel Mixed Methods research design. This involved collecting both qualitative and quantitative data simultaneously. In this approach, a researcher collects both quantitative and qualitative data, analyses them separately, and compares the results to see if the findings confirm or disconfirm each other. In this study, quantitative data were collected using survey questionnaires while qualitative data were collected through the use of interview schedules. Quantitative data were first analyzed using statistical methods, then qualitative data were analyzed using thematic approach, and finally the two types of findings compared.

3.3 Study Area

This study was conducted Rongai Sub-County. This is one of the counties that form Nakuru County. It is about 10 kilometers north of Elburgon and 15 kilometers east of Molo. The town lies 1912 m (6272 ft.) above sea level and has a population of 20,878. Rongai is divided into eight wards: Boror, Kampi ya Moto, Majitamu, Makongeni, Ngata, Rongai, Solai, and Waseges. The population growth rate is at 3.5% compared to the national average of 2.4%. About 52% of the population is poor and living below poverty line. The high poverty levels affect the Gross Enrolment rates and retention rates in the Sub-County. There are also high poverty rates in the area which may contribute to high school dropout rates. Therefore, for students to remain in school in this Sub-County, government financing must be reliable. The researcher therefore found it necessary to investigate the effect of Subsidized Secondary Education Programme in enhancing its access in Rongai Sub-County since no other similar study had been conducted in this area.

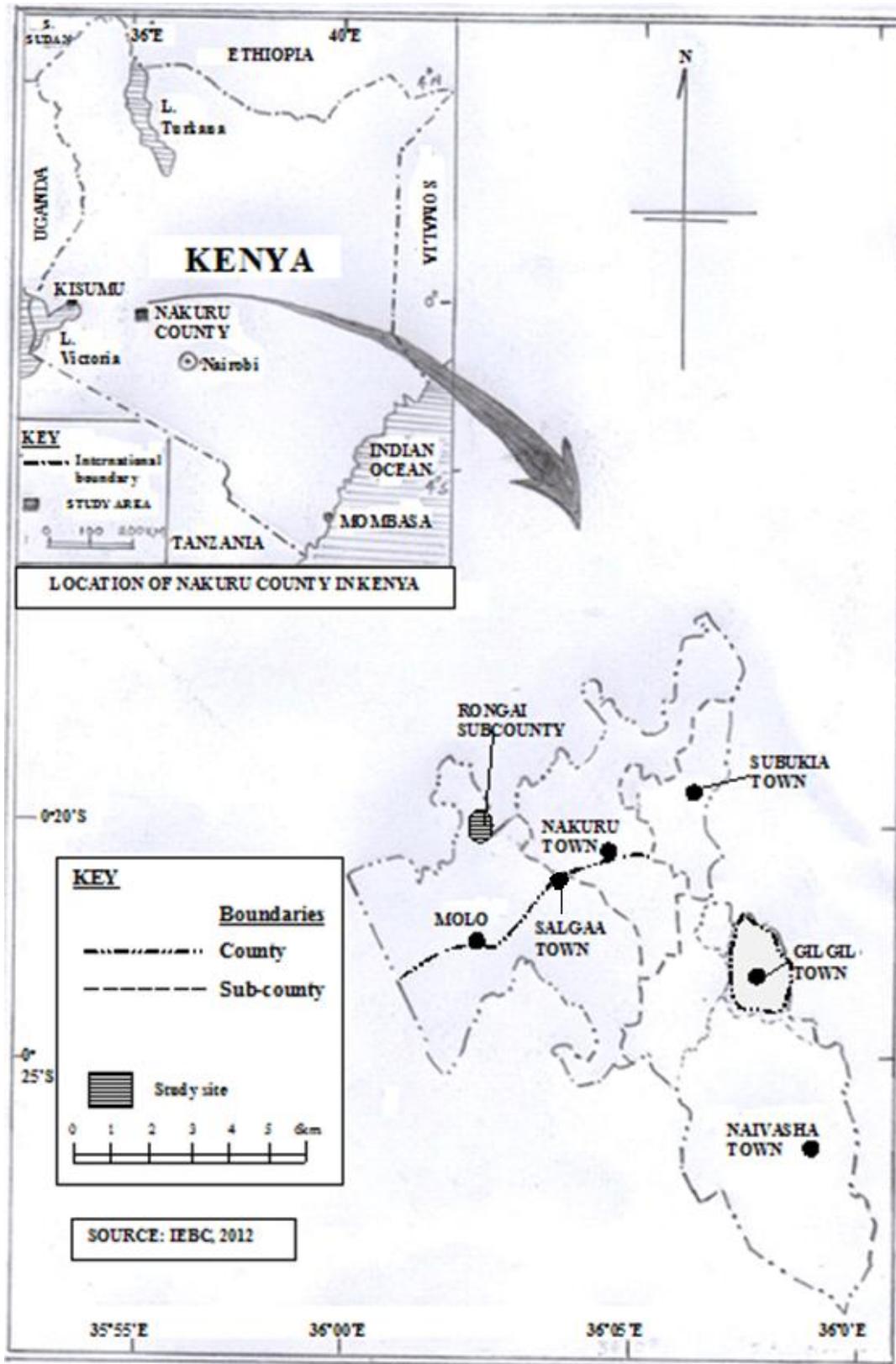


Figure 2: Map of the Study Area

3.4 Population of the Study

The target population of the study was all the principals in the 239 public secondary schools in Nakuru County, 2 teachers from each of the 239 public secondary schools and 11 sub county education officers. The accessible population was 39 principals, 78 teachers and an education officer in Rongai Sub-County that directly participated in the implementation of subsidized education Programme.

3.5 Sampling Procedure and Sample Size

All the 39 principals and 78 teachers and an education officer participated in the study. Purposive sampling was used to select two teachers from each of the 39 public secondary schools. The teachers selected were those who had been in the school before and after the implementation of SSE. Therefore a total of 118 respondents took part in the study that encompassed 78 teachers, 39 school principals and an education officer. The 39 principals and 78 teachers were given questionnaires while the education officer and five (5) principals randomly selected took part in the interview.

3.6 Instrumentation

The study used a semi -structured questionnaire developed by the researcher. The questionnaire was self -administered to the 78 teachers and 39 school principals. It contained items soliciting information on the effect of SSE on enrollment, retention rates and quality of education from 2003 - 2007 and from 2009-2013. The principals' questionnaire was divided into three sections: the first section shows demographic characteristics of the respondents, the second section shows the status of infrastructure and human resources where they were asked to indicate the number of teaching staff (TSC and BOM) before and after the introduction of SSE. In the same section, the respondents were asked to give how the policy had affected quality of various aspects of education using a Likert scale where 1=Strongly Disagree, 2=Disagree, 3= Not Sure, 4=Agree and 5=Strongly and on rating the availability of physical facilities using a Likert scale where 1=Very Inadequate, 2=Inadequate, 3= Not Sure, 4=Adequate and 5=Strongly Adequate. In the third section, they were asked give the enrollment and retention rates before and after the introduction of SSE policy. The teachers' questionnaire on the other hand was divided into two sections. Section one show demographic characteristics of the respondents while section two enabled the respondents to rate the availability of instruction materials using a Likert scale where 1=very inadequate,2=inadequate,3=Not sure,4=adequate,5=very adequate. The questionnaire samples are given in Appendix A and B.

An interview schedule was used to collect data on enrollment, retention and quality of education from the education officer and five principals in the sub-county. The Principals' questionnaire contained items requiring them to give factors that have affected students' enrolment and retention, and the quality of education after the implementation of SSE. The interview schedule is in Appendix C.

3.6.1 Validity

Validity means that the research outcomes truly reflect the phenomenon the study is trying to measure (Mugenda & Mugenda, 2008). To guarantee internal, construct and content validity of the research instrument, the research instruments were given to the thesis supervisors for expert judgement and the researcher made the corrections on them as was directed. This was by checking the instrument items against the study objectives.

3.6.2 Reliability

Reliability denotes the degree to which findings can be reproduced by another researcher (Kothari, 2008). Reliability of the questionnaires was tested by pilot testing and internal consistency gauged. To test the internal consistency of the items listed on the questionnaires, Cronbach's alpha coefficient was used. Cronbach's alpha is a statistic coefficient (a value between 0 and 1) that is used to rate the reliability of an instrument. The questionnaires were pilot tested at Nakuru Town West Sub-County. 12 questionnaires were given to the respondents. A correlation coefficient of 0.823 was obtained thus was considered acceptable (Maxwell, 2013).

3.7 Data Collection Procedure

The researcher sought an introductory letter from the graduate school of Egerton University, in order to obtain a research permit from National Commission for Science, Technology and Innovation. The researcher then visited the County Commissioner's Office and informed them of the intended study. She then visited the sampled schools and obtained the consent of the respondents before conducting the study. The researcher then administered the questionnaires to the school principals and the teachers after which she embarked on conducting interviews with the education officer and five principals in Rongai Sub-County. The interview was tape recorded with the permission of the respondent and later transcribed.

3.8 Data Analysis

Both quantitative and qualitative techniques were used to analyze data. The researcher used SPSS software to analyze quantitative data from the survey using descriptive statistics of frequencies, percentages and mean scores. The effect of SSE was tested using Paired Sample T-Test (t). Hypotheses were tested at $\alpha = 0.05$ level of significance. The data gathered from the interview were analyzed through thematic approach.

Table 2

Data Analysis Matrix

No	Objectives	Independent variables	Dependent variable	Statistical procedures and tests
1.	To compare the students' gross enrollment rates five years before and five years after the introduction of SSE in Rongai Sub-county.	Effect of Subsidized Secondary Education	Gross enrolment rate	Frequencies, percentages mean scores and paired sample t-test
2.	To describe the quality of education five years before and five years after the introduction of SSE in Rongai Sub-County.	Effect of Subsidized Secondary Education	Quality of Education	Frequencies, percentages mean scores
3.	To compare the students' retention rates five years before and five years after the introduction of SSE in Rongai Sub-County.	Effect of Subsidized Secondary Education	Students' Retention rates	Frequencies, percentages mean scores and paired sample t-test

3.9 Ethical Considerations

The participants were fully informed about the research procedure and gave their consent to participate in the research before data collection took place. The participant's opinions were respected and treated with utmost confidentiality during the entire research process. The respondents were assured that the information collected would be used for academic purposes only. The participants were assured that they could feel free to withdraw from participation in the study without fear of being penalized. In general, a high degree of openness regarding the purpose and the nature of the research were observed (Sommer, 2007).

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the data collected through the administered questionnaires and interview and further discusses the findings. The following indicators were used to measure SSE: tuition, repairs, maintenance and improvement, local transport and travel, electricity water and conservancies, activity, medical and personal emoluments. The effect of SSE on enrollment, and retention was tested using paired sample t test (t). The effect of SSE on the quality of education was assessed by establishing the adequacy of the indicators of SSE given above. Factors affecting quality of education after the introduction of SSE were obtained from interviews conducted with teachers and Sub County education officer. Hypotheses were tested at $\alpha = 0.05$ level of significance.

To understand how SSE influenced the enrollment, retention and quality of education, the researcher compared the dependent variables before and after the introduction of SSE. The average mean for all the dependent variables before and after the introduction were calculated and named (AVBTSC and AVATSC), (AVBBOM and AVABOM), (AVSSEEB and AVSSEEA) and (AVSSECB and AVSSECA). Paired sample t test was then used to compare the before and after of each dependent variable.

The second phase of the research involved qualitative data analysis. This involved interviewing the Sub-County Education Officer and five principals on factors that affect enrolment and retention of students and quality of education after introduction of SSE in Rongai Sub- County. The data gathered from the interview were analyzed through thematic approach.

4.2 Respondents Response Rate

The study had a sample size of 117 respondents. The researcher managed to issue all the questionnaires to the respondents at the time of the research. This was 100% turn out of the respondents hence excellent. The data is as shown in the Table 3 below;

Table 3**Respondents Response Rate**

Response Rate	Frequency	Percentage
Response	117	100
Non – response	0	100
Total	117	100

4.3 Demographic Characteristics of the Respondents

This section presents the demographic characteristics of the respondents in terms of their gender, age, marital status and educational background.

4.3.1 Distribution of the Principals by Gender

The analysis of gender distribution of the respondents shows that the number of male principals was 75 which forms 76.9% of the total number of principals whilst that of female principals was 09 which forms 23.1% of the total number of respondents. This means that there was high male principal rate in the study compared to their female counterparts. This distribution is shown in the Table 4 below;

Table 4**Distribution of the Principals by Gender**

	Frequency	Percentage
Male	30	76.9
Female	9	23.1
Total	39	100.0
Total	39	100.0

4.3.2 Distribution of the Principals Educational Background

There were 0 principals who had Diploma and PhD levels. Those who had Bachelors Degree were 89.7% (35 principals) while those who had Masters Degree were 10.3% (4 principals). The results are as shown in the Table 5 below;

Table 5

Distribution of the Educational Background

	Frequency	Percentage
Bachelor's Degree	35	89.7
Master's Degree	4	10.3
Total	39	100.0
Total	39	100.0

4.3.3 Period Served at Current Station

The study revealed that 38.5% of the principals had served between 1-10 years, 43.6% had served between 11-20 years while only 17.9% had served between 21-30 years in their current stations. The information is as shown in Figure 3 below.

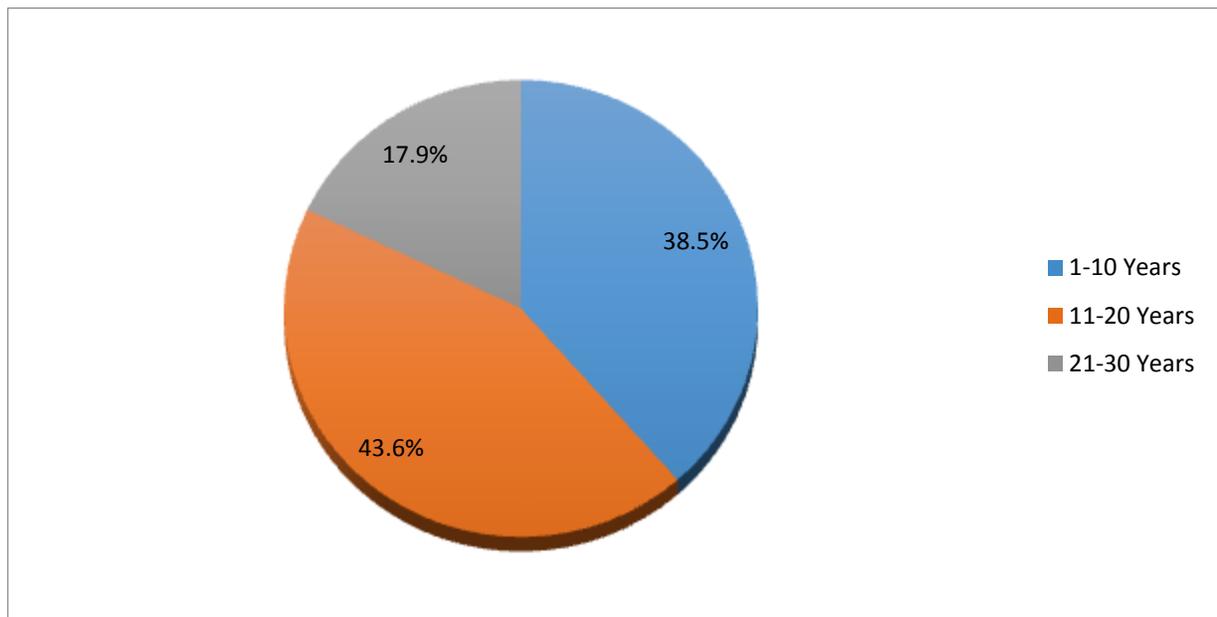


Figure 3: Period Served at Current Station

4.3.4 Type of School

The study revealed that only 5.1% of the schools were Boys boarding, only 5.1% were Girls boarding while 89.7% were mixed day schools. It can be noted the majority of schools in Rongai Sub-county are mixed day. The information is as shown in Figure 4 below.

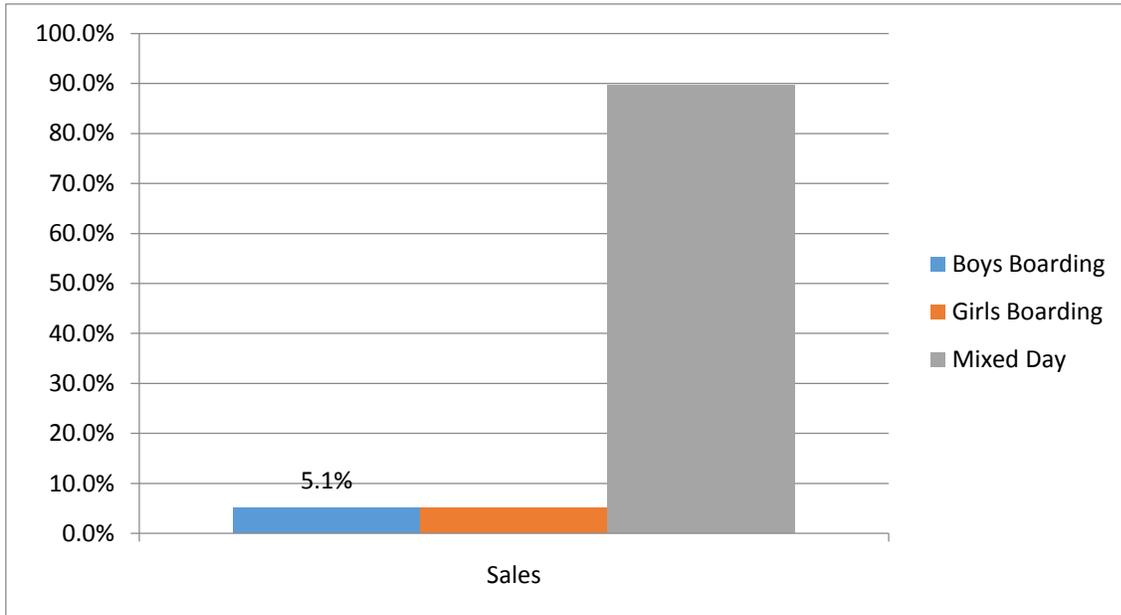


Figure 4: Type of School

4.3.5 Adequate Number of Teachers

The study revealed that 59% of the principals said that the number of teachers were adequate while only 41% said that they were inadequate. The information is as shown in Figure below.

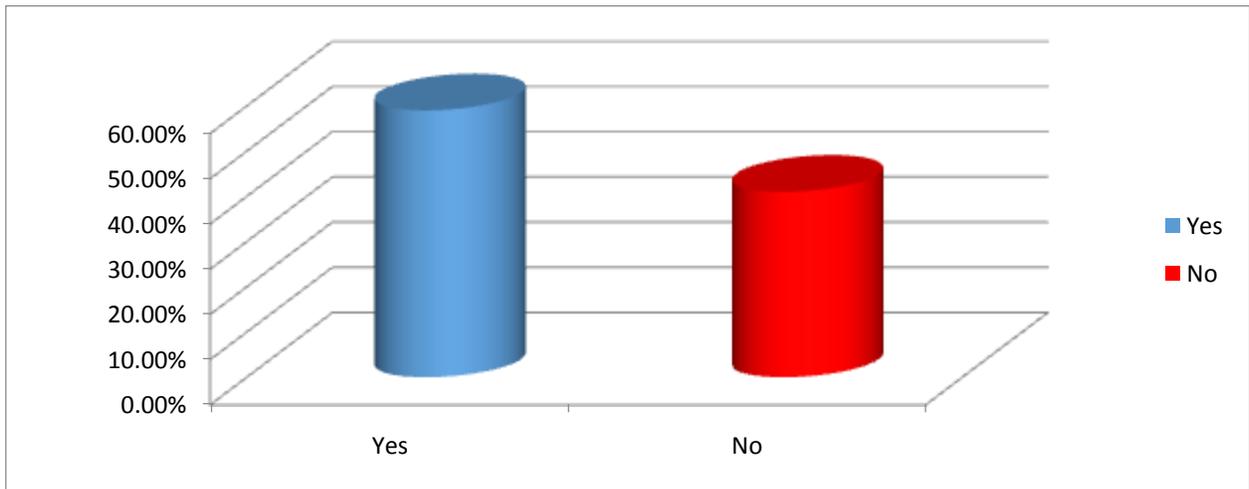


Figure 5: Adequate Number of Teachers

4.4 Analysis of the Hypotheses (Objectives)

To achieve the objectives of this study, the following null hypotheses were tested and the results of the analysis presented and interpreted in the in the table below;

4.4.1 Objective 1. To compare the students’ gross enrolment rate five years before and five years after the introduction of SSE. This objective was analyzed as hypothesis 1.

In this section, the means of each individual year (5 years before) and the means of each individual year (5 years after) were obtained. The average gross enrollment means for the 5 years after [2009-2013 named AVSSEEA] and the average gross enrollment means for the 5 years before [2003-2007 named AVSSEEB] were compared. Results are as discussed in Tables 6, 7 and 8.

H₀1: There is no statistically significant effect of SSE on the students’ enrollment rates five years before and five years after its introduction in Rongai Sub-County.

Table 6
Means After

		Means After					
		No of students enrolled after SSE 2009	No of students enrolled after SSE 2010	No of students enrolled after SSE 2011	No of students enrolled after SSE 2012	No of students enrolled after SSE 2013	Average mean for no of students enrolled 5 years after (AVSSEEA)
N	Valid	39	39	39	39	39	39
	Missing	0	0	0	0	0	0
Mean		3.9487	4.0000	4.0000	4.0769	4.3590	4.0769

Table 6, gives the average gross enrollment means of each individual year 5 years after SSE (2009-2013). The means are as follows: 2009 had 3.9487, 2010 had 4.0000, 2011 had 4.0000, 2012 had 4.0769 while 2013 had 4.3590. The average gross enrollment mean for the five years (AVSSEEA) was found to be 4.0769.

Table 7**Means Before**

		Means Before					Average mean for no of students enrolled 5 years before (AVSSEEB)
		No of students enrolled before SSE 2003	No of students enrolled before SSE 2004	No of students enrolled before SSE 2005	No of students enrolled before SSE 2006	No of students enrolled before SSE 2007	
N	Valid	39	39	39	39	39	39
	Missing	0	0	0	0	0	0
Mean		3.4615	3.4872	3.7179	3.8718	3.8974	3.6872

Table 7, gives the average gross enrollment means of each individual year 5 years before SSE (2003-2007). The means are as follows: 2003 had 3.4615, 2004 had 3.4872, 2005 had 3.7179, 2006 had 3.8718 while 2013 had 3.8974. The average gross enrollment mean for the five years (AVSSEEB) was found to be 3.6872.

Table 8**Effect of SSE on Gross Enrollment****Paired Samples t-test**

	Mean	Std. Deviation	Paired Differences		T	df	Sig. (2-tailed)	
			Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
AVSSEEA	.38974	.87653	.14036	.10560	.67378	2.777	38	.008
Pair 1 – AVSSEEB								

Table 8 gives the analysis of the effect of SSE on students' gross enrolment rates in Rongai Sub-County. When the average gross enrolment (AVSSEEA) after SSE and the average gross enrollment rates (AVSSEEB) before SSE were compared, it was found that there was a statistically significant effect of SSE on students' gross enrolment rates in Rongai Sub-County. A P-values of .008 was produced which is less than .05. The results can also be confirmed by the value of $t=2.777$ obtained in the analysis which does not fall between the upper (.67378) and the lower limit (.10560). Therefore, the null hypothesis which states that there was no statistically

significant effect of SSE on students' gross enrolment rates was rejected while alternative hypothesis was accepted.

4.4.2 Objective 2: To compare the students' retention rates five years before and five years after the introduction of SSE. This objective was analyzed as hypothesis 2.

H₀2: There is no statistically significant effect of SSE on students' retention five years before and five years after its introduction in Rongai Sub-County.

In this section, the average students' retention rates (AVSSECA) after SSE and the average students' retention rates (AVSSECB) before SSE was compared. Results are given in Table 7.

**Table 9
Effect of SSE on Student's Retention**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	AVSSECA – AVSSECB	.26667	1.07638	.17236	-.08226	.61559	.547	38	.130

Table 9 gives the analysis of the effect of SSE on students' retention rates in Rongai Sub-County and the results discussed below. When the average students' retention rates (AVSSECA) after SSE and the average students' retention rates (AVSSECB) before SSE was compared, it was found that there was no statistically significant effect of SSE on students' retention rates in Rongai Sub-County. A P-values of .130 was produced which is greater than .05. The results can also be confirmed by the value of t=.547 obtained in the analysis which fall between the upper (.61559) and the lower limit (-.08226). Therefore, the null hypothesis which states that there is no statistically significant effect of SSE on students' retention rates was accepted while alternate hypothesis was rejected.

4.4.3 Objective 3: Quality of education five years before and five years after the introduction of SSE in Rongai Sub-County.

In this section, the principals and teachers were asked to give their opinions on various aspects that pertain to the quality of education. Results are presented and discussed below.

4.4.3.1 How significant the positive impact of the policy has been on the following aspects of quality of education

Teaching

The study revealed that 5.1% of the principals said that the positive impact of the policy was very insufficient. 7.7% said it was insufficient, 17.9% were not sure, 38.5% where the majority falls said that it was sufficient while 30.8% said it was very sufficient. It can be noted that those who were for sufficient and very sufficient made up the greatest combined percentage of 69.3% i.e. forming more than half of the total number of principals. The information is shown in Table 10 below.

Table 10

Teaching

	Frequency	Percentage
Very Insufficient	2	5.1
Insufficient	3	7.7
Not Sure	7	17.9
Sufficient	15	38.5
Very Sufficient	12	30.8
Total	39	100.0
Total	39	100.0

Assessment and Exams

The study revealed that 2.6% of the principals said that the positive impact of the policy was insufficient. 15.4% were not sure, 43.6% where the majority falls were for sufficient while 38.5% were for very sufficient. It can be noted that those who were for sufficient and very sufficient made up the greatest combined percentage of 82.1% i.e. forming more than three quarters of the total number of principals. The information is shown in Table 11 below.

Table 11
Assessment and Exams

	Frequency	Percentage
Insufficient	1	2.6
Not Sure	6	15.4
Sufficient	17	43.6
Very Sufficient	15	38.5
Total	39	100.0
Total	39	100.0

Guidance and Counselling

The study revealed that 5.1% of the principals said that that the positive impact of the policy was very insufficient on the quality of guidance and counselling. 2.6% were for insufficient, 43.6% where the majority falls were not sure, 15.4% were for sufficient while 33.3% were for very sufficient. The information is shown in Figure 6 below.

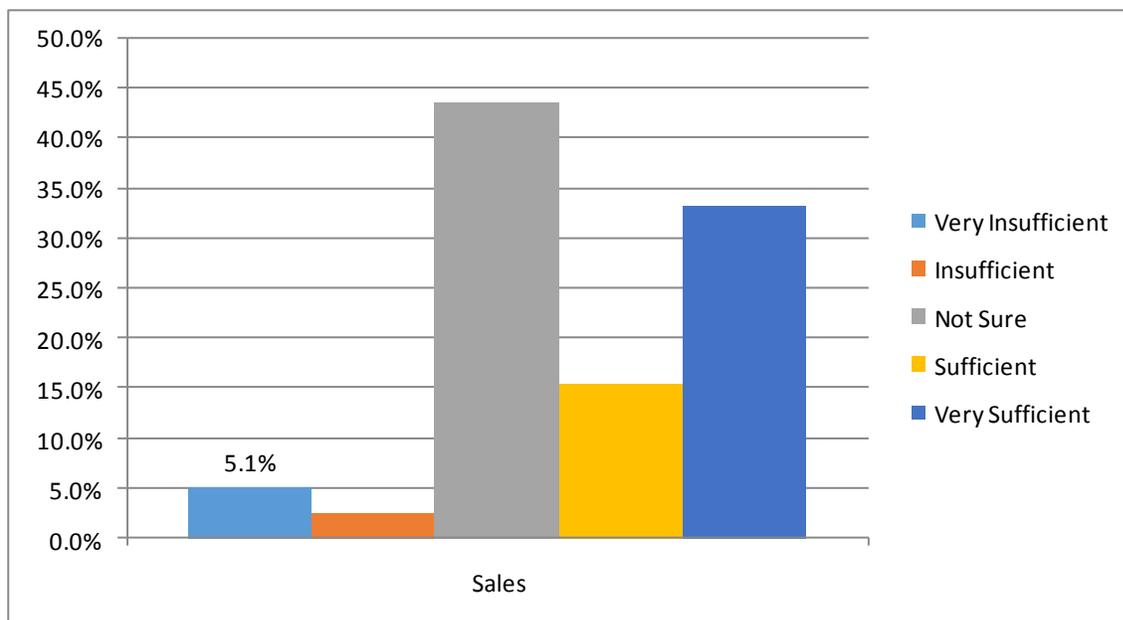


Figure 6: Guidance and Counselling

Healthcare

The study revealed that 12.8% of the principals said that the positive impact of the policy was very insufficient on the quality of healthcare. 15.4% were for insufficient, 10.3% were not sure, 48.7% where the majority falls were for sufficient while 12.8% were for very sufficient. It can be noted that those who were for sufficient and very sufficient made up the greatest combined

percentage of 61.5% i.e. forming more than half of the total number of principals. However, 5 Principals (12.8%) and 6 Principals (15.4%) said the Health care facilities were very insufficient and insufficient respectively. This implies that in those 11 schools the students in those schools are not receiving adequate health services. This situation affects quality of education because students cannot learn well when their health is not taken care of. The information is shown in Table 12 below.

Table 12
Healthcare

	Frequency	Percentage
Very Insufficient	5	12.8
Insufficient	6	15.4
Not Sure	4	10.3
Sufficient	19	48.7
Very Sufficient	5	12.8
Total	39	100.0
Total	39	100.0

Discipline

The study revealed that 7.7% of the principals said that the positive impact of the policy was very insufficient on the quality of discipline. 10.3% were for insufficient, 7.7% were not sure, 56.4% where the majority falls were for sufficient while 17.9% were for very sufficient. It can be noted that those who were for sufficient and very sufficient that the policy affected discipline made up the greatest combined percentage of 74.3% i.e. forming almost three quarters of the total number of principals. The information is shown in Figure 7 below.

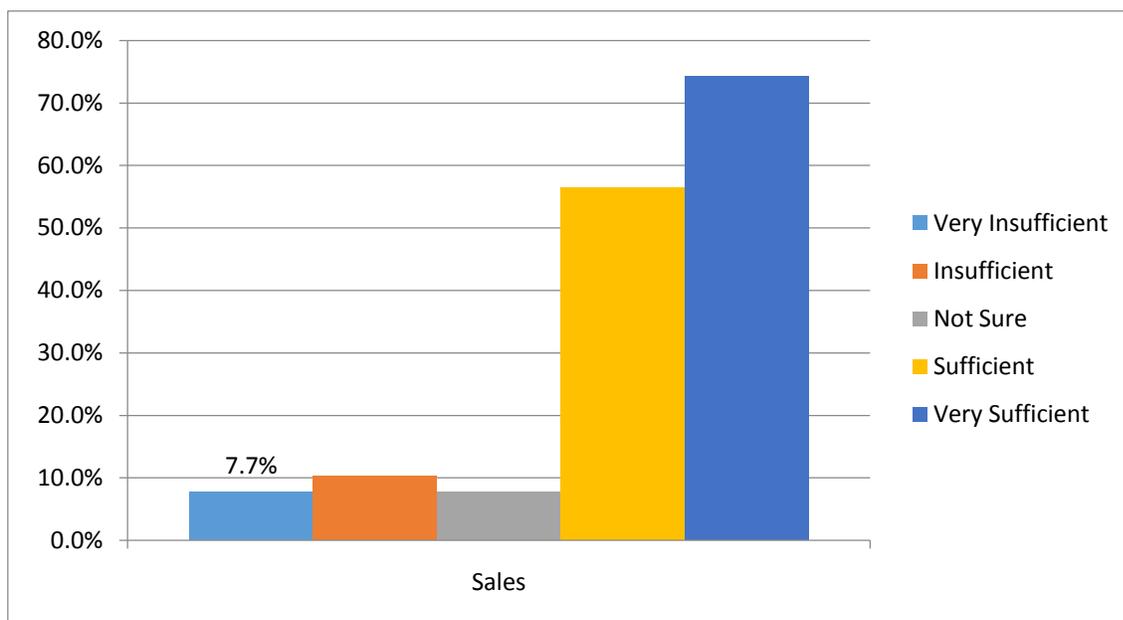


Figure 7: Discipline

4.4.3.2 The Average analysis of how sufficient the positive impact of the SSE policy has been on the following aspects of quality of education in Rongai Sub-County (A Combined General Analysis)

Table 13 below shows an analysis of the principals' average opinion score of how significant the positive impact of the policy has been on the following aspects of quality of education.

Table 13

Average mean scores on how sufficient the positive impact of the policy has been on the following aspects of quality of education

Aspects	Average mean score
Teaching	3.82
Assessment and Exams	4.17
Guidance and Counselling	3.69
Health care	3.33
Discipline	3.66
Grand average score	3.73

Table 13 gives the analysis of the average mean scores on how sufficient the positive impact of the policy has been on the following aspects of quality of education in Rongai Sub-County and the results discussed below. The average mean score of teaching is 4 (Sufficient) i.e. 3.82

rounded off to the nearest whole number. The average mean score of assessment and exams is 4 (Sufficient) i.e. 4.17 rounded off to the nearest whole number. The average mean score of guidance and counseling is 4 (Sufficient) i.e. 3.69 rounded off to the nearest whole number. The average mean score of health care is 3 (Not Sure) i.e. 3.33 rounded off to the nearest whole number and the average mean score of discipline is 4 (Sufficient) i.e. 3.66 rounded off to the nearest whole number. When combined average of the average mean scores was calculated, a grand average mean score obtained was 4 (Sufficient) i.e. 3.73 rounded off to the nearest whole number. This therefore concludes that the positive impact of the policy has been sufficient on the various aspects of quality of education in Rongai Sub-County.

4.4.3.3 Rating the adequacy of the physical facilities with the provision of SSE

Classroom

The study revealed that 5.1% of the principals said that classrooms were very inadequate. 2.6% were for adequate, 69.2% where the majority falls were for adequate while 23.1% were for very adequate. It can be noted that those who were for classrooms being adequate and strongly adequate made up the greatest combined percentage of 92.3% i.e. forming almost the total number of principals. However, the fact that 2 (5.1%) of the Principals said that the classrooms in their schools are very inadequate and 1 (2.6 %) said the classrooms are inadequate implies is that, in those schools, not all of the students are in classrooms all the time. Some of them could be learning under trees. This situation definitely affects quality of education because there cannot be meaningful learning without a blackboard to be used by teachers for illustrations. The information is shown in Table 14 below.

Table 14

Classroom

	Frequency	Percentage
Very Inadequate	2	5.1
Inadequate	1	2.6
Adequate	27	69.2
Very Adequate	9	23.1
Total	39	100.0
Total	39	100.0

Library

The information in Table 15 shows that 25 (64.1%) of the Principals said that their schools do not have adequate library space which students can use for private study. This implies that students in those schools do not have the opportunity to do extra reading or search to supplement what they have been taught by their teacher. This inadequacy of reading space affects quality of education because students in those schools will not develop reading culture that enables an individual to search and become a creative thinker.

Table 15
Library

	Frequency	Percentage
Very Inadequate	3	7.7
Inadequate	26	66.7
Adequate	2	5.1
Very Adequate	8	20.5
Total	39	100.0
Total	39	100.0

Laboratory

Results in Table 16 show that 25 (64.1%) of the Principals said that they do not have adequate laboratory space. This implies that students in those schools are not acquiring science process skills needed by scientists and technologists. Lack of such skills will hinder the achievement of the 2030 Sustainable Development Goals (SDGs). Thus, the scientific knowledge is not being acquired meaningfully by the learners in those schools. This lack of acquisition of science process skills has a negative impact on the quality of education

Table 16
Laboratory

	Frequency	Percentage
Very Inadequate	1	.8
Inadequate	25	19.7
Not Sure	1	.8
Adequate	5	3.9
Very Adequate	7	5.5
Total	39	30.7
Total	39	100.0

Dining Hall

The study revealed that 61.5% of the principals where the majority falls said that dining halls were very inadequate. 7.7% were for inadequate, 7.7% were not sure, and 7.7% were for adequate while 15.4% were for very adequate. It can be noted that most principals outlined that the number of dining halls were very inadequate. The information is shown in Figure 8 below.

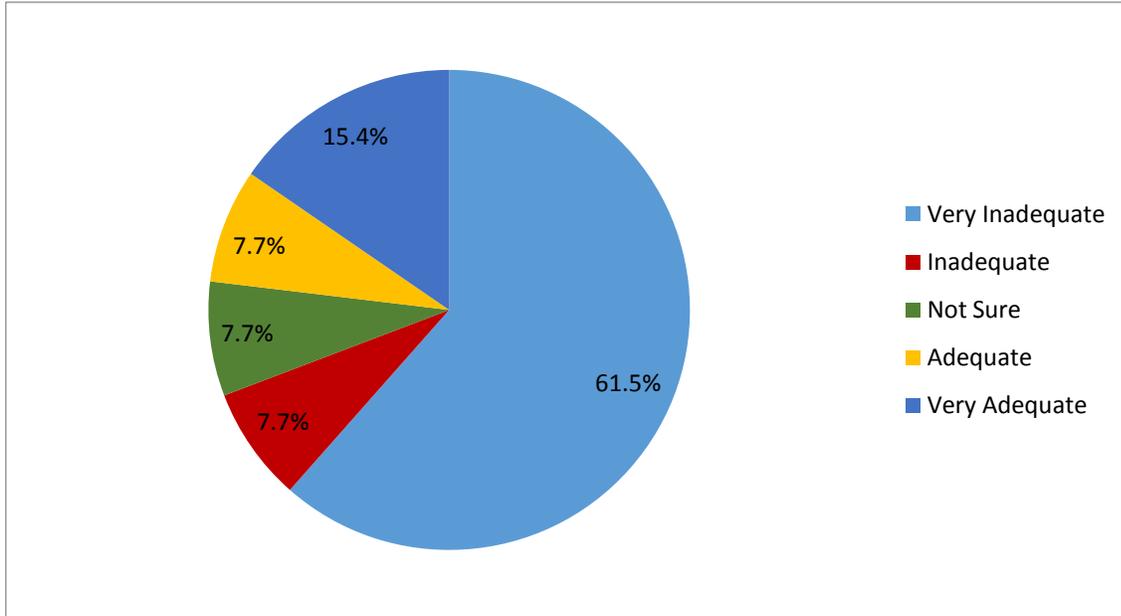


Figure 8: Dining Hall

Dormitory

The study revealed that 17.9% of the principals said that dormitories were very inadequate. 59% where the majority falls were not sure, 10.3% were for adequate while 12.8% were for very adequate. The information is shown in Table 17 below.

Table 17

Dormitory

	Frequency	Percentage
Very Inadequate	7	17.9
Not Sure	23	59.0
Adequate	4	10.3
Very Adequate	5	12.8
Total	39	100.0
Total	39	100.0

School bus

The study revealed that 25.6% of the principals said that school buses were very inadequate. 56.4% where the majority falls were for inadequate, 7.7% were for adequate while 10.3% were for very adequate. It can be noted that most principals outlined that the number of school buses were inadequate. School buses are used fir field trips, and schools without buses will not take students for field trips thereby affecting the learning of subjects that require field work. The information is shown in Table 18 below.

Table 18

School bus

	Frequency	Percentage
Very Inadequate	10	25.6
Inadequate	22	56.4
Adequate	3	7.7
Very Adequate	4	10.3
Total	39	100.0
Total	39	100.0

Staffroom

The study revealed that 30.8% of the principals said that staffrooms were very inadequate. 7.7% were for inadequate, 53.8% where the majority falls were for adequate while 7.7% were for very adequate. It can be noted that most principals outlined that the number of school buses were adequate. The information is shown in Table 19 below.

Table 19

Staffroom

	Frequency	Percentage
Very Inadequate	12	30.8
Inadequate	3	7.7
Adequate	21	53.8
Very Adequate	3	7.7
Total	39	100.0
Total	39	100.0

Toilets

The study revealed that 15.4% of the principals said that toilets were very inadequate. 38.5% were for inadequate, 41% where the majority falls were for adequate while 5.1% were for inadequate. It can be noted that most principals outlined that the number of toilets were adequate. The information is shown in Table 20 below.

Table 20

Toilets

	Frequency	Percentage
Very Inadequate	6	15.4
Inadequate	15	38.5
Adequate	16	41.0
Very Adequate	2	5.1
Total	39	100.0
Total	39	100.0

Electric Supply

The study revealed that 48.7% of the principals and where the majority falls said that electric supplies were very inadequate. 30.8% where the majority falls were for inadequate, 17.9% were for adequate while 2.6% were for very adequate. It can be noted that most principals (forming slightly less than half of the number of principals) outlined that the number of electric supplies were very inadequate. This implies that students in those schools have a difficulty in doing their assignment due to lack of electricity and this affects their studies. The information is shown in Table 21.

Table 21

Electric Supply

	Frequency	Percentage
Very Inadequate	19	48.7
Inadequate	12	30.8
Adequate	7	17.9
Very Adequate	1	2.6
Total	39	100.0
Total	39	100.0

4.4.3.4 The Average analysis on rating the adequacy of the physical facilities with the provision of SSE in Rongai Sub-County (A Combined General Analysis)

Table 22 below shows an analysis of the principals' average opinion score of how significant the positive impact of the policy has been on the following aspects of quality of education.

Table 22

Average means scores on rating the adequacy of the physical facilities with the provision of SSE

Physical facilities	Average mean score
Classroom	4.02
Library	2.64
Laboratory	2.79
Dining Hall	2.07
Dormitory	2.00
School Bus	2.20
Staffroom	3.00
Toilets	1.30
Electricity Supply	1.94
Grand average score	2.72

Table 22 gives the analysis of the average mean scores on the adequacy of the physical facilities with the provision of SSE in Rongai Sub-County. The scores are based on the Likert scale (where 1 = very inadequate, 2 = inadequate, 3 = not sure, 4 = adequate and 5 very adequate). The results discussed below. The average mean score of classroom is 4 (Adequate) i.e. 4.02 rounded off to the nearest whole number. The average mean score of library is 3 (Not Sure) i.e. 2.64 rounded off to the nearest whole number. The average mean score of Laboratory is 3 (Not Sure) i.e. 2.79 rounded off to the nearest whole number. The average mean score of Dining Hall is 2 (Inadequate) i.e. 2.076923 rounded off to the nearest whole number, the average mean score of dormitory is 2 (Inadequate), the average mean score of school bus is 2 (Inadequate) i.e. 2.20 rounded off to the nearest whole number, the average mean score of staffroom is 3 (Not Sure), the average mean score of toilet is 1 (Inadequate) i.e. 1.30 rounded off to the nearest whole number and the average mean score of electric supply is 2 (Inadequate) i.e. 1.94 rounded off to the nearest whole number. When combined average of the average mean scores was calculated, a grand average mean score obtained was 2 (Inadequate) i.e. 2.44 rounded off to the nearest whole number. This therefore concludes that the adequacy of the physical facilities with the provision of SSE in Rongai Sub-County has been inadequate.

4.5 Analysis of the Data Obtained from Teachers

4.5.1 Demographic Characteristics of Teachers

4.5.1.1 Gender of the Teachers

The analysis of gender distribution of the teachers show that the number of female teachers were 42 which forms 53.8% of the total number of teachers whilst that of male teachers were 36 which forms 46.2% of the total number of teachers. This means that there was high female teachers' rate in the study compared to their male counterparts. This distribution is shown in the Table 23 below;

Table 23

Gender

	Frequency	Percentage
Male	36	46.2
Female	42	53.8
Total	78	100.0

4.5.1.2 Educational Background of the Teachers

There were 4 (5.1%) teachers who had Diploma levels. Those with Bachelor's Degree were 78.2% (61 teachers), those who had Masters Degree were 15.4% (12 teachers) while those who were PhD holders were 1.3% (1 teacher). The results are as shown in the Figure 9 below;

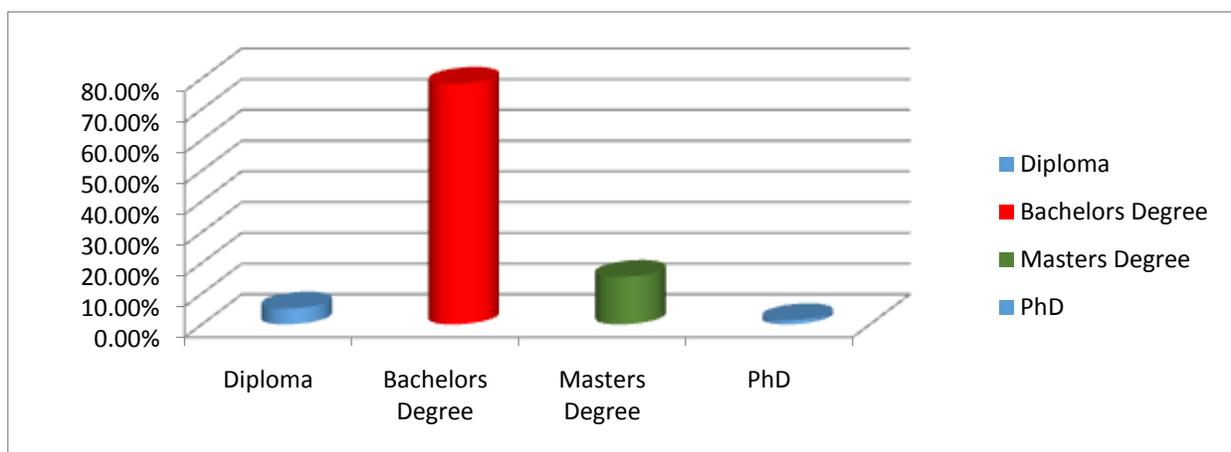


Figure 9: Educational Background of the Teachers

4.5.1.3 Period Served as a Teacher

The study revealed that 12.8% had served below 1 year, 74.4% of the teachers had served between 1-10 years, and 5.1% had served between 11-20 years while only 7.7% had served between 21-30 years. The information is as shown in Table 24 below.

Table 24
Period Served as a Teacher

	Frequency	Percentage
Below 1 year	10	12.8
1-10 years	58	74.4
11-20 years	4	5.1
21-30 years	6	7.7
Total	78	100.0

4.5.2 Period at Current Station

The study revealed that 10.3% of the teachers had been at their current stations between 1-10 years, 76.9% had been between 11-20 years, 10.3% had been between 21-30 years in their current stations while only 2.6% had been above 31 years. The information is as shown in Table 25 below.

Table 25
Period at Current Station

	Frequency	Percentage
1-10 years	8	10.3
11-20 years	60	76.9
21-30 years	8	10.3
Above 31 years	2	2.6
Total	78	100.0

4.5.3 Lessons in a Week

The study revealed that 7.7% of the teachers had 12 lessons, 53.8% where the majority falls had 14 lessons, and 34.6% of the teachers had 16 lessons while 2.6% had 24 lessons. The information is as shown in Figure 10 below.

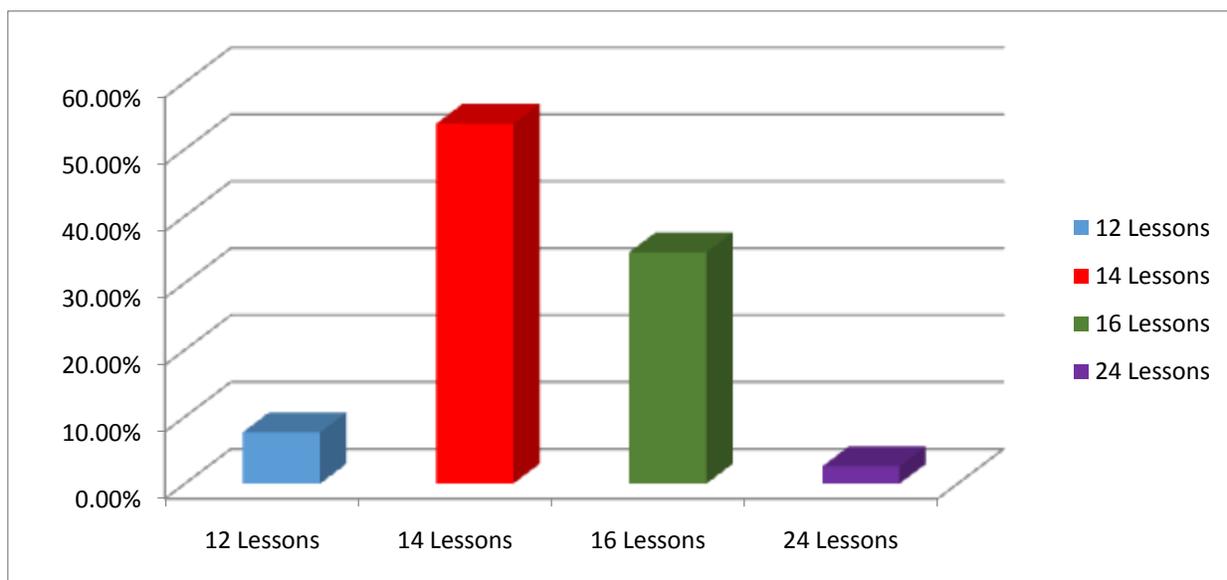


Figure 10: Lessons in a Week

4.5.4 Rating the adequacy of the instructional materials with the provision of SSE

4.5.4.1 Adequacy of Textbooks

The study revealed that 46.2% of the teachers and where the majority falls said that the textbooks were very inadequate. 43.6% were for inadequate, 3.8% were not sure, and 5.1% were for adequate while 1.3% were for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 89.8% i.e. forming more than three quarters of the total number of teachers. The implication of the above results is that students in those schools share the few textbooks available when in class, but some of them will not be able to do assignments when they are home and this affects quality of learning. The information is shown in Table 26.

Table 26

Adequacy of Textbooks

	Frequency	Percentage
Very Inadequate	36	46.2
Inadequate	34	43.6
Not Sure	3	3.8
Adequate	4	5.1
Very Adequate	1	1.3
Total	78	100.0

4.5.4.2 Adequacy of Stationery

The study revealed that 35.9% of the teachers said that the stationery were very inadequate. 53.8% and where the majority falls were for inadequate, 2.6% were not sure, 7.7% were for adequate while no teacher was for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 89.7% i.e. forming more than three quarters of the total number of teachers. This implies the majority of teachers are not able to prepare learning materials for their students. The information is shown in Table 27 below.

Table 27

Adequacy of Stationery

	Frequency	Percentage
Very Inadequate	28	35.9
Inadequate	42	53.8
Not Sure	2	2.6
Adequate	6	7.7
Total	78	100.0

4.5.4.3 Adequacy of Desks and Chairs

The study revealed that 39.7% of the teachers said that the desks and chairs were very inadequate. 50% and where the majority fall were for inadequate, 1.3% were not sure, 9% were for adequate while no teacher was for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 89.7% i.e. forming more than three quarters of the total number of teachers. The information is shown in Table 28 below.

Table 28

Adequacy of Desks and Chairs

	Frequency	Percentage
Very Inadequate	31	39.7
Inadequate	39	50.0
Not Sure	1	1.3
Adequate	7	9.0
Total	78	100.0

4.5.4.4 Adequacy of Computers

The study revealed that 28.2% of the teachers said that the computers were very inadequate. 67.9% and where the majority falls were for inadequate, no teacher was for not sure, 2.6% were for adequate while 1.3 were for very adequate teacher was for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 96.1% i.e. which forms almost all number of teachers. This result indicates that, the majority of schools in the Sub County do not have computers, and therefore the students from those schools will not contribute to the achievement of 2030 SDGs. The information is shown in Table 29 below.

Table 29
Adequacy of Computers

	Frequency	Percentage
Very Inadequate	22	28.2
Inadequate	53	67.9
Adequate	2	2.6
Very Adequate	1	1.3
Total	78	100.0

4.5.4.5 Adequacy of laboratory chemicals and apparatus

The study revealed that 16.7% of the teachers said that the laboratory chemicals and apparatus were very inadequate. 78.2% and where the majority falls were for inadequate, no teachers was for not sure, 3.8% were for adequate while 1.3% were for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 94.9% i.e. meaning that almost all the teachers were for inadequate and very inadequate. The majority of teachers 61 (78.2%) said that chemicals and apparatus are inadequate. This implies that, individual class experiments cannot take place in their schools. When chemicals and apparatus are inadequate, teachers perform demonstrations. The disadvantage of demonstrations as compared to class experiments is that, the former does not allow learners to have hands-on experiences. Thus, students in those schools leave without acquiring the scientific attitudes, skills and practices. The information is shown in Table 30 below.

Table 30**Adequacy of laboratory chemicals and apparatus**

	Frequency	Percentage
Very Inadequate	13	16.7
Inadequate	61	78.2
Adequate	3	3.8
Very Adequate	1	1.3
Total	78	100.0

4.5.4.6 Adequacy of Maps and Charts

The study revealed that 20.5% of the teachers said that the maps and charts were very inadequate. 75.6% and where the majority falls were for inadequate; those who were for not sure adequate and very adequate were 1.3% respectively. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 96.1% i.e. meaning that almost all the teachers were for inadequate and very inadequate. The information is shown in Table 31 below.

Table 31**Adequacy of Maps and Charts**

	Frequency	Percentage
Very Inadequate	16	20.5
Inadequate	59	75.6
Not Sure	1	1.3
Adequate	1	1.3
Very Adequate	1	1.3
Total	78	100.0

4.5.4.7 Adequacy of Exercise Books

The study revealed that 16.7% of the teachers said that the exercise books were very inadequate. 79.5% and where the majority falls were for inadequate, 2.6% were not sure, 1.3% was for adequate while no teacher was for very adequate. It can be noted that those who were for very inadequate and inadequate made up the greatest combined percentage of 96.2 % i.e. meaning that almost all the teachers were for inadequate and very inadequate. The information is shown in Table 32.

Table 32**Adequacy of Exercise Books**

	Frequency	Percentage
Very Inadequate	13	16.7
Inadequate	62	79.5
Not Sure	2	2.6
Adequate	1	1.3
Total	78	100.0

4.5.4.8: The Average Analysis of Rating the Adequacy of the Instructional Materials with the Provision of SSE in Rongai Sub-County (A Combined General Analysis)

Table 33

Average means scores on rating the adequacy of the instructional materials with the provision of SSE

Physical facilities	Average mean score
Textbook	1.71
Stationary	1.82
Desks and Chairs	1.79
Computers	1.80
Laboratory chemicals and apparatus	1.94
Maps and charts	1.87
Exercise books	1.78
Grand average score	1.83

Table 33 gives the analysis of the average mean scores on the adequacy of the physical facilities with the provision of SSE in Rongai Sub-County and the results discussed below. The average mean score of Textbook is 2 (Inadequate) i.e. 1.17 rounded off to the nearest whole number. The average mean score of Stationery is 2 (Inadequate) i.e. 1.82 rounded off to the nearest whole number. The average mean score of Desks and Chairs is 2 (Inadequate) i.e. 1.79 rounded off to the nearest whole number. The average mean score of Computers is 2 (Inadequate) i.e. 1.80 rounded off to the nearest whole number, the average mean score of Laboratory and Chemical Apparatus is 2 (Inadequate) i.e. 1.94 rounded off to the nearest whole number, the average mean score of Maps and Charts is 2 (Inadequate) i.e. 1.87 rounded off to the nearest whole number and the average mean score of Exercise books is 2 (Inadequate) i.e. 1.78 rounded off to the nearest

whole number. When combined average of the average mean scores was calculated, a grand average mean score obtained was 2 (Inadequate) i.e. 1.83 rounded off to the nearest whole number. This therefore concludes that the adequacy of the instruction materials with the provision of SSE in Rongai Sub-County has been inadequate.

4.6 Discussions in Relations with Other Research Findings

This section discusses the findings above in relation to other research findings.

According to Wanyama (2012) the initiative for subsidizing secondary education is a good thing. But it is not all good news. The grave challenges to which Wanyama refers include poor quality of education, insufficient teachers and equipment to meet the growing classroom population. But the system is fraught with problems: inadequate teaching space and materials, a shortage of teachers, and inadequate and late disbursement of government fund. This findings are in agreement with the present study where it was found that the number of physical facilities was inadequate as a grand average mean score obtained was 2 (Inadequate) i.e. 2.382051 rounded off to the nearest whole number. The present study however, contrasts with the findings of Wanyama as the number of teachers was found to be adequate i.e. 59% of the principals said that the number of teachers were adequate while only 41% said that they were inadequate.

According Khamati et al (2013), factors influencing the implementation of free secondary education in Mumias District, Kenya he finds that SSE has led to increased enrolment and retention in secondary schools resulting in the overstretching of facilities and inadequacy of the teaching staff. This may compromise the quality of learning for the students in the schools. Very long delays in giving schools money for the term (as late as third month of the term) are common. This was found to have negative effect on learning as the schools reach levels where crucial learning materials lack in the schools. Providing only funds for tuition were unanimously seen to be very sufficient. This is in agreement with my study where the education officer stated that the money is supposed to be in the schools in December, April and August .Which means the preceding months before opening schools respectively. The findings are also similar in that they both agree the Ministry of Education need further allocation of funds. On the other hand, SSE has been sufficient on various aspects of quality of education i.e. a grand average mean score obtained was 4 (Sufficient) i.e. 3.738462 rounded off to the nearest whole number. This contrasts the findings of Khamati who said that an influx of students compromises the quality of education.

According to Mugo (2006) a number of factors pose considerable challenges to implementation and quality of Free Primary Education (FPE). These factors include acute shortage of teachers, drought and famine, and enhanced pupils' enrolment. For example, the introduction of FPE resulted in increased enrolment, but the increase in enrolment was not coupled with increase in number of teachers, classrooms, desks, latrines, textbooks and other teaching and learning resources. The school heads had not been trained for the implementation of the programme as it was introduced without any prior strategic planning. These problems all could pose challenges in supervision of curriculum implementation, affecting the quality of teaching in public primary schools. These findings are in agreement with the present findings which were that despite the increased enrollment rates, many physical materials such as classrooms, textbooks among others become more inadequate. The teachers have been able to manage with the available resources despite the increased number of students.

A study carried out by Mbaabu (1983) revealed that lack of physical facilities, materials, equipment and tools were among the major problems that school head teachers would face in Kenya. This study revealed that free education at the primary level would bring about problems related to over-enrolment, lack of physical facilities, and inadequate teachers. This study also revealed the same that the SSE would bring over-enrolment, lack of physical facilities and inadequate teachers. The findings of Mbaabu are in agreement with the findings of the present study regarding the challenges that comes with increased enrollment rate such as inadequate physical materials among others. It however contrasts in terms of availability of teachers since it was found that the number of teachers also increased.

Njeru and Orodho (2003) observe that availability and adequacy of learning resources such as teaching force, physical facilities and instructional materials influence quality of education. The subsidized secondary education in Kenya has led to increase in students seeking secondary education. According to class teachers some of the main constraints that they encounter in relation to the implementation of the subsidized secondary education were lack of infrastructural facilities at school/stretched physical resources, lack of enough educational resources, large populations in schools which translated to high workloads as admissions were too high against the available resources. Because of the overcrowded classes individual attention of students was not taken care of due to high enrolments. These findings are in agreement with the present study since it was found that the number of students outweighed the number of physical amenities such as laboratories, classrooms and libraries.

They raised other issues like inadequate funds, mismanagement of available fund, embezzlements of funds by school managers. Most school lack tendering committees hence lacked transparency in expenditures. Lack of proper planning on how to spent school funds was another constraint and times government funds are diverted to other purposes like paying supplies for food stuff supplied to schools. Some schools had uncooperative parents who thought that government pays all funds needed in running schools. Others thought that the subsidy made education a free program hence being reluctant to pay other school levies. Students from challenged families (orphans, physical and poverty) cannot access the education because they cannot afford to buy uniform and pay lunch (Orodho & Njeru, 2003). These findings are in agreement with the interview conducted as the education officer suggested that the head teachers be taken on trainings that will enable them manage funds. It was observed that school heads lacked transparency in accounting for funds provided by the government and at the same time making it difficult on the parents to help in anything for the school.

4.7 Qualitative Analysis of the Interview with Rongai Sub – County Education Officer

In order to compare the principals' views concerning factors that affect enrolment and retention of students; and quality of education after the introduction of SSE policy in public secondary schools of Rongai Sub-County with the view of the Sub-County Education Officer, the researcher conducted an interview with the Sub-County Education Officer. The in-depth individual interview was conducted in the office of the interviewee in Rongai Sub-County. The qualitative data obtained from the interview was analyzed using thematic approach. The respondent was guaranteed confidentiality and thus not identified by name in the following analysis. The interview lasted approximately an hour. The interview was tape-recorded and transcribed for analysis.

Structure of the Sub - County

Question

How big is this Sub - County?

“Miss .Cynthia, this sub-county is divided into eight wards: Boror, Kampi ya Moto, Majitamu, Makongeni, Ngata, Rongai, Solai, and Waseges.”

Number of secondary schools

Question

How many schools are in this Sub-County?

“This county has a total of 49 schools. Of this number 39 are public secondary schools while 10 are private schools.”

Question

Are the schools well equipped?

For this question miss Cynthia I would like respond with both yes and no. Yes in the sense that there are enough equipment and No because this very equipment are limited to first come first served. Like in the laboratory, our schools don't have the necessary apparatus to serve the huge number of students being admitted in our schools. Such that at the end of the day the first students to get in the lab are the ones that get served by what is laid out and the rest are forced to crumple around the already crowded table.

Question

What is the source of funding for the SSE policy?

Our major source of funding comes from the government. The funds are at a capitation of Kshs.6, 435.00(50% of Kshs.12, 870.00) per child every term. Once in a while the World Bank comes in to help start or finish projects in the schools, but mostly it's just the government.

Question

What sort of challenges do you face in implementing SSE?

There are a lot of challenges that come with implementing SSE that I would address but mostly id say they are wrapped in a few like:

Professionalism: education officers have been judged as looking down upon teachers with resentment and suspicion from the school and this makes our work really difficult Cynthia. You see for example when we do tell head teachers and teachers on impending inspections, they become apprehensive and consequently they may decide to put something of a show to impress us. Because of this teachers and head teachers have regarded inspection as a stressful experience due to of the unknown.

Transport: the economy has been stretched for a while now meaning that we often faced with the problem of lack of transport, especially for those education officers deployed in rural areas like here. There are some geographical regions in the country where visits to schools are easily possible even by the most non-mechanized ways like walking across to a school. But proportionately such regions are very few indeed.

Management: There is need for Principals to avoid sending students home for fees so as to reduce the rate of student drop out due to lack of school fee. There is also need for Principals to establish, equip and effectively utilize guidance and counseling departments so as to deal with issues affecting students such as peer pressure and unwanted pregnancies. This would also deal with aspects of depression among students who lack fees and reduce dropout rates in the schools. Principals should avoid asking parents to pay extra fees and not receipting and instead follow the due process of asking for extra fees for this goes against their professional integrity and ethics and is punishable under the rule of law. Parents should report cases of paying fees in the schools and not being issued with receipts.

The Ministry of education should develop structures within the schools and the in-service training courses to train the school managers on successful management of the projects by imparting them with skills. This would ensure that fees charged is subsidized and therefore affordable to most households and hence increasing access, improving retention by preventing drop-out and that facilitating achievement of the Millennium development goal number two of Education for all (EFA)

4.8 Interviews with Principals

A total of five (5) principals were interviewed. They are referred to as principals A, B, C, D and E. The transcriptions of the interviews held with the Principals are presented below.

PRINCIPAL A

Question

How has enrollment been in your school since the introduction of SSE?

There has been a tremendous increase in the number of students who join secondary schools since the introduction of SSE. This increase in enrolment has led to overcrowding, overstretched facilities and teaching materials, and high pupil-teacher ratios.

Question

Are there any other factor(s) that affect enrolment in this school?

Yes and for your information more than half a million children are out of school simply because they cannot afford certain school requirements like school uniform or lunch. For example Miss. Cynthia, a full set of uniform costs ranges from Ksh 2000 to 6000 for secondary schools. Secondary school requiring a blazer will see the student incur another ksh2500 to 3000. Most

schools will insist on the uniform being purchased from particular shops giving parents no room for other options especially on pricing This will definitely keep many learners at home as most parents may not afford these fees hampering the effective achievement of SSE goals of increasing enrolment rates.

Question

Are there any problems that affect retention of pupils in this school even after the introduction of SSE?

Yes there are quite a number of challenges despite SSE being introduced. Some of these include:

- Pregnancy
- Peer Pressure
- Apathy

Question

How have you been able to mitigate them?

Please note that these are only few of the challenges we face in retaining these students in schools. But for example pregnancy is an issue surrounded by a lot of other things. You see for a girl coming from an abusive family it is extremely difficult to convince her that pregnancy is not the option out. As a school we try so much to retain the girl until she is due but in situations of a low self-esteem the girl automatically stops showing up to school especially if other schoolmates have already known she is pregnant. Despite all this we still have lessons specifically designed to teach our girls and boys on the effects of teenage pregnancies as well as peer pressure.

Question

What are the main sources of funds under the SSE policy in Kenya?

The main source of funding under the SSE policy is the government. Other sources of funds are the households (which also holds a huge part of the secondary education system).the cost of secondary education borne by the government and households consist of salaries for teaching and non-teaching staff and school tuition.

Question

What affects the quality of SSE in your school and how can they be reduced?

The shortage of teachers in schools is causing heavy workloads for the limited human resources. There has been a sharp rise in enrolment as a result of the programme being implemented;

putting a strain on the few teachers in schools and this has a direct effect on the quality of education offered. The government could employ a lot more teachers to curb this challenge.

Lack of adequate school facilities to serve the needs of both students and the teachers due to the sharp increase in enrolment of students. This is due to the unreliable and inadequacy of the income sources. The community involvement needs to be harnessed more to provide such support like land, contributions in kind for construction and through mobilizing of harambee contributions.

There is also ignorance of the community about the value of education decelerating the quality of education. This area is majorly for pastoralists who tend to discourage their children from attaining formal education and make them believe and grow in the culture role of herding their livestock. This ignorance particularly affects the first born and the girls in the pastoralist community. The first born are believed to be the flag bearer, culture and customary future leader to the family unit and thus taking them to school means overstepping such crucial role in the family and the society at large. The girls provide labour at home and are married off early.

Unemployment is on the increase and consequently poverty is rising. At present, 56% of Kenyans live below the poverty line. They earn less than a dollar a day and can hardly afford basic needs like food, health care, shelter and in some cases even water. Many people, especially those living in the rural areas, spend most of their time looking for these necessities. This leaves them with no time for other economic activities, hence sinking them deeper into poverty.

PRINCIPAL B

Question

How has enrollment been in your school since the introduction of SSE?

With the introduction of SSE, we have registered over-enrolment, which means that the resources available in schools are constrained.

Question

Are there any factors that affect enrolment in this school?

Yes quite a number of challenges affect enrolment despite the introduction of SSE like; some of our socio-cultural practices are a hindrance to development. In this community, for example, the education of the girl child is not a priority. It is assumed that they will be married off and hence no need wasting resources on them. Some of these parents take their girl child from school to

marry them to old men. A girl as young as 13 years is married to an old man (mzee) of 60 years or more. In other situations, only the boys who cannot look after cattle are sent to school. Again most of these community members are pastoralists who are nomads. They have no permanent homesteads which mean they cannot enroll their children in schools for fear of moving in search of grass and water.

High Poverty Levels-Most countries were hopeful that opportunities provided by strengthened democratic governance, and improving economies will accelerate progress. However, poverty levels still remain high. On becoming a republic in 1964, Kenyan leaders vowed to eradicate poverty, disease and illiteracy. Today the proportion of the population living on less than one US dollar a day, that is the poverty line, is higher than ever before. With high poverty line, compounded by economic crisis, prevalence of HIV/AIDS pandemic, it could be just a mere dream to attain Education for all.

Question

Are there any problems that affect retention of pupils in this school even after the introduction of SSE?

Parental Support-The Government funding left out some key areas that make learning to go smoothly in the schools. Such areas include infrastructure development (classrooms, libraries and laboratories among others), provision of meals to the students while they are in school and buying school uniforms. However, the feeling that the government provides free education has led to unwillingness by many parents to make any payments to the schools. Parents are not ready to pay levies to schools since education was 'free'. This leads to some of the students dropping out of school.

Like most of the sub-Saharan countries Kenya is really feeling the effects of HIV/AIDS. Almost every family unit is affected. A member has been lost or is infected. This has greatly destabilized or weakened the family unit since those mostly infected are bread winners or the active members of their families. Consequently, the number of orphans is on the increase. This then means that these children are not able to stay in school as no one will cater for their basic needs.

Also when the families are displaced for whatever reason, their school is interrupted. When the rains fail, they cannot go to school since they would not learn when they are hungry. Others drop

out of school to take care of their siblings when their parent(s) die. When the family income drops, the school expense is the first to do away with.

Question

How have you been able to mitigate them?

For example the HIV/AIDS pandemic can be sorted out by the government by making sure that Anti-retro virals (ARVs) and health care systems are readily available (as is not the case here). With drugs and care it is possible to prolong the lives of those infected in order to delay orphanhood and allow these people to provide for their people for longer.

The government of Kenya would also create job opportunities even in rural areas so that the family income is increased and in this no child is left out because of funds. It is also important for the government to make free secondary clear without tainting the image of principals. It should come out very clearly that they will only pay tuition only and that every other need will be catered for by the parents.

Question

What are the main sources of funds under the SSE policy in Kenya?

Mainly it is the government and others like parents, community, non-governmental organizations, churches and sometimes private sectors.

Question

What affects the quality of SSE in your school and how can they be reduced?

BOMs have the capacity to make positive contributions to the growth of the schools in general and increasing enrolment in particular. Among their contributions include sensitization of the local communities on enrolling the children in the schools, coming up with sound management policies, making financial contributions (both personal and outsourced), staff motivation and setting standards of achievement and admission in the schools. But they are not giving necessary leadership that would promote Total Quality Management practices necessary for schools continuous improvement. Most of the BOM members have inadequate education, training and commitment to manage schools properly so they run the school relying on politicians and their relationship with principals and this greatly affects SSE.

Delivery of good-quality education is ultimately contingent on what happens in the classroom, and teachers are in the front line of service. The most important determinant of educational

quality is the teacher. Thus education can be improved through supply of quality teachers. This remains the role of government. Today, teacher-pupil ratio is still high and teacher demand and supply remain a major issue. Good quality education depends in part on reasonable class sizes and Pupil/Teacher ratios. This then beats the logic in which SSE was introduced especially because no particular attention is given to learners who are slow and tuition was banned as well.

PRINCIPAL C

Question

How has enrollment been in your school since the introduction of SSE?

The free secondary education which was introduced in 2008 has led to high enrolment rates in secondary schools. This has also been accelerated by the Free Primary Education which was started five years earlier than the Free Secondary Education.

Question

Are there any factors that affect enrolment in this school?

Bright students especially from poor families are never motivated as required. Bursaries distributed by the County and National Government eventually go to educate children of rich politicians and their sycophants. This way the student is not motivated enough to join school. There is also need to develop a high institution of technology to admit bright students and get the best out of them.

Kenyan system promotes thugs, corrupt officials and criminals at the expense of the learned elite. This kills motivation in learning institutions and most students after standard eight opt to go and find money in the big cities and not pursue education in secondary schools.

Question

Are there any problems that affect retention of pupils in this school even after the introduction of SSE and how have you been able to mitigate them?

You find that parents and stakeholders, who have also learned to hate teachers, have left every aspect of child development for teachers to handle. From discipline, counseling, academic to some home matters has been dedicated to teachers to handle. This creates a situation of burdening the teacher with all responsibilities and eventually leading to suspensions and expulsions.

The high levels of poverty within many households may force some children to drop out of school to seek employment to support their family's meager resources. Many of these households may also not be able to meet the indirect costs of schooling like food, clothing, medical care, pocket money etc.

Retrogressive cultural practices for instance, early marriages are still common in this community in search of dowry. Girls are also withheld from school to tend to younger siblings, ailing parents, earn wages, do farm work and household chores. All these are obstacles hindering girl's pursuit of education and further training.

Some teachers are sex predators. They prey their students for sex and eventually spoil their future. Also parents and the society at large have a tendency of preying underage scholars for sex. Strict laws need to be at place to stop this menace.

Question

What are the main sources of funds under the SSE policy in Kenya?

The government

Parents

School

Question

What affects the quality of SSE in your school and how can they be reduced

Inadequate teaching and non-teaching personnel -The most critical element in the education process is the people charged with the task of effecting desirable change in the development of children and the youth. The government needs to recruit more teachers as a matter of urgency to be able to effectively handle the increased number of students. To improve the quality of education offered at any level, it is important to have a teaching force that is not only highly qualified but also properly motivated. Teachers with the capacity to understand learner needs and also interpreting the curriculum effectively to be able to facilitate effective teaching learning process.

Inadequate instructional materials and resources – There is a positive correlation between availability of books and other instructional materials and education quality. Effective delivery of the curriculum instruction is possible only with the availability of quality teaching and learning resources, without which classes will always be teacher centered and didactic and pupils

will not learn how to work independently or in groups .The introduction of SSE has overstretched available resources rendering them inadequate.

Relationships between the BOMs and principals could also hinder the quality of the SSE policy. In situations where principals of schools can overrule decisions by the BOMs and vice versa will definitely end up in a haphazard and unsystematic implementation of any projects or utilization of the school funds sent by the SSE programme.

PRINCIPAL D

Question

How has enrollment been in your school since the introduction of SSE?

The number of students enrolled at secondary level of education has substantially increased since the introduction of SSE. We now have huge numbers it has become difficult to handle.

Question

Are there any other factors that affect enrolment in this school?

Direct and indirect cost of schooling can exclude some students from school such as costs of pens /pencils, copy books, private coaching, transportation and school uniform which is a relative burden for many households. Parents are still unable to pay fees for their children despite elimination of direct fees, a likely cause of lack of enrollment.

Question

Are there any problems that affect retention of pupils in this school even after the introduction of SSE? And how have you been able to mitigate them?

Parents' role in the implementation of FSE Programme as noted by MOE (2010) is to have a positive attitude towards education and participate in decisions affecting their child's education. They should also participate in community initiatives to support the implementation of SSE. There is need to find out the level of teachers and parents support in the implementation of SSE. Contemporary stereotypes of bureaucracy tend to portray it as unresponsive, lethargic, undemocratic, and incompetent. Bureaucracy is an enemy of creativity and Kenya has education officials who are too bureaucratic that they cannot see anything reasonably beyond new and fresh ideas and are failing the education sector. Even though bureaucracy has its own advantages, Creativity and innovations should be given room to try fresh and new ideas that can drive education into the next level.

Social Classes in Kenyan Society like for example, Wealthy class, Religious class, Learned class, Political class etc. who educate their siblings in schools that correspond to their social classes. Education is supposed to make us equal and if it splits us, then we have no reason to be educated.

Question

What are the main sources of funds under the SSE policy in Kenya?

The government and parents but we have other small methods of making ends meet like school clubs.

Question

What affects the quality of SSE in your school and how can they be reduced?

The government is hiring contract teachers to save costs and rapidly increase teaching force, but lack of adequate training and service conditions is having a negative impact on the quality of education. In crowded classrooms with a high number of pupils per teacher the quality of education suffers. For pupils it is difficult to follow the course and teachers can dedicate less time to the needs of each individual student.

Inadequacy of teachers has made it hard to complete the syllabus which is an added factor to declining academic performance. The report indicated that, in some cases, the available teachers combine several streams in to one class resulting to overcrowding. Teachers are not able to mark students' home work, which makes it difficult for them to monitor pupils' progress.

The teachers' role in implementation of SSE is key to its success; hence, should have adequate training and in-service training supported by the government on a continuous basis and provides good quality education in line with the new curriculum. Also, teachers need to give support through preparing and using locally available Learning materials and resources as well to counsel and guide pupils during school hours and advise parents where necessary on the children's welfare.

Reduction of secondary education costs- one of the mechanisms of reducing costs related to secondary education is to build more day schools. However, a lot of awareness will need to be provided to parents and students to eliminate the attitude that day schools are of low quality

despite that all teachers are centrally trained. In addition schools should be encouraged to initiate income generating projects in order to strengthen their financial base.

Disbursement of government subsidies to schools should be done on vacation before schools open for the following term to improve smooth implementation of the programme.

PRINCIPAL E

Question

How has enrollment been in your school since the introduction of SSE?

Enrolment has increased significantly since the introduction of SSE in 2008. Due to this programme, it is possible that some students who could not afford to pay fees could now find their way into schools.

Question

Are there any factors that affect enrolment in this school?

Public schools have poorly developed infrastructure. Secondary schools rarely develop their infrastructure that can influence the learner's environment. Therefore, all schools should be assisted by the government and public to develop modern infrastructure which is instrumental for the development of technical subjects and sciences.

The quality, caliber and appointment procedure of both B.O.Gs and Principals reveal alarming limitations in enrolment. Most of them are usually politically motivated appointments with scant reference to credentials. This politics vary from the village to the clan, constituency and tribe. Usually the clarion call is that 'we want one of our own' or a councilor or Member of Parliament rewards a confidant with an appointment. This then affects enrolment because parents will then opt to take their children to schools they prefer their management.

Question

Are there any problems that affect retention of pupils in this school even after the introduction of SSE? And how have you been able to mitigate them?

Education is mostly sponsored by churches, however these churches put draconian rules in place to disadvantage other students from different denominations thus complicating learning issues or they directly interfere with daily learning of schools creating a contemporary unease situation to school managers

Another huge cause of school dropouts is due to poverty, early pregnancies and marriages, HIV/AIDS and drug abuse. All these can stem from poverty with students from poor backgrounds getting lured into risky sexual behavior in exchange for money and other material items. The status of physical facilities and high poverty levels made parents and guardians unable to meet responsibility of paying fees and other levies.

Question

What are the main sources of funds under the SSE policy in Kenya?

The government is the main source but we ask parents to chip in once in a while.

Question

What affects the quality of SSE in your school and how can they be reduced?

SSE had been seriously affected by delays in disbursements of funds which force schools to procure goods and services on credit at hiked prices and at times made suppliers refuse to supply goods to schools causing strain. The delay of government funds also causes delay in BOM workers' salaries which in turn, lower their morale and productivity.

Political interference in learning institutions especially running of institutions is killing the quality of education offered. Our education research institutions are poorly funded. For education to develop, it must be powered by research institutions which provide scientific tools to rely on when making educational policies. SSE was implemented without proper consultation and research to know how to handle any challenges that might arise as a result or in the process.

4.9 Thematic Analysis of the Interviews with Principals

The analyses of the transcriptions of the interviews with the Principals were grouped into three themes; namely, factors affecting enrolment and retention of students, and quality of education. The three themes and their subthemes are discussed below.

4.9.1 Factors affecting enrolment

The theme "Factors affecting enrolment" had the subthemes economics, culture, religion, disease and politics. These are presented in Table 34.

Table 34**Factors affecting enrolment**

	Economics	Culture	Religion	Disease	Politics
Principal A	Children are out of school because they cannot afford fees				
Principal B		Girls married off at early age Boys look after cattle		Pupils drop out because of HIV/AIDs	
Principal C	Students lack fees Students drop out to look for jobs				
Principal D	Parents unable to pay indirect fees				
Principal E			Church sponsored schools do not admit children from other denominations		Parents take their children to schools where they have influence

It can be noted that Principals A, C and D cited economics as one of the factors that affect enrolment in education after the introduction of SSE. Principal B cited culture and disease while politics is cited by Principal E.

4.9.2 Factors affecting retention of students

The theme “Factors affecting retention of students” had the subthemes sex predators, poverty, lack of corporation between parents and teachers, culture, religion, HIV/AIDS, drug abuse and pregnancy. These are presented in Table 35.

Table 35
Factors affecting retention of students

	Sex	Poverty	Corporation between parents and teachers	Culture	Religion	HIV/AIDS	Drug abuse	Pregnancy
Principal A								Pregnancy makes girls drop out of school
Principal B		Parents are unable to pay fees				Almost every family is affected by HIV/AIDS and this makes children stay away from school		
Principal C	Some teacher prey on students for sex and spoil their future	High levels of poverty force children to drop out of school	Parents leave home matters for teachers	Early marriage for girls in such of dowry				
Principal D		Parents are						

		unable to pay indirect fees						
Principal E	Poverty leads to early marriages, drug abuse and HIV/AIDS				Children whose faith is different from that of church sponsored school drop out	HIV/AIDS makes students drop out of school	Drug abuse makes children drop out of school	Pregnancy makes children drop out of school

4.9.3 Factors affecting quality of education after introduction of SSE

The theme “Factors affecting quality of education had eight (8) subthemes, namely, teacher shortage, inadequate facilities, community ignorance of the value of education, high teacher: pupil ratio, class size, BOM/ teacher relationship, late disbursement of funds and politics. The Principals that gave each type of response is indicated in table 36.

Table 36

Factors affecting quality of education

	Teacher shortage	Inadequate facilities	Community ignorance	Teacher : pupil ratio	Class size	BOM/Teacher relationship	Late disbursement of funds	politics
Principal A	A sharp rise enrolment has put strain on teachers	Lack of facilities to serve the needs of teachers and students	There is ignorance of the community about the value of education					
Principal B				Today Teacher: Pupil ration is very high	Quality of education depends on class size	BOM members have inadequate education		
Principal C	To improve quality of education it is important to have a teaching force that is qualified and motivated	The introduction of SSE has overstretched available				Bad relationship between BOM and Principals can affect implementation of projects		

		resources						
Principal D	<p>Lack of training of teachers is having negative impact on the quality of education</p> <p>Inadequacy of teachers has made it hard to complete the syllabus</p>		<p>A lot of awareness needs to be provided to parents and students to eliminate the attitude that day schools are of low quality</p>					
Principal E								<p>Political interference in learning institutions especially running of institutions is killing the quality of education offered.</p>

4.10 Discussion

The factors affecting students' enrolment, retention and quality of education after the introduction of SSE given by the Sub-County education officer are in agreement with those given by the school principals. For example, he said that the equipment supplied to schools cannot serve the large number of students admitted after introduction of SSE. The lack of facilities was also cited by the principals. The education officer lamented that parents are still being asked to pay fees and if they fail to do so their children are sent home and some of those children end up dropping out of school. The principals said that lack of school fees is one of the major factors affecting enrolment and retention of students as well as the quality of education after the introduction of SSE. Another factor cited a lot by the principals is culture. Some communities marry off their daughters to get dowry but this affects girls' education. Culture seems to affect enrolment and retention of learners in schools. Lack of well trained teachers is another major factor affecting the quality of education as cited by both the education officer and the Principals.

Comparison between quantitative and qualitative findings

The research design used in this study was Convergent Parallel Mixed Methods design. The research design requires the comparison of the findings obtained from quantitative and qualitative analyses. The discussion in this section is done in line with the objectives of the study.

Objective 1 was to find out the effect SSE on students' enrolment.

Results obtained using test showed that SSE had a statistically significant effect on enrolment. And data from both Principals and teachers show that there has been a sharp rise enrolment after the introduction of SEE. This finding is in agreement with what was obtained from the thematic analysis of the transcriptions of the interviews with the education officer and the Principals. For example, one Principal said *Enrolment has increased significantly since the introduction of SSE in 2008. Due to this programme, it is possible that some students who could not afford to pay fees could now find their way into schools.*

Objective 3 was to check the effect of SSE on students' retention rate

The finding from quantitative analysis showed that there was no statistically significant effect of SSE on students'. This finding is in agreement with what was obtained from qualitative analysis.

The Principals cited a number of factors that make students drop out of school. For example when they were to explain whether they any problems with retention of students one of the said *Another huge cause of school dropouts is due to poverty, early pregnancies and marriages, HIV/AIDS and drug abuse. All these can stem from poverty with students from poor backgrounds getting lured into risky sexual behavior in exchange for money and other material items. The status of physical facilities and high poverty levels made parents and guardians unable to meet responsibility of paying fees and other levies.* It is noted the two types of analysis have give same results.

Objective 2 was to find out the effect of SSE on quality of education

In this section, the principals and teachers were asked to give their opinions on various aspects that pertain to the quality of education. The questions focused facilities such laboratories, textbooks, classrooms, library and many others. The majority of teachers said that the learning materials are inadequate and cannot cater large numbers of students their schools.foe example only 1 out of the 78 teachers said that his had adequate textbooks, and 62 said that their schools did not have adequate textbooks. This was the finding from the qualitative analysis. One Principal said this,

Inadequate instructional materials and resources –There is a positive correlation between availability of books and other instructional materials and education quality. Effective delivery of the curriculum instruction is possible only with the availability of quality teaching and learning resources, without which classes will always be teacher centered and didactic and pupils will not learn how to work independently or in groups .The introduction of SSE has overstretched available resources rendering them inadequate.

Comparison with other researchers' findings

Gogo (2003) examined the impact of cost sharing strategy on access, equity and quality of secondary education in Rachuonyo district, Kenya. He used a sample of 32 head teachers and 417 students (12 randomly selected from the 32 secondary schools). He administered questionnaires to the respondents. The study showed that the enrolment in the district remained low because the parents were unable to pay fees. This finding is in agreement with that of the present study that school fees affect both enrolment and retention of students. Chabari (2010) carried out a study on the challenges of the implementation of Free Secondary Education Policy,

and found that the average number of students in the schools increased steadily and this led to overcrowded classrooms. This finding agrees with that of the present study in that the Principals said that the classrooms cannot accommodate the large number of students admitted after the introduction of SSE. Consortium for Research on Education Access, Transition and Equity (CREATE) (Ohba, 2009) carried out a study in rural Kenya to establish whether Free Secondary Education enabled the poor to gain access to secondary education. The report indicated that free secondary education cannot solve the problem of access. Some of the parents interviewed said that lowering school fees has not enabled all children from all families to access secondary education, in particular the poor families that do not even have money for basic needs like food.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary and conclusions of the findings and the conclusions. In addition, it also gives the recommendations and suggestions for further research.

5.2 Summary of the Findings

The following is a summary of findings of the study that set to determine the effect of subsidized secondary education policy on enrolment, retention and quality of education in public secondary schools of Rongai Sub-County.

- i. There was a statistically significant effect of SSE on student enrollment rates in public secondary schools in Rongai Sub-County.
- ii. There was no statistically significant effect of SSE on student retention rates in public secondary schools in Rongai Sub-County.
- iii. There are a number of socio cultural factors that affect the enrolment and retention of students and quality of education after the introduction of SSE policy.

5.3 Conclusions of the Study

Based on the findings of this study, the following conclusions were arrived at in line with the study objectives.

- i. Subsidized secondary education has enabled more Kenyan children to access secondary education in Rongai Sub-county.
- ii. The average number of students per class has been increasing over the years. The results show that there has been an increase in the total number of students per school.
- iii. The available learning facilities cannot cater for the high number of students in secondary schools in the division.
- iv. In order to improve the quality of education the Ministry of education should address a number of socio cultural factors that seem to be impacting negatively on the quality of education.

5.4 Recommendations of the Study

From the questionnaires and observations made by the researcher, the following are the recommendations made;

- i. Measures should be put in place to ensure school resources are used well. The ministry should disburse SSE funds early enough to avoid financial crisis when schools are in session. The government should allocate more funds to schools to enable them expand their facilities to accommodate the high number of students seeking secondary education.
- ii. The government should employ more teachers to reduce the workload and ease the burden on parents paying for B.O.G teachers.
- iii. The input of the CDF education bursary in maintaining the students in schools was very low and when compared to other sources of funding available to the students. The education officer felt that the contribution of the fund was very low and hence had no input on the quality of education.
- iv. There is a need for the introduction of a better method to finance education which would enable the poor to enroll at schools of their choice.
- v. The government through the Ministry of education should formulate policies that will require schools to come up with alternative sources of financing secondary education in order to break the overdependence on Subsidized Secondary funding that does not seem to be sustainable from the findings of the study.
- vi. The Ministry of education should develop structures within the schools and the in-service training courses to train the school managers on successful management of the projects by imparting them with skills. This would ensure that fees charged is subsidized and therefore affordable to most households and hence increasing quality of education, improving retention by preventing drop-out and that facilitating achievement of the Millennium development goal number two of Education for all (EFA).
- vii. In pursuit of increased returns from secondary schools, the ministry should put in place mechanisms to ensure that each school is given a condition of raising a minimum threshold of income for financing secondary education, before it qualifies for the free day secondary funding.

5.5 Suggestions for Further Research

From the background and findings of this study, the following areas are suggested for further study:

- i. There is need for further research countrywide on the effect of SSE on Enrollment, Retention and Quality of Education in Public Secondary Schools since this study was only limited to public schools in Rongai Sub-County.
- ii. Studies should also be conducted to establish the influence of level of skills in management of income generating activities in secondary schools in Kenya.
- iii. That a study be conducted to find out the influence of alternative sources of income on the quality of education offered.
- iv. That a study be conducted to establish the effect of the level of training of the management team of secondary schools on resource mobilization of the schools.

REFERENCES

- Abagi, O. & Odipo, G. (1997). *Efficiency of primary Education in Kenya*. Discussion Paper no. DP 004/97. Nairobi: IPAR.
- Asayo, O. (2009). *Immediate Assessment of the Introduction of Free Secondary Education in Kenya: Emerging Issues*. Oxford: Centre for international Education, University of Sussex. Available: <http://www.create-rpc.org>.
- Baker, D.P., & Wiseman, A.(2007).*Education for all :Global promises ,national challenges* NewYork: Elsevier Science.
- Bell, J. (2005). *Doing your Research Project*. London: Open University.
- Bell, L. (2002). Strategic Planning and School Management: Full of Sound of Fury, Signifying Nothing? *Journal of Educational Administration*, 40(4), 407-424.
- Bell, L. & Rhodes, C. (1996).*The skills of Primary School Management*, London: Routledge.
- Bobbie, E. (2010). *The Practice of Social Research .12th Edition*. Wadsworth.Cengage Learning.
- Borg, W.R. & Gall M.D. (1989). *Educational Research 5th Edition*. NewYork, Holt, Rinehart and Winston, Inc.
- Borg, W.R. (1998). *Applying Educational Research: A practical guide for teachers*. New York: Longman.
- Cochran, W.G.(2007). *Sampling Techniques*. New York: John Wiley & Sons.
- Colelough, C. & Lewin, K. (1993).*Educating all the Children: Strategies for primary Schooling in the South*. New York: Oxford University Press.
- Cooper D.R & Emory C.W. (1995). *Business research Methods*.
- Edward B.C. (2010). *Challenges facing effective implementation of free secondary education in public secondary schools in Kangundo district, Kenya*: Unpublished Med Thesis Report, Nairobi: Chuka University College.
- Gall, M., Borg, W., &Gall, J. (2003).*Educational Research: An Introduction 6th Edition*.New York: Longman
- Gatheru, K. (2008). *Challenges Facing Head teachers in the Implementation of Free Primary Education: A Case of Narok District*. Kenya: Unpublished Med Project Report, Nairobi: Kenyatta University.
- Gay, L.R (1992) *Educational Research: Competencies for Analysis and Application* (4th Ed.); Columbus Merrill.

- Government of Kenya, (1978).*Report of the Presidential Working Party of Education and Manpower Training for the Next Decade and Beyond.*(Kamunge).Nairobi: Government Printer.
- Government of Kenya, (2005).*Kenya Education Sector Support Programme: Delivering Quality Education and Training to all Kenyans.* Nairobi:
- Government Printer. Government of Kenya, (2005).*Sessional Paper No.1 2005: A Policy Framework for Educational Training and Research.* Nairobi: Government Printer.
- Holsinger, D. & Cowell, R. (2000).*Positioning Secondary-School Education in Developing Countries* Paris: IIEP/UNESCO.
- J.H & Schumacher, S. (2000). *Research in Education*; London: Addison Wesley Longman.
- Kathuri, N.J. & Pals, D.A.(1993). *Introduction to Educational Research .Education Medic Centre (EMC).*Egerton University, Kenya.
- Kenya National Examination Council (KNEC), (2010): *2009 Kenya Certificate of Secondary Education Report .*Nairobi, Kenya: KNEC
- Kothari, C. R.(2004). *Research Methodology: Methods and Techniques.* NewDelhi: New Age International Publishers
- Kriemadis, A. (1997). Strategic Planning in Higher Education Athletic Departments. *Internal Journal of Educational Management, 11(6), 238-247.*
- Lindlof, T.R., & Taylor, B.C. (2002). *Qualitative Communication Research Methods, 2nd edition.* Thousand Oaks, CA: Sage.
- Mbaabu, L. N. (1983). *A Study of Administrative Problems Experienced by Primary School Headteachers.* Unpublished M.Ed. Nairobi: Thesis Kenyatta University
- Mbiti, D. M. (2007).*Foundations of School Administration.* Nairobi: Oxford University Press. McMillan.
- McGraw-Hill in Creemers B.P. 'The effective classroom London' Casell.
- MoE, (2003).*Education in Kenya: Challenges and Policy Responses.* MoE, Nairobi. Teachers Image vol. 14, 2007.
- MoE, (2007). *Secondary Education Strategy (2007-2010).* Nairobi: MoE.
- MoE, (2009). *Education Facts and Figures (2002-2008).* Nairobi: EMIS, MoE.
- MOE, (2011). *Ministry of Education Strategic plan 2008 – 2011.*MoEST, (2003). *FPE: Every Child in School.* Nairobi:
- MoEST. Moon, B. & Mayes, A. S. (1994).*Teaching and Learning in Secondary Schools,* London: Routledge.

- Mugenda, O and Mugenda, A (1999). *Research Methods. Qualitative and Quantitative Approaches*. Nairobi: Acts Press.
- Mugenda, O.M & Mugenda A.G (2003). *Research Methods: Quantitative and Qualitative Approaches*; Nairobi: African Centre for Technology Studies.
- Mugenda, A. G. (2008). *Social Science Research: Theory and Principles*. Nairobi: ARTS Press.
- Nachmias, C.F.& Nachmias, D. (1996). *Research Methods in the Social Sciences*, 5th Edition. London: Arnold.
- Neuman, W. L. (1994). *Social Research Methods: Qualitative and Quantitative Approaches*. 2nd Edition .Boston: Allyn and Bacon.
- Njeru, E.H.N, & Orodho, J. A. (2003). *Access and Participation in Secondary Education in Kenya*. Nairobi: IPAR.
- Nyaga, B. M. (2005). *Effects of Delayed Fees Payments on the Teaching and Learning Process in Public Secondary Schools in Mbeere District, Kenya*; Unpublished MEd Thesis, Nairobi: Kenyatta University.
- Oketch, G. J. & Asiachi, A. J. (1992). *Curriculum Development for Schools*. Nairobi: Educational Research Publications Limited.
- Okumbe, J. A. (1998). *Educational Management: Theory and Practice*. Nairobi: University Press. Onsomu, E.N (2006). *Financing of Secondary Education in Kenya: Costs and Options*. Nairobi: KIPPRA.
- Onyango, G. A. (2001). *Competencies Needed by Secondary School principals and Implications on Pre-service Education*. Unpublished PhD Thesis, Nairobi: Kenyatta University.
- Orodho, J.A. (2004). *Techniques of Writing Research Proposals and Reports in Education and Social, Sciences*. Nairobi: Masola Publishers,
- Orodho, J.A (2008). *Techniques of writing Research proposals and Reports in Education and Social Sciences*, Nairobi, 2008 edition, KanezjaHp Publishers.
- Orodho, J.A (2009). *Elements of Education and Social Sciences, Research Methods* (2nd Ed); Maseno: Kenezja Publishers.
- Psacharopoulos, G. (1995). Returns to Education: A further international update and implications. *Journal of Human Resources* 20, 583-604.
- Rousseau J.J. (1772-1778). *Emile for Today: The Emile of Jean Jacques Rousseau*. Selected and Interpreted by William Boyd (1956). London: Heinemann.
- Sherman. L W & Wood.D.J.(1982). *Education Theories in the Eightees, University of Illinois, Urbana*. Stresemann Institute.

- Suddho A. (2001). *Financing and Cost of Education in Mauritius*. Paris: ADEA & CODESRIA.
- Teshome, Y. (2008). *Challenges of Higher Education in Africa and Lessons Experience for the Africa - U.S. Higher Education Collaboration Initiative*. April, 2008 Washington D.C.
- UNESCO, (2005).EFA. *Global Monitoring Report: The Role of the Organization and Social Context of Schools*. <http://portal.org/education>.
- UNESCO, (2007).*Education for all by 2015. Will We Make it?* Oxford University Press: Oxford.
- UNESCO, (2009).*Global Education Digest 2009: Changing Patterns in Higher Education Worldwide*. Montreal: UNESCO Institute of Statistics. September, 2009.
- Veriava, F. (2002).*Eradicating Barriers to Education: An Introduction to the Education Rights Project*; SA e-publications, Vol. 3 (2), 13 – 15
- Verspoor, A. (2008). *At the Crossroads: Choices for Secondary Education in Sub Saharan Africa*; Washington, D.C.: World Bank.
- Wiersma, W (1995). *Research Methods in Education*. An Introduction; London: Allyn.
- World Bank (1995). *Devon Practice Primary Education in India*. Washington D.C: World Bank

APPENDIX A: PRINCIPALS' QUESTIONNAIRE

Dear Respondent,

My name is Cynthia Benta Awuor, a student at Egerton University pursuing a Master of Research and Public Policy. I am undertaking a research on the “Effect of SSE on Students’ Enrollment, Retention and Quality of in Public Secondary Schools of Rongai Sub-County.” I would kindly request that you fill in this questionnaire to the best of your knowledge. The information you provide will be treated with utmost confidentiality and will be used purely for academic purposes only. Thank you.

SECTION A: Demographic Information

1) Please indicate your gender

Male []

Female []

2) What is your academic qualification?

i. Diploma []

ii. Bachelor’s degree []

iii. Master’s degree []

iv. PhD Holder []

3) How long have you been on your current station?

i. Below 1 year []

ii. 1-10 years []

iii. 11-20 years []

iv. 21-30 years []

v. Above 31 years []

4) Please indicate the type of school

i. Boys Boarding []

ii. Boys Day []

iii. Girls Boarding []

iv. Girls Day []

v. Mixed Boarding []

vi. Mixed Day []

SECTION B: Status of Infrastructure and Human Resources

5) Please indicate the number of your teaching staff on the basis of the following categories

TSC

YEAR	1-10	11-20	21-30	31-40	Above 40
BEFORE SSE					
2003					
2004					
2005					
2006					
2007					
2008					
AFTER SSE					
2009					
2010					
2011					
2012					
2013					
2014					

BOM

YEAR	1-10	11-20	21-30	31-40	Above 40
BEFORE SSE					
2003					
2004					
2005					
2006					
2007					
2008					
AFTER SSE					

2009					
2010					
2011					
2012					
2013					
2014					

6) In your opinion how has the policy affected quality of the following aspects of education using the scale provided below where 1=Strongly Disagree, 2=Disagree, 3= Not Sure, 4=Agree and 5=Strongly Agree. Please tick as appropriate.

Aspect	1	2	3	4	5
Teaching					
Assessment and exams					
Guidance and counseling					
Healthcare					
Discipline					

7) With the provision of SSE kindly rate the availability of the following physical facilities. Using the scale provided below where 1=Very Inadequate, 2=Inadequate, 3= Not Sure, 4=Adequate and 5=Strongly Adequate, please tick as appropriate.

Facility	1	2	3	4	5
Classrooms					
Library					
Laboratory					
Dining Hall					
Dormitory					
School Bus					
Staffroom					
Toilets					

Electricity Supply					
---------------------------	--	--	--	--	--

SECTION C: Trends in Enrollment and Retention Levels since the Introduction of SSE

8) What were the enrollment rates in this secondary school before and after the introduction of SSE policy in the following years?

NO OF STUDENTS ENROLLED BEFORE SSE

YEAR	0-50	51-100	111-150	151-200	Above 200
2003					
2004					
2005					
2006					
2007					

NO OF STUDENTS ENROLLED AFTER SSE

YEAR	0-50	51-100	111-150	151-200	Above 200
2009					
2010					
2011					
2012					
2013					

9) What was the retention rate like before the in the introduction of SSE in the following years?

NO OF STUDENTS RETAINED BEFORE SSE

YEAR	0-50	51-100	111-150	151-200	Above 200
2003					
2004					
2005					
2006					

2007					
------	--	--	--	--	--

NO OF STUDENTS RETAINED AFTER SSE

YEAR	0-50	51-100	111-150	151-200	Above 200
2009					
2010					
2011					
2012					
2013					

APPENDIX B: TEACHERS' QUESTIONNAIRE

Dear Respondent,

My name is Cynthia Benta Awuor, a student at Egerton University pursuing a Master of Research and Public Policy. I am undertaking a research on the "Effect of SSE on Students' Enrollment, Retention and Quality of in Public Secondary Schools of Rongai Sub-County." I would kindly request that you fill in this questionnaire to the best of your knowledge. The information you provide will be treated with utmost confidentiality and will be used purely for academic purposes only. Thank you.

SECTION A: Demographic Information

1) Please indicate your gender

Male [] Female []

2) What is your academic qualification?

- i. Diploma []
- ii. Bachelor's degree []
- iii. Master's degree []
- iv. PhD Holder []

3. How long have you been on your current station?

- i. Below 1 year []
- ii. 1-9 years []
- iii. 9-20 years []
- iv. 21-30 years []
- v. 21-30 years []
- vi. Above 30 years []

SECTION B: Status of Infrastructure and Human Resource

4. For how long have you served as a teacher?

- i. Below 1 year []
- ii. 1-9 years []
- iii. 9-20 years []
- iv. 21-30 years []
- v. 21-30 years []
- vi. Above 30 years []

5. How many lessons do you have in one week?

- i. 0-6 lessons []
- ii. 7-12 lessons []
- iii. 13-18 lessons []
- iv. 19-24 lessons []
- v. 25-30 lessons []

6. With the provision of SSE kindly rate the availability of the following instruction materials.

Using the scale provided below ,where 1=very inadequate,2=inadequate,3=Not sure,4=adequate,5=very adequate. Please tick appropriate.

Material	1	2	3	4	5
Textbooks					
Stationary					
Desks and Chairs					
Computer					
Maps and charts					
Exercise books					
Laboratory Chemicals and apparatus					

APPENDIX C: INTERVIEW GUIDE FOR COUNTY EDUCATION OFFICER

Dear Respondent,

My name is Cynthia Benta Awuor, a student at Egerton University pursuing a Master of Research and Public Policy. I am undertaking a research on the “Effect of SSE on Students’ Enrollment, Retention and Quality of in Public Secondary Schools of Rongai Sub-County.” I would kindly request that you fill in this questionnaire to the best of your knowledge. The information you provide will be treated with utmost confidentiality and will be used purely for academic purposes only. Thank you.

1) Ward

.....

2) Number of secondary schools

.....

3) What is the role of an education officer?

.....
.....
.....
.....

4) a. Do you consider the number of teachers as adequate?

Yes [] No []

b. Does your office organize refresher courses for them?

Yes [] No []

5) Are the schools equipped?

Yes [] No []

6) What is the source of funding for the SSE policy?

.....
.....

7) What are the main challenges that the Sub-County encounters in relation to the implementation of the Subsidized Secondary Education?

.....
.....

8) What is the effect of Subsidized Secondary Education since it was implemented in your Sub-County?

.....
.....

9) Suggest some possible solutions to the constraints in relation to Subsidized Secondary Education.

.....
.....
.....
.....

APPENDIX D: RESEARCH AUTHORIZATION DOCUMENT

THIS IS TO CERTIFY THAT:
MISS. CYNTHIA BENTA AWUJOR
of EGERTON UNIVERSITY, NJORO,
0-40404 RONGO-KENYA, has been
permitted to conduct research in
Nakuru County

on the topic: EFFECT OF SUBSIDIZED
SECONDARY EDUCATION POLICY ON
ENROLLMENT, RETENTION AND QUALITY
OF EDUCATION IN PUBLIC SECONDARY
SCHOOLS OF RONGAI
SUB-COUNTY, NAKURU COUNTY, KENYA

for the period ending:
15th March, 2018

Smmmbw
Applicant's Signature

Permit No : NACOSTI/P/17/55028/16224
Date Of Issue : 15th March, 2017
Fee Recieved :Ksh 1000



Smmmbw
Director General
National Commission for Science,
Technology & Innovation

CONDITIONS

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.**
- 2. Government Officer will not be interviewed without prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**



REPUBLIC OF KENYA



NACOSTI
National Commission for Science,
Technology and Innovation

RESEACH CLEARANCE
PERMIT

Serial No.A 13284

CONDITIONS: see back page