FACTORS INFLUENCING THE CHOICE OF AGRICULTURE SUBJECT BY	
BOYS AND GIRLS IN PUBLIC SECONDARY SCHOOLS IN KAJIADO COUNTY	Y,
KENYA.	

CHEMJOR J. ESTHER

A Research Project Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Education in Comparative and Contemporary Issues in Education of the University of Nairobi

DECLARATION

other degree in any other university.
Chemjor Esther J. Reg.
No. E56/70606/2013
This research project has been submitted for examination with our approval
as university supervisors.
Dr. Daniel K. Gakunga
Lecturer
Department of Educational Foundations
University of Nairobi
Dr. Musembi Nungu
Lecturer
Department of Educational Foundations
University of Nairobi

DEDICATION

This work is dedicated to my husband George, my dear children Victor, Sylvia, and Mumo; and my parents.

ACKNOWLEDGEMENT

I wish to thank the Almighty God for the strength to go through this course especially the research part. He gave me good health and patience to overcome all the obstacles to the end.

My special gratitude goes to my supervisors Dr. Daniel K. Gakunga and Dr. Musembi Nungu who tirelessly guided me throughout the process and refined this project. I also appreciate the work done by Mrs. Rosemary Saruni for typing and organizing my work that even took her up to odd hours of the day, God bless you. I also appreciate my family members for the encouragement and my colleagues for their support during the research.

I wish to thank, too, the Principals, teachers and students of Ololaiser, Ololua, Oloosuyian, Ilbissil, Kiluani, Ilkisonko, Olkejuado, Isinya, Oloitokitok and AIC High Schools for their time and resources in the process of data collection for the project. My other special thanks go to Margaret Nthiwa and Mr. Mukono who took time to distribute, collect and deliver back the questionnaire from their schools, and for their encouragement and prayers.

Lastly, I wish to thank Mr. George Jumbe, Principal Meto Secondary School, for guiding me to his Loitokitok home area schools. May God bless you all.

Table of Contents

Declaration	i
Dedication	ii
Acknowledgement	iii
Table of Contents	iv
List of tables	. viii
LIST of Abreviations and Acronyms	X
Abstract	xii
CHAPTER ONE	
INTRODUCTION	
1.1 Background to the study	1
1.2 Statement of the problem	6
1.3 Purpose of the study	7
1.4 Research Objectives	7
1.5 Research Questions	7
1.6 Significance of the Study	8
1.7 Limitations of the study	9
1.8 Delimitations of the study	9
1.9 Assumptions of the study	10
1.10 Definition of Operational terms	11
1.11 Organization of the Study	12
CHAPTER TWO	
REVIEW OF RELATED LITERATURE	
2.1 Introduction	13
2.2 An Overview of Agriculture Education Globally	13
2.3 Students' peer influence on choice of agriculture by boys and girls in	19
Secondary Schools	19
2.4 Parental influence on boys' and girls' choice of Agriculture in secondary schools.	21
2.5 Influence of students' Individual attitudes on boys' and girls' choice of	23

Agriculture in secondary schools	23
2.7 Summary of reviewed literature	27
2.8 Conceptual framework	29
CHAPTER THREE	
RESEARCH METHODOLOGY	
3.1 Introduction	32
3.2 Study design	32
3.3 Target population	33
3.4 Sampling Procedure and sample size	33
3.5 Research Instruments	34
3.6 Pilot Study	35
3.6.1 Instrument Validity	35
3.6.2 Reliability of the Instrument	36
3.7 Data collection procedure	37
3.8 Data analysis techniques and presentation	37
3.9 Ethical Considerations	38
CHAPTER FOUR	
DATA ANALYSIS, INTERPRETATION AND PRESENTATION	
4.1: Introduction	40
4.2: Response Rate	40
4.3: Demographic information of the respondents	41
4.3.1: Classification and Category of Schools	41
4.3.2: Gender of the respondents.	43
4.3.3: Principals and teachers academic qualification.	43
4.4: Academic qualification of parents and guardians	44
4.5: Teaching experience of teachers and principals	45
4.6: Optional subjects chosen in group 4 in secondary schools	46
4.7: Data analysis based on students' peer influence on choice of agriculture	47
4.7.1: Principals responses on peer influence on choice of agriculture	49
4.7.2: Agriculture teachers responses on peer influence and choice of agriculture	50
v	

4.8: Parental influence on choice of agriculture by boys and girls51
4.8.1 Principals' responses on parental influence and choice of agriculture53
4.8.2: Teachers responses on parental influence and choice of agriculture54
4.9: The influence of students' attitudes on the choice of agriculture by boys and girls55
4.9.2 Teachers responses on individual students' attitudes on choice of agriculture by boys and girls
4.10: Students' career influence on choice of agriculture by boys and girls60
4.10.1 Principals' responses on career aspiration on choice of agriculture62
4.10.2: Agriculture teachers' responses on career aspirations and choice of agriculture
4.11: Agriculture in secondary schools be made compulsory or elective65
4.12: Data analysis from the interview scheduled of parents and education officers66
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
5.1 Introduction
5.2 Summary of the Study68
5.3 Major Findings of the study70
5.3 Major Findings of the study
5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in
5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in public high schools
5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in public high schools
5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in public high schools
5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in public high schools

APPENDICES

APPENDIX 1	Introduction Letter	82
APPENDIX II	Questionnaire for Students	83
APPENDIX III	Questionnaire for Principals	77
APPENDIX IV	Questionnaire for Agriculture Teachers.	80
APPENDIX V	Interview Schedule for Parents.	84
APPENDIX VI	Interview Schedule for Education Officers	86

LIST OF TABLES

Table 1.1: Enrollment of Agriculture subject in Kajiado	5
Table 4.2: Students responses on classification of schools	. 42
Table 4.3: Gender of the respondents	. 43
Table 4.3: Principals' and Teachers' Academic Qualification	. 44
Table 4.5: Teachers and principals responses on experience	. 46
Table 4.6: Students responses on optional subjects	. 47
Table 4.7: Students' views on peer influence on choice of agriculture	. 48
Table 4.8: Principals' responses on peer influence on choice of agriculture	. 49
Table 4.9: Teachers responses on peer influence on choice of agriculture	. 51
Table 4.10: Students' responses on parental influence.	. 52
Table 4.11: Principals' responses on parental influence on choice of agriculture	. 54
Table 4.12: Teachers views on parental influence	. 55
Table 4.13: Students' responses on attitudes on choice of agriculture	. 56
Table 4.14: Principals' responses on students' individual attitudes on choice of	
Agriculture	. 58
Table 4.15: Teachers results on individual students' attitude on choice of agriculture	. 59
Table4. 16: Students' responses on career influence on choice of Agriculture	. 61
Table 4.17: Principals' responses on career aspiration and choice of agriculture	. 62
Table 4.18: Agriculture teachers' replies on career aspirations and choice of	. 64
Table 4.19: Students' responses on Choice of subjects	65

LIST OF FIGURES

Figure 2.1: Conceptual framework: Relationship of variables influencing choice of	
agriculture among boys and girls	29

LIST OF ABBREVIATIONS AND ACRONYMS

AAAE American Association of Agriculture Education

AARE American Association of Research Education

AET Agriculture Education and Training

AIAEE Association for International Agriculture and Extension

Education.

FAO Food and Agricultural Organization

FFA Future Farmers in America

GDP Gross Domestic Product

ICRAF International Centre for Research and Agro forestry

K.C.S.E Kenya Certificate of Secondary Education

KICD Kenya Institute of Curriculum Development

KIE Kenya Institute of Education

MDGs Millennium Development Goals

PDGs Post Millennium Development Goals

PGDE Post Graduate Diploma Education

SAE Supervised Agricultural Education

(SPSS) Statistical Package for Social Sciences

TIQET Totally Integrated Quality Education and Training

UNDP United Nations Development Program

UK United Kingdom

USA United States of America

USD United States Currency

ABSTRACT

The objective of the given study was to establish factors that influence the choice of agriculture subject by boys and girls in secondary schools registered as public schools in Kajiado County. This study was conducted based on four objectives, namely, to determine peer influence on choice of agriculture by boys and girls, parental influence on choice of agriculture, individual student's attitudes on choice of agriculture, and influence of students' career aspirations on choice of agriculture by boys and girls in public secondary schools in Kajiado County. Literature reviewed highlighted the importance of agriculture education globally, in Africa, in Kenya and in Kajiado County. It further showed that the choice of agriculture in secondary schools was influenced by students' peers, parents, students' individual attitudes, and career aspirations among other factors. The study used the descriptive survey design to collect data from students, principals, agriculture teachers, parents and education officers. The study targeted 50 public schools 1000 form three students who took agriculture, 50 principals, 50 agriculture teachers, 10 parents, and 10 education officers. The sample included 120 form three students who took agriculture, 10 principals, 10 agriculture teachers, 5 parents, and 5 education officers who were sampled using random and purposive sampling techniques. Additionally, the data was collected using questionnaires from students, principals and teachers who teach agriculture subject. The data from parents and education officers was collected using interview schedules. Data collected for the study was subjected to Statistical Packages for Social Sciences (SPSS) version 21 for analysis and presented using frequency tables and percentages. The study established that 34 percent of the boys and 27 percent of the girls indicated peer influence as a major factor that determined the choice of agriculture among boys and girls in public secondary schools. This was supported by principals and teacher responses. The study also established that parental influence was a key influencing factor on the choice of agriculture among boys and girls in public secondary schools as indicated by 36 percent of the boys and 24 percent of the girls. School principals and teachers concurred with the students that parents determined the students' choice of agriculture. The study further established that 32 percent of boys and 24 percent girls believed that individual student's attitudes determined their choice of agriculture. This was supported by 100 percent of the principals and also 70 percent of the teachers. The study also established that 39 percent of the boys and 33 percent of the girls agreed that students' future career aspiration was the major influencing factor on the choice of agriculture subject among boys and girls in public secondary schools.

The study concluded that the main factors influencing choice of agriculture among boys and girls were peer influence, parental influence, individual students' attitudes and students' career aspirations. It was also concluded that more boys than girls choose agriculture as a future career. The study therefore recommended that students should be well informed about the importance of agriculture as a technical subject which may shape their future career. The study suggested further research on factors influencing choice of agriculture among boys and girls in tertiary and university levels of education.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Globally, Agriculture plays a key role in promotion of social, economic and cultural development (Temu, 2003). It enjoys both international and local support from time immemorial. Agriculture education is worth being emphasized at all levels of education to enhance food sustainability especially in Africa where the population increases rapidly (Macalla, 2000). In developed countries, such as USA, China, and Brazil, agriculture education is ranked highly and is offered as a compulsory subject in the curriculum (Mustapha & Greenan, 2007). The same is found in some developing countries such as Cuba where agriculture is taught from primary level of education and students carry out voluntary agricultural activities for three years after completing secondary schools (Ritzen, 1999). This has improved the individual and government perception of the subject and led to high agricultural production in the country.

In Africa, Egypt, even though it is a desert, has put a lot of weight on agriculture education mostly on irrigation farming utilizing the Nile waters. Today Egypt is self-sufficient in food production, equipped with skills concerning soil conservation and water management (Alabu, 2001). Other Sub-Saharan countries, like South Africa, have made agriculture a compulsory subject in secondary school giving it value in the curriculum. Economic development in these countries clearly shows the importance of agriculture as a source of employment and food security. In developing countries which depend heavily on agriculture for economic development as Kenya and Ghana, the study of agriculture which is a technical subject is optional in secondary schools. This is a matter of

concern especially in Kenya where agriculture is the backbone of the economy. According to a report tabled by the Cabinet Secretary for Agriculture during the Agriculture Summit at State House on August 15, 2016, Agriculture in Kenya contributes 23 percentage of the country's Gross Domestic Product (GDP), fetching the country eleven million US Dollars (USD) from the export market as shown by the Government records at the beginning of 2013. This increased to 30 percent by 2016. Commercial agriculture is intended to create employment besides making the country self-sufficient in food. Moreover, agriculture education is aimed at increasing technological skills and professionalism in agriculture filed, which go hand in hand with the country's vision 2030. Food and Agricultural Organization FAO (1997) emphasized that agricultural education should be designed to provide students with competences and awareness of the world of work. The subject should develop the learners' essential skills regarding the technical, practical, and ethical dimensions of the field. As the subject is not examined in primary schools in Kenya since the revision of the curriculum in 2002, this gives a poor background to the learners at the secondary school.

The choice of agriculture by boys and girls in secondary school among other optional subjects make it difficult for the learners to decide correctly. Thus this study remain keen in identifying the influencing factors on the choice of agriculture by boys and girls in public secondary schools in Kajiado County, a county which is agriculturally potential since there is still space and room for smart farming. The study of agriculture as a key subject in secondary school curriculum is very important so as to produce graduates with requisite skills and positive attitude to engage in agricultural practices. This study focused on the

choice of agriculture by boys and girls in secondary schools; it sought to compare the number of boys and girls who choose the subjects and the factors influencing them to make these choices. In tertiary colleges, agriculture is given important position as a technical subject which prepare learners for the job market for instance in Bukura college, Egerton University and Kabete School of Agriculture and Veterinary Technology. The practical aspect of the subject is emphasized to produce competent professionals in the sector. In university curriculum, agriculture is also given a great importance like other science and art subjects especially for the teacher students and agricultural experts. Thus, the country puts a lot of efforts and finances in teaching of agriculture in the middle and higher levels of learning while the basic education lags in the same. This study revolves around the choice of agriculture by boys and girls in secondary schools. Agriculture policy in Kenya (2006) focuses on the core objectives of improving productivity and also income growth, particularly for holders of small farms; advanced food security and equitability, stressing on irrigation to stabilize agricultural production. The policy concerns include specialization into non-traditional agriculture produces and value addition to decrease vulnerability; improving food security and reduce those people suffering from starvation as well as attainment of Millennium Development Goals (MDGs) and Post Millennium Developments Goals (PDGs). Agriculture Policy in Kenya (2006). The declining growth in agriculture has raised concern to the policy makers and those interested in the sector United Nations Development Program (2000) hence this study focuses on the choice of the subject in public secondary schools in Kenya to find out the main factors causing the decline of the boys and girls using agriculture related careers.

According to Alabu (2001), agriculture contributes to the balance of trade by increasing exports and expanding production of agricultural input. Therefore, students should be equipped with agricultural and expertise to meet this demand. This study dealt with the influencing factors on the choice of the subject in secondary schools in Kajiado County like other parts of the country which require skilled manpower to exploit the agricultural potentials and better her economic status by adapting to the climate smart agricultural practices as explained by David Njengere, a senior director of Kenya Institute of Curriculum Development report. KICD report (2013). Being a semi-arid region, agriculture is a very important subject that would improve career areas such as veterinary medicine, soil science and agribusiness. An area that is predominantly pastoral farming; would encourage learners to study agriculture hence the motivation of this study.

According to Claire, Andrew, and Sarah (2006), participatory curriculum implementation, innovation and creativity leads to acquisition of skills for life and promotes community development. Agriculture can create a new pattern of education through practical skills and enable students be more responsible to the community needs. For instance, diversified farming in the dry parts of the country and commercial pastoral farming. Correct choice of the subject by boys and girls will motivate them to exploit the available resources in the county for individual and national economic benefits. More importantly, changing of peoples' perception towards agriculture by provision of adequate information towards the subject and making it a source of employment through innovation and acquisition of necessary skills. The study stood curious in establishing influencing factors on the choice of agriculture by boys and girls in Kajiado County. From the K.C.S.E results for the last

three years in Kajiado County, out of the fifty KCSE schools, with 2500 students, a quarter of them chose agriculture and an eighth of the agriculture students were girls. The table below shows the county public schools KCSE results from 2012 to 2014.

Table 1.1: Enrollment of Agriculture subject in Kajiado

Year	Enrolment	Agric Students	Boys		Girls	
			Frequency	Percentage	Frequency	Percentage
			(n)	(%)	(n)	(%)
2012	2028	405	259	64	146	36
2013	2100	720	500	69	220	31
2014	2560	940	752	80	188	20

Sources: Kajiado County Education Office

As a region which depends heavily on agriculture, the continuous reduction of the number of students taking the subject especially girls which dropped from 36 percent in 2012 to 20 percent in 2014 is alarming. When it became un-examinable in primary schools and optional in secondary schools it led students to make tough choices according to Kenya Institute of Education KIE now KICD (2002). Surveys carried out by Mwiria in 2005 and Ngesa in 2006 show that the total number of students choosing agriculture in the country has decreased from 70 percent to 40 percent yet the subject is a key pillar in economic development.

Such a decline in enrolment may in part be due to negative attitudes by students towards vocational and technical subjects and preferring, instead, to pursue careers in professional areas (Hages and Mechur, 2004).

1.2 Statement of the problem

The foregoing highlights agriculture as an important subject and practice all over the world especially in developing countries like Kenya where the economy is heavily dependent on agriculture. Progressive governments across the world, for instance USA, China, Cuba and Brazil have emphasized the study of agriculture in primary, secondary and post-secondary levels of education. In Africa, countries such as Egypt and South Africa have made agriculture compulsory in the secondary school curriculum. In Kenya, where agriculture stands the backbone of the economy, the subject has been integrated in primary schools and made optional in the secondary school curriculum. This is problematic for a country still seeking to attain self-sufficiency in food production and to create jobs for the thousands of school and college graduates particularly in the agricultural sector.

A bigger concern, moreover, is that fewer students are choosing to study agriculture at secondary schools, and eventually as a career or occupational choice. In Kajiado County, for example, agriculture is the major economic activity and source of livelihood for majority of the residents. However, very few students in secondary school have been showing interest in studying agriculture or pursuing the same as a career. This is worrying. This study, therefore, sought to examine the influencing factors on the choice of the agriculture subject by students from public secondary schools in Kajiado County. The study specifically sought to interrogate how peer influence, parental influence, career aspirations, and perceptions towards agriculture in influencing the choice of agriculture by students from secondary school in Kajiado County.

1.3 Purpose of the study

The aim of this study was to examine factors influencing the choice of agriculture by boys and girls students from public secondary schools in Kajiado County.

1.4 Research Objectives

The study was guided through the objectives given below:

- i) To determine the impact of students' peers on the choice of Agriculture by boys and girls in public secondary schools in Kajiado County.
- ii) To establish influence of parents on choice of agriculture by boys and girls from public secondary schools in Kajiado County.
- iii) To determine influence of students' individual attitude on the choice of agriculture by boys and girls in public secondary schools in Kajiado County.
- iv) To establish the influence of students' career aspirations on the choice of agriculture by boys and girls in public secondary schools in Kajiado County.

1.5 Research Questions

The research questions given below guided the study:

- i) How do student peers influence the choice of agriculture by boys and girls students in public secondary schools in Kajiado County?
- ii) How do parents influence the choice of agriculture by boys and girls students in public secondary schools in Kajiado County?
- iii) How does students' individual attitude influence in choice of agriculture subject among boys and girls in public secondary schools in Kajiado County?

iv) How do students' career aspirations influence the choice of agriculture by boys and girls in public secondary schools in Kajiado County?

1.6 Significance of the Study

The findings of this study could be of interest to persons and groups in the education sector such as teachers in understanding the relationship between agriculture education and its use in the outside world. The findings could assist students from public secondary schools to identify the importance of agriculture subject in their future careers. Curriculum developers, too, could find the study informative regarding, particularly, necessary changes and adjustments in the curriculum to make agriculture more appealing to students.

Policy makers may find these findings useful in highlighting key policy areas that may be necessary in supporting the study of agriculture in secondary schools. Additionally, these findings would be incorporated into workshops for parents to use in improved production and innovation during demonstration and training, community developers in adopting the best implementation methods, teachers to modify the teaching of agriculture especially the practical part and education administrators to motivate and guide learners in making the right choices. It may inspire career teachers to develop more interest in searching for more deep relevant materials and training to make them more effective in classroom interaction hence inspire boys and girls to choose agriculture.

Furthermore, the findings may assist interested individuals who would wish to invest in agriculture education. Furthermore, the findings may encourage the department of education in carrying out research on factors influencing choice of agriculture by boys and

girls in secondary schools of Kenya hence improve the entire curriculum. The recommendations would help other researchers in finding a field of study in the same area. Finally, the findings would add to the existing literature on agriculture education and could be used by researchers and scholars for purposes of teaching and further research.

1.7 Limitations of the study

The study faced the following limitations;- Public schools in Kajiado County are far apart, hence limited time—spend with respondents as most of the time was used travelling from one sample school to another. Another major issue of concern during the study was the negative attitude of the school principal and teachers who felt that the research information required needed to be paid for. This posed a challenge to the researcher in carrying out the research on time. The study overcame this by carrying out purposive sampling from all the parts of the county so as to get representative information saving time and resources. The researcher explained clearly the purpose of research so as to change the principals and teachers attitudes towards data collection.

1.8 Delimitations of the study

The delimitation of study were that the study investigated some of the factors influencing choice of agriculture by boys and girls in public secondary school in Kajiado County which included peer influence, parental influence, individual students' attitudes and students' career aspirations, limiting the study not to consider other possible influencing factors on the choice of agriculture in secondary schools. The study was limited to Kajiado County; hence the findings would only be used to make generalization of the influencing factors on

the choice of agriculture among boys and girls in secondary schools and not other levels of learning.

Delimitation was that the study collected data from sampled schools since the schools were in different geographical areas and made general conclusions from the sampled responses. The study faced the following limitations; - That the study looked at peer influence, parental influence, individual students' attitudes and students' career aspirations on the choice of Agriculture by boys and girls in Kajiado County, limiting the study not to consider other possible influencing factors on the choice of agriculture in secondary schools. The study was limited to Kajiado County hence the findings would only be used to make generalization of the influencing factors on the choice of agriculture by boys and girls in secondary schools and not other levels of learning.

1.9 Assumptions of the study

The study was based on the following assumptions; -

- i) That both boys and girls in Kajiado County secondary schools choose agriculture as one of their optional subjects.
- ii) That the students' peers influenced their choice of agriculture
- iii) That parental influence was among the main factors that determined the choice of agriculture in secondary schools in Kajiado County.
- iv) That individual attitudes influence their choice of subjects, and
- v) That students' career aspirations determined their choice of agriculture.

1.10 Definition of Operational terms

Agriculture refers to a subject which is taught in secondary school and is also optional subject in the secondary school curriculum in Kenya

Agriculture teacher refers to qualified personnel to handle agriculture in secondary school.

Aspirations refer to ambitions and expectations of boys and girls in secondary schools in Kajiado County.

Attitude is the manner of feeling, thinking and behavior of both boys and girls students in secondary schools in Kajiado County.

Career refers to the profession/occupation that gives opportunities for progression and promotion in a certain area of education such as veterinary medicine.

Career teacher refers to fully certified member of staff appointed by the Teachers Service Commission or school management to teach and guide secondary school students in agriculture.

Choice refers to a decision made against many alternative preferences of subjects in the same cluster by students in secondary schools regarding agriculture.

Curriculum is a set of diverse choices about what one learned when taught and the way is taught. It defines the general framework around which lessons are scheduled and learning takes place in a level of education like secondary school level.

Education system is an organized method, plan or process of acquiring skills for a given discipline which contain sequence and progression.

Gender refers to characteristics which associate one with being male or female

Guidance refers to the process of helping and individual to understand himself and his/her world.

Individual students' attitudes refer to student feelings towards a subject such as agriculture which determines the choice of that subject.

Parental influence refers to how parents motivate or demotivate the students' decision to choosing subject in secondary schools.

Peer Influence refers how people of the same interest like students in the same class motivate one another towards or against the subject or course to be relevant to the group.

Subject refers to a branch of knowledge, studied in a school such as agriculture.

Subject choice refers to a chance provided in the course of a study where students carefully select subject for their study.

1.11 Organization of the Study

This study was structured into five chapters;- Chapter one contain introduction, background of the study, statement of the problem, the purpose of the study, research objectives, research questions, limitations and delimitations of the study, definition of operational terms, basic assumptions and also the organization of the study. Chapter two dealt with the literature reviewed. Chapter three concentrated on research methodology. Chapter four focused on data analysis, interpretation and presentation of the findings. Finally, chapter five focused on the summary, conclusion and recommendations from the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter contains literature review which was related to the determinants of the choice of agriculture by boys and girls in secondary schools. The review specifically focused on literature highlighting whether and how variables such as peer influence, parental influence, individual attitude, and career aspirations affect the choice of agriculture by secondary school students. Other factors may include the availability of resources in the schools and adequate trained teachers. The study investigated the disparity in the choice of the subject between boys and girls in Kajiado County. It looked at global perspective, African, Kenyan perspective and Kajiado County.

2.2 An Overview of Agriculture Education Globally

Education in agriculture involves instructions on crop production, livestock management, soil and water conservation, irrigation farming among additional areas (Schutt and Wiekert, 2008). Agriculture education further involves food production that help farmers increase subsistence and commercial production leading to quality life of the population. Agriculture education in secondary schools in United States is meant to offer students with the individual academic and career experience vital for achievement in the fields of science, business and technology. Secondary school agriculture education programme involves three main elements which include classroom and laboratory, instructions, Supervised Agricultural Experience (SAE) and future farmers in America (FFA).

The classroom and laboratory instructions provide learners with foundational knowledge in the subject, prepare students for careers in food industries, fiber and natural resource industries among other areas that help to motivate students to enroll in agriculture. Supervised agricultural experiences gives the learners the chance to feel ownership of their agricultural enterprises or in field of work. The students' projects in this case would involve raising an animal or crops, the student may work on a farm or employment at an agriculture business dealing with agricultural machineries. This gives the learner the practical perspective of the subject in the real world. Supervised Agricultural Experience empowers the students to improve skills in agriculture associated areas Schutlz, Wiekert, Howard and Dickson (2008). Future farmers in America (FFA) are national organizations which improves student's potential for premier leadership, individual growth as well as career achievement. They do this through participation in competition, degree programmes, community service projects and national leadership agreements. The three components of agriculture education will bring up a graduate who is all rounded for the job market and well competent for the industry.

In the USA, due to improved farming activities has led to decline in individual involvement in agriculture from 38 percent to 28 percent Department of Agriculture United States (2005). Before agriculture in secondary schools were dominated by production content to prepare them for future careers. According to Sereno (2004) in his study on challenges facing agriculture in USA pointed out that agricultural education in many developed countries face issues for instance enrolment, curriculum content and finance. He noted a reduction of the number of students choosing agriculture since 2001 to be declining to date, this indicates that though the subject contributes to the economy of the world, it is chosen by few students.

According to Broyles and Skelton (2002), in a study on problems facing beginning agriculture teachers emphasized that shortage of qualified personnel affect the existing and future secondary agriculture programs hence the choice of subject by boys and girls.

Furthermore, a study by the American Association for Agriculture [AAAE] (2011 –

2015), reveals that when the world population grows to an anticipated 9 billion by the year 2050, the population concern with non- agricultural should understand and be involved in sustaining a viable agriculture system. There should be emphasis for an informed citizen alongside policy decisions at all levels; to ensure a long-term sustainability of agriculture and quality life in the world. Technology and economic advancements have led to reduction in number of farms and rural community population threatening agriculture as explained by American farm bureau federation (2002).

In China, agriculture schools had previously begun to take actions systems and strengthen their vocational programs (Ministry of Education, 1998). In total there are about 360 agricultural schools across the autonomous regions, provinces, and municipalities in China. They are residential schools which enables learners pass standardized admission examination (Chen, 2000). The ministry of Agriculture take on the function of regulation and macromanagement for all agricultural institutions. These economies have progressed as they place agriculture highly in the education curriculum.

In Cuba, education is highly placed in the development of the economy. Agriculture education is included in the curriculum from primary to the university education. Participatory education and practice is seen in all levels of learning where the children take part in agriculture practicals such as gardening in primary schools. The compulsory education in primary school

curriculum includes 480hours of "labour education" over six years, of a total of 5,680 hours to foster positive attitude towards work and one year of voluntary farming after completion of secondary education. The participatory education especially in agriculture has greatly improved the economy of Cuba which has good food security as well as management of the economy among the countries of Latin America.

In Africa, as Miller and Diamini (2007) established that agriculture education in the secondary curriculum has different goals; like in Swaziland country, the aim of junior secondary agricultural education is to improve the learners' gratitude and positive attitude concerning agriculture, while senior school aim is to organize interested youth to gain entry to join the college of agriculture at the University of Swaziland. As Diamini and Ngwenya (2004) explain girls students in Swaziland choose to pursue agriculture in high school for economic, personal, educational, family and social reasons. In these countries agriculture is very important subjects as it determines a future career of individuals and improves the economy of such countries.

According to Apori, Zinnah and Anor (2003), in position to Ghana, a students' choice of agriculture is predisposed by socio-economic background of individual learner; the agriculture colleges also influence the learners, parental influence and peer influence. Though the country is agriculturally potential for economic and subsistent purposes, agriculture is optional in the education curriculum hence low number of students in agriculture lessons. In most countries of sub-Saharan Africa, agriculture education has been very impassive to the rapid changing forms of demand for learners and fails to adjust to new realities, Tom (2009) curricular,

syllabi, timetables in secondary school level are mostly overloaded with theory lessons at the expense of practical application. In essence agriculture is demanding making fewer students to choose it. Tom further argues that most topics related to agricultural production like agricultural entrepreneurship income generating undertakings and agricultural processing as well as marketing are ignored which would motivate learners to pursue careers related to agriculture.

In South Africa, agriculture education is compulsory in secondary school curriculum which has seen the country develop both economically and agricultural production, Diamini (2004). Egypt also puts a lot on irrigation farming, soil and water conservation. This has resulted in the country being self-sufficient of agricultural products even though it is found in a true desert. Agriculture education is emphasized to ensure gender balance and increase technological innovation which in turns will improve industrial development in line with global development agenda.

In Kenya, like many other African countries which depend heavily on agriculture economically; agriculture education is optional in secondary school curriculum. The subject has a long history for instance in 1924 Phelps Stokes commission observed that African natives were more dependent on agriculture; hence recommended vocational agriculture education to Africans. It was taught in primary school curriculum and primary teacher training colleges. The same was later enforced by Beecher and Binns reports of 1949 and 1952 respectively, Eshiwani (1993) explained post-independence perspective of agriculture education in secondary schools. Agriculture education is key to the economic development of the country and individual growth as it has room for improvement and unique innovation since it is very practical.

In 1985, Kenya introduced 8-4-4 system of education, as explained by Ngesa (2006) which attempted to vocationalize the curriculum. Agriculture was among the subjects that needed a lot of practicals but as Mburu (1996) noted with a lot of concern that practical teaching in secondary schools has been neglected hence the disparity in the KIE report of (2002), the theory and practical aspect of teaching are complementary and non should be neglected.

In 2002, the government of Kenya attempt to develop the practical aspect of education by reviewing the curriculum where agriculture among the practical subject were scrapped from the primary school curriculum and left it as an optional subject in secondary schools. This has made the subject have a poor background hence low enrolment by boys and girls in secondary schools. According to Ngesa (2006) secondary agriculture consist of many topics ranging from crop production, soil and water conservation, livestock production, health, agro-forestry, farm machinery, agricultural economics just to name a few. These topics are very important but too wide to be adequately tackled within the time limit in secondary school resulting in differences in the choice of the subject by students.

According to Ngesa (2006) agricultural clubs in secondary schools like the young farmers club are critical ingredients of quality life in Kenya but few boys and girls engage in club activities other than the examination projects and agricultural shows. This motivated this study to find out how this had affected the choice of the subject in secondary school. In tertiary colleges such as Bukura 20 ge of Agriculture and universities for instance Kabete school of Agriculture and veterinary science, Jomo Kenyatta University of Agriculture and Technology and Egerton University embrace serious teaching of agriculture and the practical aspect of it to produce skilled professionals for the job market. According to Mwiria (2005), the number of students selecting agriculture in high schools of Kenya had decreased from 70

percent in early 1990s to 40 percent today; this study will investigate the factors influencing the decrease basing on peer influence, parental influence, individual attitude and the career aspirations in the choice of agriculture by boys and girls in public secondary schools in Kajiado county.

2.3 Students' peer influence on choice of agriculture by boys and girls in

Secondary Schools

Students in secondary schools are not mature enough to make their own decisions, most of them during their choice of subjects, consider short term benefits of the choices. Since students come from different backgrounds, they influence one another easily on the positive and negative perspective of the subject they choose.

According to Broyles, Camp, and Skelton (2004), students' interest in the subject depends on how they perceive agriculture. The learners from the rural setting find it "dirty" and may tie them to their former lifestyle. Learners aspire to take up white collar jobs as compared to blue collar jobs and this may make them encourage one another to choose other subjects other than agriculture. Mob psychology is another common feature of the students at this age they can easily influence one another to remain in the groups. Most of them do not take agriculture because their friends view that it is tedious, time consuming and has no future, but not that they themselves find it the same. This shows that peers influence each other in the choice of agriculture.

According to Lesley (2001) peer influence on subject choice may not be good for the students' peers provide personal and academic support especially when they work in groups, peer pressure and integrated subject guidance and academic achievement are correlates of subject selection by students. At times may visualize what they want to be when they work together for instance farm projects and class assignments. In addition, some learners are very strong when working in groups that they dominate discussions and activities; if they are good achievers, they easily convince their peers in choosing agriculture or not. These scholars clearly show that there is a high relationship between the choice of subjects and the peer influence students choose agriculture as influenced by their peers.

The study also agrees that peers influence each other in most of their academic activities including choice of the subjects. Students can influence one another using their past or present experiences for instance, those students from rural setting who have been dealing with agricultural production may perceive the subject as tedious hence influence their friends not to choose agriculture or have succeed in agricultural activities, therefore want to advance it more and influence their friends to choose it. These experiences may clearly dictate the students choose of agriculture as explained by Hardre, Sullivan and Crowson (2009). More importantly student from urban setting do not have enough prerequisite information about agriculture hence influencing their peers not to choose the subject.

This study, therefore wanted to find out how student in Kajiado County choose agriculture and the factors influencing boys and girls in choosing the subject. The study agrees with literature review that students peer influence determine the number of students who choose agriculture in secondary schools. According to Loko (2005) peer group membership with a

student with high career expectation influenced the group to be inspired to choose certain subjects as agriculture. This implies that students like to be around others who have similar personalities of subject groups.

2.4 Parental influence on boys' and girls' choice of Agriculture in secondary schools

Parents play a major role in the selection of optional subjects by students in secondary schools. Most of the parents would want their children to pursue careers they themselves wanted but never achieved hence influence their children towards these. Furthermore, since the parents understand what is in the outside world, they motivate their children towards better job – market field and industry. According to Chee and Leong –Yong (2001), the parents discourage their children from choosing agriculture because they believe that they will not have a better future as well as grow in career fields of their choice. High parental expectation about their children may motivate them to choose or leave agriculture as a subject that may determine their future career as the choice of agriculture subject in public secondary schools of Kajiado County is perceived to be influenced by the parents.

According to Young (1985) argues that students see their parents as role models and that parental encouragement or discouragement influences the choice of agriculture among other subjects. This study seeks to investigate the extend at which parental influence affect the choice of agriculture by boys and girls in Kajiado county being from a farming background, parents would influence their children to venture into other professions other than agriculture. Early experience in the field and the benefits there in may encourage students to choose agriculture. Mostly boys choose agriculture so as to improve their parents' agricultural

activities back at home. Kajiado being a pastoral community, commercial agriculture is a very important venture even among the youth and therefore parental support in the choice of the subjects is paramount.

According to Sue, and Sue, (1990) the career of the parents is very much related to the career choose of the children, meaning that most parents would like their children to choose subjects which will lead to the career they are taking. Children will always obey their parents even in choosing the subject. Parental success in agriculture related fields motivate their children further in the same area hence influencing them to choose agriculture such as booming family business which is agriculture based. According to Kariuki (2006), students choose subjects based on the force put on them to pursue certain career by their parents; these leads some students to drop subjects of their ability only to please their parents. Since most parents have undertaken agriculture, they never wish their children to remain with them but rather take up better paying careers, therefore discouraging them from taking agriculture.

Additionally, Malgwi (2005) argued that parents are likely to influence students' decisions on subject's choice than other players such as teachers or guidance and counselors, this is also true in choice of agriculture as those parents who have alternative plan for their children determine their choice of career. According Tenenbaum (2008), parents expect their children to choose subjects which would help them to excel. He continued to assert that fathers are likely to discourage their children from taking certain difficult subjects especially boys of fear being defeated by girls. The study was determined to establish influencing factors on the

choice of agriculture in Kajiado County in support of Malgwi's and Kariuki's arguments on factors influencing choice of subjects in secondary school.

2.5 Influence of students' Individual attitudes on boys' and girls' choice of

Agriculture in secondary schools

Students in secondary schools choose subjects mainly due to their positive attitudes towards the subject or teachers. According to Alabu (2001), in his study concluded that few students especially girls choose agriculture for the reason of the already formed attitude that it is time consuming, leads to low paying career, the boys find the subject as a source of employment opportunities. The attitude of an individual towards a subject will encourage or demoralize that student towards the subject if given options like agriculture. According to Ngesa (2006) he asserted that most countries in Africa have low agricultural production even after acquisition of knowledge and skills in the subject. Apart from the learners' attitudes towards agriculture, Salibury and Roddel (2000) contented that teachers' attitudes and behavior towards certain subjects affect the students in some ways. They will choose a subject because they like the teacher or he/she is competent enough to deliver the content appropriately and has a positive attitude towards it, and do not choose the subject because the teacher does not handle it adequately. Agriculture involves manual activities and for a long time it has been used in Kenyan schools as a mode of punishment. This has created negative attitudes in the students who find it a tedious subject which is very involving at the expense of other subjects; especially those students whose background intention of education is to achieve careers that will change their lifestyle completely. Most learners strive to acquire skills for a "white collar job" or courses that will take them to urban areas as compared to their present rural life.

According to Eshiwani (2001) he attributed the low number of students taking agriculture to lack of role models, since there are few female teachers than their male counterparts in most schools in the country; this has created a negative attitude in the choice of agriculture by students in secondary schools. More importantly, positive or negative attitudes towards agriculture are influenced at home, most parents discourage their children from taking agriculture as the y have undertaken agricultural activities with little success hence want their children to venture into other fields. The parents would want their children to undertake courses which have quick future success and have complete change of lifestyle. This study was keen to identify how attitudes of learners, teachers and parents influence the choice of agricultural in public high schools in Kajiado County, this study wanted to determine the boys' and girls' attitudes towards agriculture as a subject which will shape their future career. According to Kritsada (2012), in his study what causes low enrollment in agriculture lesson, found out that many students are not interested in agriculture as a vocation or career since they are interested in white or blue color jobs; he further identified internal factors that influence the choice of agriculture such as social economic characteristics of students, and how a student values the subject or the attitudes towards it. Other students find agriculture not interest, time consuming and not valuable hence having negative attitudes towards it. Additionally, Babad and Taybe (2003) contented that students' attitudes about instructor, learning environment has a large impact towards the choose of a subject. Subjects which are taught by knowledgeable teachers and well-spoken about the subject encourage many students to choose it. Since agriculture is a very practical subject proper instruction motivate the learners' attitudes towards it and poor instruction discourage them from choosing it. Early involvement in the practical aspect of agriculture and exposure of learners to successful agricultural activities give them a positive attitude towards the subject.

Chee (2003) he found out that weak students were made to choose agriculture making most of them to have an attitude that it is a less important subject which will assist the poor performers to boost their grades and discourage performing students' from taking it. It was further supported by Camp (2002) that students' interests in agriculture depend on their perception on what they learn and what they want to achieve as a career. The study agreed with the scholars who believe students' individual attitude influence their choice of agriculture which is perceived as an important subject in the economic development of a person or country. The study revolved around factors influencing choice of agriculture by boys and girls in Kajiado County.

2.6 Influence of students' career aspirations on boys' and girls' choice of agriculture in secondary schools.

The choice of agriculture by boys and girls greatly influence their career as Farrant (1987), argues that today's society is much more complex and the tendency is therefore to be more specialized hence the place of an individual without any special teaching is very much condensed. Education should equip children with the elementary skills for surviving in the current world and aid one to develop some valuable marketable services that will be a source of employment. Eyken supported the view to do with one's real life. It should relate to students' like lives as they have been, as learners are and as they will be so as to give purpose to the practice. According to Eshiwani (2001) he asserted that as the country attempts to

achieve a higher level of socio-economic growth, it is authoritative that education and preparation should help in developing the necessary human resource. Proper choice of subjects will determine the career a student will pursue as they move up their academic ladder.

Ihunga and Kaundio (2001) agreed that the choice of subjects should relate with what one expects in the job market. Students should be provided with opportunities to take part in diversified experiences that relate to the subject matter being taught and the occupation as supported by Moon and Mayes (1995). Students especially girls have misconception of agriculture work-related careers since they are unaware of the types of opportunities found in the sector; also they perceive the jobs to be dirty and low paying, Chee & Leong-Yong (2001). These scholars found out that parents discourage their children from taking agriculture careers as they have no future and so determine the choice of subject for their children. These views have called for an in-depth study of their influences in the choice of agriculture by boys and girls; it sought to verify if career aspirations of individual students has an impact in the choice of agriculture. According to Vanderbosch (2006) she argued that learning agriculture to provide a background for future studies has not been fully realized because of rural- urban relocation and school leavers ambitious for white collar jobs, their choice of subjects will be geared towards their future aspiration. This study wanted to identify the way individual students' career aspirations have contributed to the choice of agriculture by boys and girls in public secondary schools in Kajiado County.

According to Gichohi (2005), students choose subjects for career aspiration of their own because there has been no serious effort in Kenya to help students make right career choices. Students are left in the dark when choosing subjects as they are not well aware of what these subjects entail like agriculture. Most of the students go through schooling with the notion that all of them have to pursue courses such as medicine, engineering, and law to name a few. In support of these, Gachohi and Kariuki (2005) added that students choose subjects because of strong force from peers or parents even when they do not perform in the subject area. From the above argument I support the fact that choice of agriculture by boys and girls has been greatly influenced by individual's desire to pursue certain career in life. Students' future aspirations influenced their choice of agriculture in public secondary school in Kajiado County. The study therefore, was determined to establish how these factors influenced the choice of agriculture by boys and girls in public secondary schools in Kajiado County.

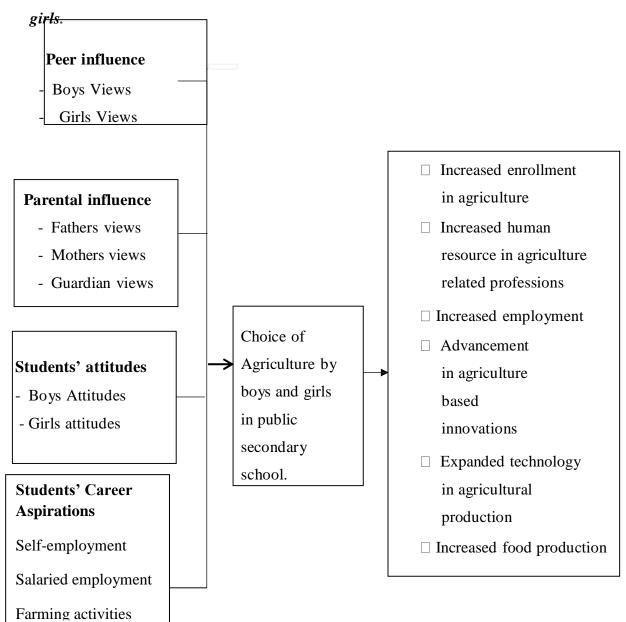
2.7 Summary of reviewed literature

While agriculture from the reviewed literature is the backbone of economies of most developing countries of the world, there was little evidence that such governments in these countries prioritize teaching of this subject in secondary schools. There was minimal evidence in countries like Kenya and Ghana among the countries which are highly dependent on agriculture. In Kenya the available literature showed that agriculture being a pillar of vision 2030 was not highly regarded as it is optional in secondary school curriculum. The study sought to investigate the factors causing the disparity in the choice of agriculture by boys and girls in public secondary school of Kajiado County hence addressing the gap based on the fact that they was a little evidence in the literature reviewed on the influencing factors on the

choice of agriculture among boys and girls in the Kajiado County. Many scholars have studied influencing factors on the choice of agriculture in other parts of the world but there was a gap on the influential factors on the choice of agriculture among boys and girls in secondary schools of Kajiado County which is predominantly dependent on agriculture (pastoralism). The study agreed with the scholars that peer influence, parental influence, students' individual attitudes and students' careers aspirations were among the factors influencing students' choice of agriculture positively or negatively. The study sought to establish how these factors influence boys and girls choice of agriculture in Kajiado County.

2.8 Conceptual framework

Figure 2.1: Relationship of variables influencing choice of agriculture among boys and



Conceptual framework is well-defined as a component of the scientific procedure whereby a specific idea is distinct as measurable incidence or in relations that give a clear sense of the concept as stated by Wikipedia. It provides a pictorial presentation of the association between dependent (response) and independent variables. In this study, the dependent variable was the choice of agriculture by boys and girls and the independent variables were peer influence, parental influence, attitudes towards the subject and career aspirations of the students were perceived elements that influenced the selection of agriculture by boys and girls in public secondary schools. Peer influence of boys and girls affected the choice of agriculture either positively or negatively, boys were influenced positively to choose the subject while the girls were influenced negatively. Parents encouraged boys to choose agriculture and girls were discouraged from choosing the subject. Individual attitudes determined the choice of the subject of boys and girls in secondary school, career aspirations of the student led to disparity in the choice of agriculture by boys and girls in secondary school.

The improved choice of agriculture will lead to high number of girls and boys taking the subject also employees in the sector will increase as well as agriculture professionals. Agriculture sector will expand employment opportunities and create room for individual and group innovation, encouraging agriculture technology and food production. Students' peer influenced the choice of the subject in that boys perceived agriculture positively like their friends while the girls found it not fit for them hence few of them were positive while most of them were negative. The parents on the other hand influenced their children against agriculture as most fathers want their sons to pursue other areas like medicine discouraging them from choice of agriculture, while the same parents encourage their girls

to take up agriculture. Moreover, student's individual attitudes enabled a learner to choose or not to choose agriculture even with external influence such as parents or friends. Additionally, student's future career aspirations increased or decreased the desire to choose agriculture. Positive choice of agriculture by boys and girls will lead to important outcomes like high number of students enrolling in agriculture lessons in secondary school and high levels of learning.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter dealt with research methodology which was used in this study. It described the research design, sampling technique target population and sample size, the research instruments, data collection procedure, piloting, data analysis and ethical considerations.

3.2 Study design

The study embraced a descriptive survey design. This design was aimed at describing as they are and the relationship between these affairs. According to Gay (2003), a descriptive survey is a procedure of data collection in order to response to questions regarding the recent status of agriculture among boys and girls in public secondary schools.

Orodho (2009) asserted that descriptive survey is a technique of collecting information through interviewing or administering questionnaires to a given sample of individuals. It is the most commonly used process of collecting information regarding peoples' opinions, attitudes, habits and other societal issues related to education. Descriptive study design was appropriate for the study as it allowed the researcher to find appropriate and precise information from respondents as well as the fact that the method prevented biasness from the researcher. This method enabled the researcher to collect information from a large population sampled and it is also flexible hence one gets more accurate information.

3.3 Target population

The target population is a large well-defined set of individuals, elements, services, and events or groups that is being studied. From this study the target population was 50 public schools, 1000 form three students who take agriculture in Kajiado County, 50 principals from these secondary schools, 50 agriculture teachers, 10 parents and 10 education officers.

3.4 Sampling Procedure and sample size

Sampling plan defines the way the sampling unit, sampling frame, sampling processes and the sample size of the study would be designed. The sampling frame shows the list of all population entities from which the samples are chosen. According to Gay (2001) a sample size of 10 percent and above of the total population is appropriate to give a representative population.

Kajiado County has 50 public secondary schools consisting of boys, girls and mixed schools. Out of 2,500 form three students, only 1,000 of them take agriculture as an optional subject. The county is vast and the schools are distributed in the 5 sub-counties; studying all the schools was expensive, hence 13 schools were sampled using purposive sampling technique so as to capture national, extra-county and county schools. The sampling also considered boys, girls and mixed schools in the county. 3 of the 13 schools were used in piloting while 10 of them were used for the actual study. From the target population 1000 students taking agriculture, simple random sampling techniques was used to sample 12 agriculture students from each of the 10 sampled schools giving a population

of 120 students who took agriculture for the study. Additionally, out of 50 principals in the county public schools, purposive sampling technique was used to give a sample of 10 of them from the 10 sampled schools, and the same for the agriculture teachers where 10 agriculture teachers from the 10 sampled schools were used. From the target population of 10 parents, 5 of them were sampled from the 10 sampled schools. Since Kajiado County has 5 sub-counties, census technique was used to sample all the 5 education officers for the study 1 from every sub-county, the total sample size for the study was 150 respondents which was 13 percent of the targeted population.

3.5 Research Instruments

Questionnaires and interview schedules was used to collect data in this study. This method was appropriate for the study since it can collect information which was not directly observable. Questionnaire captures about attitudes, feelings, motivation, actions and personal involvements of persons. The questionnaire used were both closed and open ended to enable the study find the influential factors on the choice of agriculture by boys and girls in secondary schools. Open ended questions allowed respondents to give their personal views; these elicited responses on the background information of the respondents to explain what influenced them to choose agriculture. The question design gave room for the use of Likert scale questions that refrain the respondents from giving vague answers for instance gender, place of residents, type of school and age bracket. Questionnaire were used by students', principals, and agriculture teachers' respondents; the interview schedules were used to collect data from parents and education officers.

3.6 Pilot Study

The study piloted 3 schools in Kajiado County where 30 students were used to respond to the questionnaire, 15 boys and 15 girls, 3 principals and 3 agriculture teachers were also used, 1 parent and 1 education officer were included. According to Mugenda & Mugenda (1999), pilot study refers to pre-testing of the research instruments in administering it to a certain sample which is the same as the actual sample which the study intended to use in the actual study. The pilot study was used to identify items in the questionnaire which are vague and unclear to the respondents which are then clarified and modified before administering the questionnaire for the final study. The pilot study enabled the researcher to familiarize himself/ herself with the management of the instrument. Additionally, piloting assisted the researcher to ensure that the final instruments elicited the information needed by the study and to make the necessary adjustment before the final questionnaire and add more item based on criticism on the pre-test. Piloting was to measure how the questionnaire was to collect the required information for the study. The result showed that some of the questions were difficult and needed more than one answer, some of the questions were not answered meaning that the respondents were not clear on them, hence the researcher modified the questions and made them simpler. Piloting helped the researcher to identify the challenges experienced during collection of data.

3.6.1 Instrument Validity

A study by Kerlinger (1986) stated that validity is the degree to which an instrument measures what it's intended to measure according to subjective assessment of the researcher. According to Orodho (2009) he argued that validity is concerned with the gradation to which an empirical measure or numerous measures of a concept precisely

represent that concept. Content validity was used to validate the instruments of this study. This refers to the degree of measure to which data collected using a specific instruments represents a particular domain off indicators or content of a certain concept. An instrument is said to have content validity if it covers all the possible aspects of the research topics. The study ensured content validity by seeking the assistance of the supervisor on the capability of the instruments to collect the essential information for the study. The instruments were given to them for correction and their comments and feedback were used to adjust the instruments accordingly.

3.6.2 Reliability of the Instrument

According to Kombo and Tromp (2006), reliability is a measure of extent to which research instruments will return constant results after repetitive trials. More importantly, Orodho (2009) stated that reliability of an instrument is its consistence in generating related results over a period of repetitive trials.

To test instruments reliability, the researcher used a split-half technique to determine the consistency or reliability coefficient. The instruments was divided into two halves after administering, each subjects was treated separately and scored manually. The scores were computed for each a half and correlated using Pearson's correlation coefficient. The results gave a value of 0.9 which was a perfect reliability hence the instrument was good for the study.

3.7 Data collection procedure

To be able to collect data for the study, the researcher obtained permission from the National Commission of Science, Technology and Innovation. On visiting the sampled schools, also sought permission from the school principals before administering questionnaire to the students and agriculture teachers, school principals for prompt responses. The researcher interviewed 5 parents and 5 education officers. The collected information was treated with high confidentiality for the purpose of this study. The study sought the help of the subject teachers to explain, sample and distribute the questionnaire to the students and personally gave the questionnaire to the principals. The study sought the assistance of the principals to interview parents during academic days in their schools and personally visited sub-county education offices to request to interview the education officers.

3.8 Data analysis techniques and presentation

Data analysis refers to examining and structuring of what has been collected to make inferences Kombo (2006). Agreeing to Mugenda and Mugenda (1999), data analysis refers to the procedure of getting order, structure and meaning to the large information collected. This study created both qualitative and quantitative data. Quantitative data was coded and input into statistical packages for Social sciences (SPSS) version 21 and analysis was done using descriptive statistics. Quantitative data was analyzed centered on the content matter of the responses and the objectives of the study. Responses with joint theme or forms were grouped together in related or coherent groups. Descriptive statistics used in the study were analyzed using frequency tables and percentages of the boys and girls responses,

teachers and principals. Qualitative data was discussed in relative to the goals of the study and presented in thematically prose form.

3.9 Ethical Considerations

The researcher obtained a letter from University of Nairobi School of education, this letter was used to access research authorization from the National commission of Science, Technology and Innovation. The letter was used to seek consent from principals, education officers and parents to collect data, inform the respondents of the authority to carry out the research.

The investigator then organized with the principals to endorse the dates for data collection and got consent from the administration of the schools. This reduced the suspicion or surprises when visits were made. The researcher explained to the respondents that they were to fill the questionnaire freely and voluntarily to avoid wrong information and exaggeration.

The investigator ensured confidentiality of the information obtained from respondents by clearly informing all the respondents during data collection the purpose of the questionnaire and asking them not to write their names and names of their school on the questionnaires. The respondents especially the students were informed by their agriculture teachers that the questionnaire were not examinations but to be used for research study only. The researcher gave time to the respondents to fill and bring back the questionnaire in her absence to avoid suspicion from the respondents. The other ethical consideration observed during the study was that parents and education officer needed more time to answer the interview questions asked, hence gave them time to think, discuss and answer

the questions. The researcher also acknowledged and wrote sources of information from other peoples' work to avoid plagiarism.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1: Introduction

This chapter focused on the analysis, presentation and interpretation. The chapter discussed the data collected and how it was analyzed and presented. The data collected was analyzed according to the study objectives which included peer influence, parental influence, individual student's attitudes and career aspirations on the choice of agriculture by students in public secondary schools in Kajiado County.

4.2: Response Rate

The study targeted a population of 150 respondents consisting of 120 form three students who chose agriculture, 10 principals, 10 agriculture teachers, 5 parents and 5 education officers. The study got a response of 100 students which was 83.3 percent response rate, 10 principals which was 100 percent response rate, 10 agriculture teachers a response rate of 100 percent, 5 parents which was 100 percent response rate and 5 education officers a 100 percent response rate.

According to Mugenda and Mugenda (1999), 50 percent response rate is adequate for analysis and reporting; 60 percent response rate is good and 70 percent response rate and above is tremendous, hence the response rate of this study was excellent for analysis and reporting.

4.3: Demographic information of the respondents

To understand the background of the respondents participating in the study, the study sought the demographic data which included classification of the schools, category of the schools, gender, teachers', and principals' academic qualification, teaching experience of principals and teachers. This information was analyzed in the following sections.

4.3.1: Classification and Category of Schools

The study sought to establish the classifications and category of schools in Kajiado County, students were asked to show the classification of their schools and they responded as shown in Table 4.1.

Data contained in Table 4.1 indicated that 11 percent of the boys and 10 percent of girls were from National schools, 10 percent boys and girls school were provincial schools, 18 percent of the boys schools were extra county schools, while none of girls schools was extra county school. 10 percent of the boys students and 11 percent of the girls students were from District boarding schools and 10 percent of boys and 10 percent of girls students were from district day schools. There was an average distribution of the category of schools in the county.

Table 4.1: Students responses on classification of schools

Classification		Boys	Girls			
	Frequency	Percentage	Frequency	Percentage		
	(n)	(%)	(n)	(%)		
National	11	11	10	10		
Provincial	10	10	10	10		
Extra County	18	18	-	-		
District Boarding	10	10	11	11		
District Day	10	10	10	10		
Total	59	59	41	41		

Data contained in Table 4.1 indicated that 11 percent of the boys and 10 percent of girls were form National schools, 10 percent boys and girls school were provincial, 18 percent of the boys schools were extra country schools, while none of girls schools was extra county school. 10 percent of the boys and 10 percent of the girls were from district day schools. There was an average distribution of the categories of schools in the county.

4.3.2: Gender of the respondents.

This study wanted to establish the respondents' gender, hence they were invited to show their gender and the responses were captured in Table 4.2.

Table 4.2: Gender of the respondents

Gender	Students		Teac	chers	Principals		
	Freq.	Percentage	Freq.	Percentage	Freq.	Percentage	
	(n)	(%)	(n)	(%)	(n)	(%)	
Male	54	54	4	40	5	50	
Female	46	46	6	60	5	50	
TOTAL	100	100	10	100	10	100	

Data captured in Table 4.2 indicated that 54 percent of student respondents were male as compared to 46 percent females this showed that there were more male respondents than female. Data also revealed that there were more female teacher respondents than males as shown by 50 percent and 40 percent respondents respectively. Further, the study established that there was equal number of male and female principals indicated by 50 percent male and 50 percent female respondents.

4.3.3: Principals and teachers academic qualification.

To establish the academic qualification of principal and teacher respondents, the respondents were asked to indicate their academic qualifications and their responses were captured in Table 4.3.

Table 4.3: Principals' and Teachers' Academic Qualification

Qualification	Teacl	ners	Principals			
	Frequency	Percentage	Frequency	Percentage		
	(n)	(%)	(n)	(%)		
Diploma Certificate	2	20	1	10		
Bachelor's Degree	8	80	6	60		
Masters Degree	0	0	3	30		
TOTAL	10	100	10	100		

Information contained in Table 4.3 showed that 80 percent of the teachers and 60 percent of the principals had Bachelor's degree. The study also established that none of the teachers had masters' degree but only 30 percent of the principals had masters' degree.

The researcher concluded that principals and teachers are well qualified to deliver agriculture curriculum adequately. This results disapprove Ngesa (2006) and Mwiria (2005), on agriculture teachers' qualification that less than 50 percent of them were less than graduates. This may have been attributed to the fact that in the recent years, teachers have continually upgraded themselves by pursuing further studies.

4.4: Academic qualification of parents and guardians

The study tried to identify the academic qualifications of the parents of the student respondents. The students were requested to indicate the academic qualifications of their parents and guardians. Their replies were shown in Table 4.4.

Table 4.4: Students responses on the parent's academic qualification

Qualification	Во	ys	Girls			
	Frequenc	Percentag	Frequenc	Percentage		
Primary Education	20	20	27	27		
Secondary Education	18	18	10	10		
College Education	11	11	7	7		
Bachelor's Degree	15	15	2	2		
TOTAL	54	54	46	46		

Data captured in Table 4.4 indicated that 20 percent of the boys' and 27 percent of the girls' parents had primary education, 18 percent of the boys' and 10 percent of the girls' parents had secondary education, 11 percent of the boys' and 7 percent of the girls' parents are college education and only 15 percent of the boys' and 2 percent girls' parents had bachelors' degree. The level of education of the parents and guardians might have had an influence on choice of agriculture among boys and girls in public secondary schools.

4.5: Teaching experience of teachers and principals

The study sought to establish the teaching experience of agriculture teachers and the principals. They were requested to indicate how long they have worked as agriculture teachers in secondary schools and as principals in secondary schools.

Their responses were shown in the Table 4.5.

Table 4.5: Teachers and principals responses on experience

Period	Tea	ichers	Principals			
	Frequency (n)	Percentage	Frequency	Percentage		
Less than 1 year	1	10	-	-		
1-3 years	1	10	2	20		
4-6 years	1	10	2	20		
7-9 years	3	30	4	40		
10 and above	4	40	2	20		
Totals	10	100	10	100		

Data contained in Table 4.5 showed that 70 percent of the teachers were experienced in the subject area having handled agriculture syllabus for over 9 years. The study further established that 60 percent of the principals were experienced as they have served as principals for over 9 years.

4.6: Optional subjects chosen in group 4 in secondary schools.

To establish the subjects chosen with agriculture, respondents were asked to tick the optional subjects in their schools which are grouped together with agriculture and the replies were presented in Table 4.6.

Table 4.6: Students responses on optional subjects

Subject		ys	Gi	rls	Totals		
	Frequency	Percentage	Frequency	Percentage	(n)	(%)	
	(n)	(%)	(n)	(%)			
Agriculture	80	80	20	20	100	100	
Business studies	70	70	30	30	100	100	
Home science	20	20	10	10	100	100	
Art and design	-	-	-	-	-	-	

Data captured in Table 4.6 indicated that 80 percent of the boys and 20 percent of the girls in the schools chose agriculture, while 70 percentage of the boys and 30 percentage of the girls choose business studies, 20 percent of the boys and 10 percentage of the girls chose home science and none of the students sampled chose art and design.

4.7: Data analysis based on students' peer influence on choice of agriculture

The study sought to establish how students' peers influenced choice of agriculture among boys and girls. Their views were captured in Table 4.7.

Table 4.7: Students' views on peer influence on choice of agriculture

Reason n = 100	G	Very		Influ	ential	Not Infl	uential	Totals
	e	Influe	ential					
	n	Freq	Perc	Freq	Perc	Freq	Perc	
	d	uency	ntage	uency	ntage	uency	ntage	
	e	(n)	(%)	(n)	(%)	(n)	(%)	
	r							
Most of my classmates chose	t B	34	34	3	3	17	17	54
•	G	27	27	3	3	16	16	46
My best friends chose Agriculture	В	18	18	9	9	27	27	54
	G	13	13	5	5	28	28	46
Teachers influenced me	В	26	26	8	8	20	20	54
	G	15	15	7	7	24	24	46
It will boost my points	В	32	32	7	7	15	15	54
	G	12	12	4	4	30	30	46
To be like others in my villag	ge B	13	13	7	7	34	34	54
	G	6	6	8	8	32	32	46
It is convenient for boys	В	19	19	7	7	28	28	54
girls	G	10	10	4	4	32	32	46
Agriculture is preferred for	В	10	10	5	5	39	39	54
girls than boys	G	15	15	5	5	26	26	46
I will be despised by my	В	13	13	9	9	32	32	54
friends if a choose agriculture	e G	12	12	5	5	29	29	46

Data contained in Table 4.7 revealed that 34 percent of the boys were influenced by their classmates as compared to 27 percent of the girls who were also influenced by their classmates to choose agriculture. Another influencing factor shown by the data was that agriculture boosts their

performance shown by 32 percent of the boys and 12 percent of girls' respondents. 18 percent of the boys and 13 percent of the girls were influenced by friends to choose agriculture; it was also revealed that 26 percent of the boys and 15 percent of the girls were influenced by teachers, while 13 percent of the boys and 6 percent of the girls chose agriculture to be like other students from their villages. 19 percent of the boys and 10 percent of the girls found agriculture convenient for boys, 10 percent of the boys and 10 percent of the girls prefer it for girls; 13 percent of the boys and 12 percent of the girls agreed that their choice of agriculture made them be despised by their peers.

4.7.1: Principals responses on peer influence on choice of agriculture.

The study sought to establish the principals' perception on choice of agriculture by boys and girls in their schools, they were asked to tick yes or no on how this factors influence the students' choice of the subject. Their views were shown in the Table 4.8.

Table 4.8: Principals' responses on peer influence on choice of agriculture

Reason	Y	Zes	Ī	No		Total
	Frequ ency (n)	Perce ntage (%)	Frequ ency (n)	Perce ntage (%)		n %
Do peers influence each other in subjects especially agriculture?	10	100	-	-	10	100
Is agriculture chosen by more students in form three than other subjects in the cluster?	5	50	5	50	10	100
Do the students encourage each other to	8	80	2	20	10	100
choose the subject? So as to pass examination?	7	70	3	30	10	100

Data in Table 4.8 indicated that 100 percent of principals agreed that peers influence each other in choosing agriculture, 70 percent of the respondents revealed that students choose

agriculture in order to pass examinations. 50 percent respondents showed that students influence each to choose agriculture while 80 percent of them agreed that students encourage each other. Additionally, agriculture teachers were asked to explain how peer influence determines the choice of agriculture by boys and girls in their schools.

4.7.2: Agriculture teachers responses on peer influence and choice of agriculture

The study sought to establish agriculture teachers' feelings on students peer influence on choice of agriculture, they were asked to respond using yes or no to the following statements and their responses were as shown in Table 4.8

Table 4.9: Teachers responses on peer influence on choice of agriculture.

Reason	Y	Zes -		No		Total	
	Frequ	Perce	Frequ	Perce	(n)	%	
	ency	ntage	ency	ntage			
	(n)	(%)	(n)	(%)			
Class mates.	9	90	1	10	10	100	
Friends in form three.	9	90	1	10	10	100	
As convenient for boys.	6	60	4	40	10	100	
Perfect for girls than boys.	5	50	5	50	10	100	
As booster subject.	3	30	7	70	10	100	
To avoid being despised by peers.	7	70	3	30	10	100	
Since others are choosing it.	3	30	7	70	10	100	

Data captured in Table 4.9 indicated that 90 percent of the teachers agreed that students chose agriculture because they were influenced by their classmates, 90 percent of them also believed that students were influenced by friends, 60 percent felt that agriculture was convenient for boys; 50 percent preferred it for girls while 30 percent of them agreed that agriculture boost the learners performance. To add on that 70 percent of the teachers agreed that students chose agriculture so as to be despised by peers and 30 percent of them believed that students chose agriculture to be like other students.

4.8: Parental influence on choice of agriculture by boys and girls

The study sought to establish how parents influence their children in choice of agriculture. The respondents were asked to rate the given statements as strongly agree, agree, neutral, disagree and strongly disagree. They responded as shown in Table 4.9.

Table 4.10: Students' responses on parental influence.

n=100	G		gly agre		gree	Disagre		Strong Disagr	ree	Total
	n d	ency	Perce ntage	Freq uency	Perce ntage	Freq uency	Perce ntage	-	Perce Ntage	
	e r	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	
My parents contributed a lot in choice	B G	36 24	36 24	9	9	6	6	3 22	3 22	54 46
My parents feel that agriculture is	В	2	2	3	3	12	12	37	37	54
not important	G	5	5	4	4	5	5	32	32	46
Agriculture leads to low paying jobs	В	13	13	2	2	16	16	23	23	54
	G	12	12	4	4	8	8	22	22	46
Parents think that it	В	24	24	3	3	11	11	16		54
is a subject for boys	G	16	16	6	6	4	4	20	20	46
Any student can undertake the	В	29	29	15	15	7	7	3	3	54
subject	G	19	19	4	4	5	5	18	18	46
The subject is better for boys	В	20	20	9	9	12	12	13	13	54
than girls	G	9	9	7	7	5	5	24	24	46
The subject is easy to	В	34	34	11	11	2	2	5	5	54
pass	G	19	19	4	4	4	4	19	19	46

Data captured in Table 4.10 indicated that 36 percent of the boys and 24 percent of girls were influenced by their parents to choose agriculture, 2 percent of the boys and 5

percent of the girls agreed that parents do not value agriculture, 13 percent of the boys and 12 percent of girls agreed that agriculture leads to low paying job. Data also established that 25 percent of the boys and 16 percent of the girls accepted that parents see agriculture is a subject for the boys, while 29 percent of the boys and 19 percent of the girls saw the subject to be convenient for all students. 19 percent of the boys and 20 percent of the girls preferred agriculture for boys than girls, 34 percent of the boys and 19 percent of the girls chose the subject because it is easy to pass. Therefore, choice of agriculture by boys and girls was greatly influenced by parents.

4.8.1 Principals' responses on parental influence and choice of agriculture.

The principals were asked their opinion on parental influence and the choice of agriculture by boys and girls and they responded by ticking yes or no as shown in Table 4.11.

Table 4.11: Principals' responses on parental influence on choice of agriculture.

Reasons	Ye	? S	N	0	Total	
	Frequ ency	Perce ntage	Frequ ency	Perce ntage	(n) (%)	
	(n)	(%)	(n)	(%)		_
Parents greatly influence their children	7	70	3	30	10	100
Parents encourage boys than girls to take						
agriculture.	6	60	4	40	10	100
The subject is preferred for girls than boys	3	30	7	70	10	100

Data captured in table 4.11 indicated that 70 percent of the principals agreed that parents greatly influenced their children to choose agriculture, 60 percent of them saw that parents encourage boys than girls to choose agriculture, while 30 percent of them agreed that the parents prefer agriculture for girls than boys.

4.8.2: Teachers responses on parental influence and choice of agriculture

The study sought to establish the teachers' perception on parental influence on choice of agriculture. They were requested to respond using true or false to the statements below, their responses were as shown in Table 4.12

Table 4.2: Teachers views on parental influence

Reasons			False		Total	
	Frequ ency (n)	Perce ntage (%)	Frequ ency (n)	Perce ntage (%)	n	%
Parents greatly influence their children.	8	80	2	20	10	100
According to parents, agriculture is not important	4	40	6	60	10	100
Agriculture has no better paying job	1	10	9	90	10	100
Parents feel that agriculture is for boys	10	100	-	-	10	100
The subject is better for girls than boys	2	20	8	80	10	100
The subject is easy to pass	4	40	6	60	10	100

Data contained in Table 4.12 revealed that 80 percent of the respondents agree that parents greatly influence their children while 40 percent of them accepted that parents does not value agriculture, 10 percent of them believed that agriculture leads to low paying job and 20 percent of them preferred agriculture for girls, 40 percent of the respondents agreed that students chose agriculture because it is easy to pass.

4.9: The influence of students' attitudes on the choice of agriculture by boys and girls

The study sought to establish the students' attitudes towards agriculture, the students' were asked to answer question on basis of strongly agree, agree, disagree and strongly disagree. Their responses were captured in the Table 4.12.

Table 4.13: Students' responses on attitudes on choice of agriculture.

$\begin{array}{c} n=100 & G \\ & e \\ & n \\ & d \end{array}$	SA		SA	A		D		SD	Total	
	Frequenc	_	Perce ntage		q Perce (n)tage	Freq uency	Perce ntage	-	Perce ntage	
	(n)	-	(%)		(%)	(n)	(%)	(n)	(%)	
e										
r										
Agriculture can only	В	6	6	2	2	11	11	31	31	54
be handled by boys	\mathbf{G}	8	8	-	-	1	1	34	34	46
Girls are good	\mathbf{B}	7	7	3	3	4	4	32	32	5 4
farmers hence should choose agriculture	G	3	3	4	4	3	3	31	31	46
Agriculture deals	\mathbf{B}	4	4	10	10	11	11	29	29	5 4
with farm work only	\mathbf{G}	2	2	4	4	2	2	38	38	46
Agriculture will	В	7	7	14	14	14	14	19	19	54
me unable to handle other subjects	G	4	4	15	15	8	8	19	19	40
Agriculture involves	\mathbf{B}	10	10	5	5	11	11	26	26	54
dirty activities	\mathbf{G}	12	12	8	8	5	5	21	21	46
The syllabus is too	\mathbf{B}	27	27	19	19	8	8	-	-	54
wide.	G	23	23	14	14	6	6	3	3	40
I like working on	\mathbf{B}	34	34	17	17	1	1	2	2	5 4
agriculture activities	G	33	33	4	4	6	6	3	3	46

Data captured in Table 4.13 revealed that 6 percent of the boys and 8 percent of the girls agreed that agriculture can only be handled by boys, 7 percent of the boys and 3 percent of the girls believed that girls are good farmers hence chose agriculture; 4 percent of the boys and 2 percent of the girls have the attitude that agriculture deal with farm work only. It was also established that 7 percent of the boys and 4 percent of the girls felt that agriculture would make them to unable to handle other subjects, 10 percent of the boys and 10 percent of the girls find agriculture to be involving dirty work hence influence their choice, 27 percent of the boys and 23 percent of the girls found agriculture

syllabus to be too wide. 34 percent of the boys and 33 percent of the girls chose agriculture because they had a positive attitude and like working agricultural activities.

4.9.1: Principals views on the student's individual attitudes on choice of Agriculture

The study sought to establish how principals feel about the students' individual attitudes towards the choice of agriculture, they were told to indicate using Yes & No answers how these statements influence the choice of agriculture, and their responses were as shown Table 4.14

Table 4.14: Principals' responses on students' individual attitudes on choice of Agriculture

Yes No Reason **Total Frequency** Percentage Frequency Percentage n % (%) (n)(n)(%) Are the individual student's 10 100 100 10 attitudes the major influencing factor in the choice of Do more boys than girls choose 6 60 40 10 100 4 agriculture?

Data captured in Table 4.14 indicated that 100 percent of the principals agreed that individual students' attitudes influence them to choose agriculture, 60 percent of them concurred that boys than girls choose agriculture. The study sought the opinion of the teachers as shown below.

4.9.2 Teachers responses on individual students' attitudes on choice of agriculture by boys and girls

The sought to establish the agriculture teachers' perception about individual student's attitudes on choice of agriculture. They were told to rate the statement below as strongly agree, agree, disagree and strongly disagree. Their results were as shown in the Table 4.15

Table 4.15 Teachers results on individual students' attitude on choice of agriculture

		SA Fotal		A		D	SD			
	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	(f)	(%)
		(n)	(%)	(n)	(%)) (n	e) (%)	(n)	
Agriculture can	-	-	-	-	1	10	9	90	10	100
be handled by boys										
Girls are good	-	-	1	10	4	40	4	40	10	100
farmers hence										
should choose										
agriculture	_	4.0		4.0				0.0	4.0	400
Agriculture deals	1	10	1	10	-	-	8	80	10	100
with farm work only				4.0		1.0	_	~ 0	4.0	400
6	-	-	4	40	1	10	5	50	10	100
consuming					2	20	7	70	10	100
Agriculture involves	-	-	-	-	3	30	7	70	10	100
dirty works	7	70	2	20	1	10			10	100
Agriculture syllabus	/	70	2	20	1	10	-	-	10	100
is too wide.	6	60	4	40					10	100
It is a manageable	U	00	4	40	-	-	-	-	10	100
subject. It's good for	5	50	3	30	1	10	1	10	10	100
performance	J	30	3	30	1	10	1	10	10	100

Data captured in Table 4.15 revealed that 90 percent of teachers strongly disagreed that agriculture curriculum be handled by boys, 80 percent of them disagreed that girls are good performers hence should chose the subject. It was also established that 10 percent of the respondents concurred that agriculture involves farm work only while 70 percent of them disagree with the same statements. Further studies established that 70 percent of the teachers accepted that agriculture syllabus was too wide, 60 percent of them agreed that the subject is manageable while 50 percent of the respondents agreed that the subject is good for performance.

4.10: Students' career influence on choice of agriculture by boys and girls.

The study sought to find out how students' career aspiration influenced the choice of agriculture. The respondents were asked to rate the statements below as very influential, influential and not influential. Their responses were as recorded in Tables 4.16.

Table 4. 16: Students' responses on career influence on choice of Agriculture

Reason n = 100	G e	Very Influen		Infl	uentia	Not very 7 influential			Total		
	n n	Freque ncy	ntage	Freau ncy	Perce ntage	Freau ency	Perce ntage	Freau ency	Percent age		
	d	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)		
	e r										
Boys more than girls	В	20	20	5	5	29	29	54	54		
choose agriculture for career purposes	G	9	9	4	4	33	33	46	46		
Girls are more likely to	\mathbf{B}	12	12	9	9	33	33	54	54		
choose agriculture for future careers than boys.	G	11	11	8	8	27	27	46	46		
I choose agriculture for	В	39	39	8	8	7	7	54	54		
my future career.	G	33	33	2	2	11	11	46	46		
to have admission cluster	G	29	29	4	4	13	13	46	46		
The subject more than	В	36	36	12	12	6	6	54	54		
others in the group has better opportunity in the job market.	Ğ	34	34	7	7	5	5	46	46		
Agriculture leads to low	В	10	10	3	3	41	41	54	54		
paying jobs.	Ğ	11	11	12	12	23	23	46	46		
agriculture more than boys are confined to the rural settings.	G	10	10	9	9	27	27	46	46		

Data captured in Table 4.16 indicated that 39 percent of the boys and 33 percent of the girls chose agriculture for future career aspirations, 36 percent of the boys and 34 percent of the girls chose agriculture since it has better opportunities in the job market. It was further established that 31 percent of the boys and 29 percent of the girls agreed that the teachers guided them to choose the subject so as to get admission cluster; 20 percent of the boys and 9 percent of the girls believed that more boys than girls chose agriculture for career purposes, 12 percent of the boys and 11 percent of girls accepted that more girls than boys

chose agriculture for career purposes. Additionally 11 percent of the boys and 10 percent of the girls believed that agriculture confines them to the rural setting while 10 percent of the boys and 11 percent of the girls thought that agriculture leads to low paying jobs. The study further sought to identify the principals' opinion on influence of the students' career aspirations on choice of agriculture.

4.10.1 Principals' responses on career aspiration on choice of agriculture

The study sought to establish the principals' feelings about career aspiration and choice of agriculture, they were asked to rate the below statements as strongly influential, influential, and not influential. Their responses were captured in Table 4.17.

Table 4.3: Principals' responses on career aspiration and choice of agriculture.

		ongly uential	Influen	tial	Not In	fluential	I	otal
Statement		Percen tage	Freque ncy	Percen tage	Freque ncy	Perce ntage	Frequ ency	Perce ntage
	(n)	(%)	(n)	(%)	(I	ı) (%)	(n)	(%)
Career aspirations influenced	5	50	2	20	3	30	10	100
the choice of the subject Boys than girls choose agriculture for career	4	40	1	10	5	50	10	100
More girls than boys prefer agriculture	2	20	1	10	7	70	10	100
Agriculture is relevant for market.	6	60	3	30	1	10	10	100

Data captured in Table 4.17 revealed that 60 percent of the principals agreed that agriculture was relevant for the students job markets, 50 percent of them concurred that students choose agriculture for future career aspirations; 40 percent of them believed that

boys more than girls chose agriculture for future career purposes while 20 percent of them agreed that more girls than boys chose agriculture for future career purposes. These were supported by agriculture teachers' responses when they were asked to rate the statements below concerning career aspirations and choice of agriculture.

4.10.2: Agriculture teachers' responses on career aspirations and choice of agriculture.

Agriculture teachers were questioned on their opinion on the influence of students' career aspirations and choice of agriculture, they were asked to rate the following statements concerning career and choice of agriculture as very influential, influential or not influential and their replies were as displayed in Table 4.18.

Table 4.18: Agriculture teachers' replies on career aspirations and choice of Agriculture.

Statement V	ery		Influent	ial	Not Influ	iential		Total
	Influen	tial						
	Frequ	Perce	Frequ	Perce	Frequ	Perce	Frequ	Perce
	ency	ntage	ency	ntage	ency	ntage	ency	ntage
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Both boys and girls choose	4	40	4	40	2	20	10	100
agriculture for career								
purposes. The girls' career aspiration	s 3	30	2	20	5	50	10	100
than boys influence them t		20	_	20		20	10	100
choose agriculture	7	70	1	10	2	20	40	100
Both boys and girls choose the subject to perfect their	· 7	70	1	10	2	20	10	100
future careers								
Teachers encourage them t		70	1	10	2	20	10	100
choose agriculture to obtai better grades.	n							
Agriculture leads to low	_	_	_	_	10	100) 10	100
paying jobs								- 1
Those who choose	2	20	-	-	8	80	10	100
agriculture Setting								

Data in Table 4.18 indicated that 70 percent of agricultural teachers agreed that the choice of agriculture by students was influenced by teachers' encouragement and for them to perfect their future career aspirations respectively. It was also established that both boys and girls chose agriculture for future career purposes, 30 percent of them indicated that more girls than boys were influenced by their career aspirations to choose agriculture, 20 percent of them believed that agriculture confined them to the rural areas while 100 percent of them strongly disagreed that agriculture leads to low paying jobs. These supported the

students' responses and principals' responses that choice of agriculture is influenced by student's future career.

4.11: Agriculture in secondary schools be made compulsory or elective.

The study sought to establish whether agriculture should be made compulsory or continue being optional. Students' were asked to tick compulsory or elective as shown in the Table 4.19.

Table 4.19: Students' responses on Choice of subjects

	C	Compuls	sory		Elective				
В	oys	G	Firls		Boys		Girls		Total
Freq	Percen	Freq	Percen	Freq	Percen	Freq	Percen	Freq	Percen
	age		age		age		age		age
(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
20	20	18	18	50	50	12	12	100	100

Data captured in table 4.19 showed that students' still want agriculture to be elective as it has no value to them. Shown by 50 percent of the boys and 12 percent of the girls as compared to 20 percent boys and 18 percent girls respondents who said that agriculture should be compulsory. The students' responses showed that boys preferred a wide range of selective subjects to shape their future career while girls were not decided about agriculture. The stud y concluded that students wanted agriculture to be one of the optional subject to the secondary school.

4.12: Data analysis from the interview scheduled of parents and education officers

The study interviewed 5 parents from 5 of the 10 sampled schools, 2 women and 3 men, 5 education officers, 3 men and 2 women. Their responses on the questions revealed that educated parents play a key role in their childrens' choice of agriculture shown by 100 percent response rate of the parents interviewed. Additionally parents agreed that peer influence is the main factor determining their children choice of agriculture shown by 16 percent response rate. The parents interviewed accepted that their children have a negative attitude towards agriculture hence most of them do not choose it shown per 80 percent response rate.

The study also found out that parents' guide their children to choose subject which will shape their future career and often time give the learners opportunities to choose the subject they perform well. The study also concluded that peer influence, parental influence, students' attitudes and career aspirations were the main influencing factors on the choice of agriculture subject among boys and girls.

More importantly, the 5 education officers interviewed gave the opinion that peer influence was the core factor which influenced choice of the agriculture subject among boys and girls. Parents discourage their children from taking agriculture especially boys because they want them to undertake other careers such as medicine and engineering shown by 100 percent respondents. The education officers agreed that students' negative attitudes and the erratic weather conditions of Kajiado County have discouraged them from choosing agriculture.

They suggested that schools should be fully equipped with resources for learning technical subjects like agriculture and creation of awareness on the benefits of agriculture by ministry of agriculture, science and technology.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented a summary of the data analysis on the factors influencing choice of agriculture by boys and girls in public secondary schools in Kajiado County. The conclusions and recommendation are based on the study objectives. The chapter is structured into summary of the findings, discussions, conclusions, recommendations and areas for further research.

5.2 Summary of the Study

The determination of this study was to establish influencing factors on the choice of agriculture by boys and girls in public high schools in Kajiado County. The study was conducted based on the four objectives: To determine students' peer influence on choice of agriculture by boys and girls, parental influence on choice of agriculture, individual student's attitudes on choice of agriculture and students career aspirations on choice of agriculture by boys and girls in public secondary schools in Kajiado County. Literature reviewed highlighted the importance of agriculture education globally, in Africa, in Kenya and in Kajiado County. It further showed that the choice of agriculture in secondary schools was influenced by students' peer influence, parental influence, students' individual attitudes, career aspirations among other factors were established. The study used descriptive survey design to collect data from students, principals, agriculture teachers, parents and education officers; The study targeted 50 public schools 1000 form three students who took agriculture 50 principals, 50 agriculture teachers, 10 parents and 10 education officers for the study. A sample size of 120 form three students who took

agriculture, 10 principals, 10 agriculture teachers, 5 parents and 5 education officers were sampled for the study using random and purposive sampling techniques. Additionally questionnaires were used to collect data from students, principals and agriculture teachers; data collected from parents and education officers was obtaining using interview schedules. Data collected for the study was analyzed using statistical packages for social science (SPSS) version 21 and presented using frequency tables and percentages. The study established that 34 percent of the boys and 27 percent of the girls indicated peer influence as a major factor that determined the choice of agriculture among boys and girls in public secondary school. This was supported by principals and teachers responses. The study also established that parental influence was a key factor influencing the selection of agriculture among boys and girls in public secondary schools indicated by 36 percent of the boys and 24 percent of the girls respondents; principals and teachers concurred with the students that parents determined their choice of agriculture. The study further established that 32 percent of boys and 24 percent girls indicated that individual student's attitudes determined the choice of agriculture among boys and girls in public secondary schools, it was supported by 100 percent principals respondents and 70 percent teachers respondents. The study established that 39 percent of the boys and 33 percent of the girls agreed that students' future career aspiration was the major factor influencing the selection of agriculture among boys and girls in public secondary schools.

The study concluded that the main factors influencing choice of agriculture among boys and girls were peer influence, parental influence, individual students' attitudes and students' career aspirations. It was also concluded that more boys than girls choose agriculture for future career. The study therefore recommended that students should be

well informed about the importance of agriculture as a technical subject which may shape their future career. The study suggested a further research on factors influencing choice of agriculture among boys and girls in tertiary and university levels of education.

5.3 Major Findings of the study

The major findings of this study were summarized as per the research objectives below:-

5.3.1: Findings based on peer influence on the choice of agriculture by boys and girls in public high schools.

The findings of this study revealed that from students' responses 34 percent of the boys' and 27 percent of the girls captured in 4.7 were influenced by peers to choose agriculture, principals' responses also uncured with the students shown by 100 percent respondents in table 4.8. Teachers responses agreed with the students' and the principals' that peer influence was a determining factor in the choice of agriculture among boys and girls as indicated in the table 4.9. The study further established that students' choose agriculture to enable them pass examination, the findings concurred with Lesley (2001) who contended that peer influence on choice of subjects may not be good for students' as it may influence them positively and negatively.

5.3.2 Findings based on parental influence on choice of agriculture by boys and girls.

The study established that 36 percent of the boys and 24 percent of the girls strongly agreed that they were influenced by their parents to choose the subjects; also 13 percent of the boys and 12 percent of the girls strongly agreed that their parents think that agriculture leads to low paying jobs captured in table 4.10, 70 percent of the principals agreed that parents greatly influence their children while 60 percent of the principals agreed that

parents encourage boys than girls to choose agriculture shown in table 4.11. 80 teachers respondent supported the principals' responses shown in table 4.1.

The findings showed that parents greatly influence their children on the choice of agriculture in line with Chee & Leong – Yong (2001) who argued that parents discourage their children from taking agriculture as it has no future.

5.3.3 Findings based on influence of students' individual attitudes on choice of agriculture by boys and girls.

The study findings revealed that 34 percent of the boys and 33 percent of girls chose agriculture because they have a positive attitude towards the subject, they like working in agricultural activities, as captured in table 4.13, this was supported by 100 percent principals' responses, 60 percent teacher respondents who believed that the subject was manageable captured in the tables 4.14 and 4.15 respectively.

The literature reviewed revealed that African Countries have low agricultural production even after acquisition of knowledge and skills Ngesa (2006) this was due to negative attitude and lack of role models.

5.3.4 Findings based on Influence of students' career aspirations on the choice of agriculture by boys and girls.

The study established that 39 percent of the boys and 33 percent of the girls chose agriculture for future career purposes and 36 percent of the boys and 34 percent of the girls chose it since it offered better opportunities in the job market captured in table 4.16, it was also supported by 60 percent principals respondents that agriculture was relevant for the

job market as indicated in table 4.17. Teachers also agreed that choice of agriculture was influenced by students' career aspirations shown by 70 percent teacher respondents as in table 4.18.

This concurred with Ihunga and Kaundio (2001) who argued that choice of subjects correlates with what one expects in the job market.

5.4 Conclusion from the study

Based on the findings of objective one, on influence of peers on choice of agriculture, the study concluded that peer influence is the major factors which determine the choice of agriculture by boys and girls. This is because students encourage themselves so as to fit in certain peer groups and that proper guidance at this stage make them choose the best for their future. Students can influence themselves positively or negatively when choosing subjects for instance, boys where agriculture has succeeded motivate their peers to choose the subject while from urban centres discourage their friends. Girls mostly discouraged their peers from choosing agriculture as most of them do not enjoy manual work as compared to boys. Students choose subjects which most of their friends have chosen or their relatives or parents are undertaking.

Based on the findings of objective two, on parental influence on choice of agriculture, it was concluded that parents greatly influence their children on the choice of agriculture for instance most parents encourage the boys than girls to take up the subject. This was clear in the study that parents determine the choice of subjects of their children especially the educated parents. Most of them would like their children to take up subject clusters which will lead them to undertake careers which they themselves are in or intended to be in but

never succeeded. It was also concluded that parents have low attitudes towards agriculture related careers, hence discourage their children especially girls. They want their children to be lucrative careers like medicine, engineering which will improve their economic lives. Based on the findings of objective three, on the influence of individual students' attitudes on choice of agriculture, the study concluded that individual students' attitudes greatly influence the choice of agriculture by boys and girls. Girls view the subject as tedious and involves dirty activities hence few of them choose it while boys embrace agriculture as an opportunity for innovation and source of employment, on the other hand girls are not comfortable with agriculture since they believe that it ties them to the rural life especially those from agricultural areas of the country, hence the disparity in choice of agriculture between boys and girls. More boys than girls are positive about agriculture which was seen to boost their performance and relevant in the job market. Agriculture is important in individual future development as the untapped resources can be exploited to improve the economy of the country and create room for new innovations among the youths. Based on the findings of objective four, on the influence of career aspirations on choice of agriculture, the study concluded that career aspirations of individual students determine their choice of agriculture in public secondary schools as an exposure to agriculture based careers may encourage them to choose the subject. With early nurturing of agriculture more boys were more likely than girls to choose the subject for future career. Students who were well exposed to agriculture based activities and have benefited from the career are likely to choose the subject more than those who are not exposed to it. Boys more than girls choose agriculture since it is involving and has wide range of innovation activities

which they like taking the challenge as compared with the girls who like taking simple tasks in their careers.

5.5 Recommendations from the study

From the outcomes of the study, the following recommendation was made.

- (i) The school management should make sure that students are guided well on the career awareness so as to equip them with adequate knowledge on subject choice especially agriculture in secondary school.
- (ii) The curriculum developers should ensure that introduction of subjects which will shape career area should be nurtured early enough to enable students make the right decision like starting from primary level of education.
- (iii)The government through its ministry of education should provide guidance and counseling to the students on subjects choice on secondary school.
- (iv)Students should be exposed to successful agricultural activities like smart farming to motivate them on the subject area.
- (v) Principals and teachers should ensure that peers understand the importance of proper choice of subjects through involvement in discussions on subject choices and involving resource persons in schools.
- (vi)Parents should be enlightened on their roles in the choices of subjects by their children by involving parents during the selection of the subjects and give students' enough time to make the right decisions.
- (vii) Learners future careers should be nurtured early enough to enable them make the right choices through exposure to agriculture based careers and provide right

attitudes through involving them in agriculture based activities.

5.6 Recommendations for further research

The study was carried out in public secondary schools of Kajiado County. It explode the factors influencing choose of agriculture by boys and girls in public secondary schools and found out that there was need to research on the factors inducing the implementation of agriculture curriculum in high schools in Kenya. On the basis of this study further research can focus on:-

- (i) There is need to study students' attitudes towards optional subjects in secondary schools and their influence on their future career.
- (ii) There is need to study the factors influencing the choice of technical subjects in secondary and tertiary colleges.
- (iii) There is need to study the influence of the background of the learners in the choice of optional subjects in public secondary schools.

REFERENCES

- Alabu G.I, (2001). Education in the political economy of African Agricultural knowledge system. South Africa: Einsburg College of Education.
- Apori, S.O, Zinnah M.M and Annor F. (2003). Factors that influence choice of Agriculture science by senior secondary school students: A case study of students in Cape coast municipality of Ghana proceedings of the 19th Annual conference Association for International Agriculture and Extension Education (AIAEE). Department of Agricultural Education Texas. A&M University, Tamu, Texas, USA.
- Babad E & Tayeb. A (2003). Experimental analysis of students course selection.

 British journal of education psychology.
- Broyles, T & Skelton, N.S. (2002). A national study of the supply and demand for teachers of agricultural education in 1999 2001. Blacksburg VA:

 Virginia Polytechnic Institute and state University.
- Camp W.G, Broyles.T.,& Skelton,(2002). A national study of the supply and demand for teachers of agricultural education in 1999 2001. Blacksburg VA: Virginia Polytechnic Institute press.
- Chee S. & (Leong Yong, P. (2011). Factors that influence Branelan students not to enroll in secondary school Agriculture subject: Darassalam Brunei.
- Chen X.A, (2000). A few thoughts on the reform and development of agricultural schools. The journal of agricultural vocational education (Chinese version) Vol. 36 (2).
- Claire.G.Andrew.G. Sarah.C (2006), Stakeholder engagement-Atoolkit Torfaen county Diamini M.P. & Ngwenya S.S. (2004). Reasons girls choose agriculture or other

- science and technology programs in Swaziland. AIAEE 2004 Proceedings of the $20^{\rm th}$ Annual conference "Education for multi-functional Agriculture". May 23-29, 2004. Dublin Ireland.
- Eshiwani G.C. (1993), Education in Kenya since Independence. Nairobi: East African Educational publishers.
- Eshiwani G.S, (2001). Enhancing female participation and performance in mathematics, science and information technology in university education in Kenya: Intervention strategies.
- Farant J.S (1997), Principles and practice of education: Longman Group: UK.

 Food and Agricultural Organization (1997). Agricultural Education and
 Training: Issues and opportunities. Roma: Italy: Guatamala press.
- Gay R. (2009). Educational Research competence for analysis and application 4th ed. New York: McMillian publishers.
- Gichohi L. (2005). Inadequate career guidance and counseling of secondary school students. Nairobi: The standard newspaper.
- Handre P.S, Sullivan D & Crowson H. (2009). Students characteristics and motivation in rural high schools. Journal of researchers rural education 24 (126) pg 1-9.
- Joe Ritzen, (1999) looking for Eagles: A short guide to bird watching in a educational contest. The World Bank February, 1999.
- Kariuki L. (2006a). Effects of career guidance on students career choice at secondary school levels in Kabati Division, Kitui district. And published Thesis Kenyatta University.

- Kaudio A. and Ihunga F.K (2001). Advantages and Opportunities of science and mathematics based career for women: The Kenyan Case.
- Kelly A. (ed), (1981). The Missing Half; Manchester: Manchester University press. Kenya Institute of education (KIE) (2002), Secondary school syllabus. Kenya Institute Bureau. Nairobi.
- Kerlinger F. & Lee (2000). Foundation of Behavioral Research, 4th edition Toronto Wadeorth. Thomson Learning.
- Kombo K.D &D. Tromp. L.A (2006), proposal and thesis writing: An Introduction pauliness publication Africa, Nairobi.
- Kritsada P. (2012). Factors influencing enrollment in agriculture course. Highland: Laguna press
 - Lesley L.S (2007). The quality of Teachers of Agriculture Training for Rural Development F.A.O. Rome.
 - Lutjens S. (1999). "Women Education and the state in Cuba" Latin America education, comparative perspective, Carlos Alberto Torres, Aldariano Purggros west view press 1997.
 - Maccalla A.F. (2000). Agriculture in the 21st century. South Africa: Unpublished Forth Distinguished economic lecture.
 - Malgwi C.A (2005). Influence on students' choice of college major. Journal for education for Business. 80,5,275,282.
 - Miller L.E & Diamini M.P (2007). Career undecidedness of high school students. Geneva. Routledge, London.

- Moon B. & Mayes A.S (1995). Teaching and Learning in the secondary school. Routlegde, London.
- Mugenda O.M & Mugenda A.G (1999). Research methods: Quantitative Approaches.

 Nairobi: ACTS Press.
- Mugenda O.M & Mugenda A.G (2003). Research Methods : Quantitive approach.

 Nairobi: ACT Press
- Mustapha R.B & Greenon J.P (2007), Role of vocational Education in economic development in Malaysia. Educators and employers perspectives. Journal of industrial teacher's education.
- Mwiria K. (2005), Vocationalization of secondary education. Nairobi Kenya: Kenya Literature Bureau Press.
- Ngesa F.U. (2006), Demand profiles and supply Reponses for agricultural education and training (AET) at the post primary level: case study of Kenya. Final report prepared for world Agro forestry centre (IC RAF) Nairobi.
- Onyango R.O (2008). Nutritional status of children of women, sugarcane workers in central Alego.
- Orodho A.J (2009). Element of education & Social science research methods Kazezja. Publishers, Maseno Kenya.

- Owoyele J.W & Toyobo, O.M. (2008), Parental will, peer pressure, academic ability and school subject selection by students in senior secondary schools Ojebu-ode: Olubade press.
- Report of Kenya (1999), Totally integrated quality education and training (TIQET), Government printers. Nairobi.
- Salibury J & Riddels. S. (2000). Gender policy and education shifting agenda in the UK and Europe, London, Routledge.
- Sereno F (2004) Challenges facing higher agricultural education, Belize: Guatamala press.
- Schultz L.H, Wieckert, D.A, Howard W.T & Dickson, D.P (2008), A century of excellence in education and Discovery. Wikipedia free encyclopedia of agriculture education.
- Syeda W.K. (2010). Vocational education and skills development: A case study of Pakistan.Retrieved from htt://finders.edu.au/education/i.e
- Temu A. (2003), Improving Agriculture and Natural resources education in Africa: A stitch in Time. Nairobi. Agro forestry centre. (ICRAF).
- Tom V.B. (2009). Workshop on "Food crisis education and Training of rural people at stake". FAO Headquarters. Rome: Italy: 4th and 5th June, 2009.
- United States department of Agriculture (2005), Growing nation. The story of American Agriculture: Washington D.C.
 - Vanderbosh T. (2006). Post primary education and training in sub-Saharan Africa: Nairobi. World Bank Agro forestry centre (ICRAF).

Young P.M. (1988). The influence of parents on the education and occupation decision making of their children, reducing sex role stereotyping in vocational education. Eric Document Reproduction.

APPENDICES

APPENDIX I

INTRODUCTION LETTER

ESTHER .J. CHEMJOR

P.O Box 455

KAJIADO

5th April 2016

Dear Sir/Madam

RE: TRANSMITAL LETTER FOR RESEARCH INSTRUMENTS

My name is Esther J. Chemjor, a student at the University of Nairobi carrying out a research study for the award of a master of education in comparative and contemporary issues in education. The research study focuses on the factors influencing choice of agriculture by boys and girls in public secondary schools of Kajiado County. In this regard, I would kindly request you to offer your support by responding to the attached questionnaire. Your accuracy and honest response will be critical in ensuring objective answers. The information that you will be provide will be treated with uttermost confidentiality and the findings of this research knowledge in the area of subject choice in secondary school.

Thank you in advance for support.

Yours faithfully,

ESTHER J. CHEMJOR (CP)

L56/70606/2013

82

APPENDIX II

QUESTIONNAIRE FOR STUDENTS

Dear respondent,

My name is Esther J. Chemjor, a student at the University of Nairobi carrying out a research study for the award of a Master of Education in comparative and contemporary issues in education. The research study focuses on the factors influencing choice of agriculture by boys and girls in public secondary schools in Kajiado County. In this regard, I would kindly request you to offer your support by responding to the questionnaire accurately and honestly as your response will be critical in ensuring objective answers. The information you will provide will be treated with outmost confidentiality and the findings of this research knowledge in the area of the subject choice in secondary school. Please tick where appropriate or write a brief explanation in the spaces provided and do not write your name or the name of your school.

SECTION A: General Information

(i)	National	()
(ii)	Provincial	()
(iii)	Extra county	()
(iv)	District boarding	()
(v)	District Day	()

1. (a) Kindly indicate the classification of your school

b) Please indicate the category of your school

(i) Boys ()
(ii) Girls ()
(ii) Mixed ()

((i)	Male	()				
((ii)	Female	()				
3. Ple	ease i	indicate yo	our parent	s /guardians level	of education		
	(i)	Primary	()	1			
	(ii)	Secondar	y ())			
	(iii)	College	()				
	(iv)	Graduate	()				
				_		_	
SEC'	ГЮ	N B: Opti	onal subj	jects secondary s	chool in group	four	
4. Ple	ease 1	مده مالد داه	العداء المسالة			. 1	
		nck me op	nonai suc	pjects in form thre	e in your school	71.	
/·×			uonai suc				1
(i)		iculture	uonai suc	Home science	Business	Computer	Arts & Design
(i)			uonai suc				Arts & Design
(i)			uonai suc				Arts & Design
	Agr	iculture		Home science	Business	Computer	Arts & Design
5. Ki	Agr	iculture		Home science	Business	Computer	-
5. Ki	Agr	iculture		Home science	Business	Computer	-
5. Ki	Agr ndly	iculture indicate he		Home science	Business	Computer	-
5. Kit 3 - V	Agr ndly ery i	iculture indicate he		Home science	Business	Computer	-
5. Kit 3 - V	Agr ndly ery i	iculture indicate he		Home science	Business	Computer	culture in form three
5. Kit 3 - V	Agr ndly ery i	iculture indicate he		Home science	Business	Computer	culture in form three
5. Kin 3 - V 2 - In 1- No	Agr ndly ery in fluer	iculture indicate he influential itial	ow the fo	Home science	Business	Computer	culture in form three
5. Ki: 3 - V 2 - In 1- No	Agr ndly ery influen ot inf	iculture indicate he influential itial luential	ow the fo	Home science llowing factors in	Business	Computer	culture in form three
5. Kin 3 - V 2 - In 1- No (a)N (b) I	Agr ndly ery influer of inf	iculture indicate he influential itial	s mates cl	Home science llowing factors in the science the scien	Business	Computer	culture in form three

2. State your gender

(d) It will boost my points		
(e) To be like the others from my village		
(f) It is convenient for boys than girls		
(g) Agriculture is preferred by girls than boys		
(i) I will be despised by peers if I choose agriculture		

6. Please indicate how the following statements influenced your choice of agriculture. Tick in the boxes.

5 – Strongly agree

4 - Agree

3 - Neutral

2-Disagree

1 –Strongly disagree

		5	4	3	2	1
		SA	A	N	D	SD
(i)	My parents contributed a lot in my choice					
(ii)	My parents feel that agriculture is not important					
(iii)	Agriculture leads to low paying jobs					
(iv)	My parents think that it is a subject for boys					
(v)	Any student can undertake agriculture					
(vi)	The subject is better for boys than girls					
(vii)	The subject is easy to pass					

SECTION C: Student's individual attitudes towards agriculture.

7. Would you agree or disagree with the following statements as related towards agriculture?	o stude	ent's	atti	itud	les
5 – Strongly agree					
4 – Agree					
3- Neutral					
2- Disagree					
1 – Strongly disagree					
	5	4	3	2	1
	SA	A	N	D	SA
(i) Agriculture can only be handled by boys					
(ii) Girls are good farmers hence should choose agriculture					
(iii) Agriculture deals with farm work only					
(iv) Agriculture will make me unable to handle other subject					
(v) Agriculture involves 'dirty' activities				+	
(vi) The syllabus is too wide				+	
(vii) I like working on agricultural activities					
SECTION D: Student career aspirations 8. Please indicate if the following statements have influenced your choice 3 - Very influential 2 - Influential	e of ag	ricul	ture	;	
1 - Not influential					
		3		2	1
		V	Ί	Ι	NI
1. The boys more than the girls choose agriculture for career purposes					

2. The girls are more likely than boys choose agriculture for future careers		
3. I choose agriculture for my future career		
4. The teachers guided me to choose agriculture to enable me have the correct		
admission cluster		
5. Agriculture more than other subjects in group four has better opportunities in		
the job market		
6. Agriculture leads to low paying jobs		
7. The girls who choose agriculture than boys are confined to the rural setting.		

9.(a) Agriculture subject in secondary schools should be made

- (i) Compulsory ()
- (ii) Elective ()
- (b) Give one reason for your answer

Thank you for your assistance

APPENDIX III

QUESTIONNAIRE FOR PRINCIPALS

Dear Respondent,

My name is Esther J. Chemjor, a student at the University of Nairobi carrying out a research study for the award of a Master of Education in comparative and contemporary issues in education. The research study focuses on the factors influencing choice of Agriculture by boys and girls in public secondary schools in Kajiado County. In the regard I would kindly request you to offer your support by responding to the questionnaire accurately and honestly as this will be critical in ensuring objective answers. The information you will provide will

be treated with outmost confidentiality and the findings of this research knowledge in the area of the subject choice in secondary schools.

SECTION A: General Introduction

1. (a) Please indicate the category of the school
Girls () Boys () Mixed ()
(b) Your gender Male () Female ()
(c) Your highest academic qualification
(i) Masters () (ii) Degree () (iii) Diploma ()
(d) Period served as a principal in the school
(i) Less than 1 year ()
(ii) 2-4 years ()
(iii) 5-7 years ()
(iv) Over 8 years ()

SECTION B: Peer influence on choice of agriculture

- 1 (a) Use Yes or No to answer the following questions.
- (i) Do peers in your school influence each other in choosing the optional subjects

especially agriculture? (i) Yes () (ii) No ()
(ii) Is agriculture chosen by more students in form three than other subjects in the
cluster? (i) Yes () (ii) No ()
(iii) Do the students encourage others to choose so as to pass examinations
(i) Yes () (ii) No ()
(b) What factor influences students in your school to choose agriculture?
2(a) Kindly indicate how the parents influence their children to choose agriculture.
(i) Parents greatly influence their children
(i) Yes () (ii) No ()
(ii) Parents encourage boys than girls to take agriculture?
(i) Yes () (ii) No ()
(iii) The subject is preferred by parents for girls than boys
(i) Yes () (ii) No ()
(b) In your opinion, what is the parents role in choice of agriculture.
SECTION C : Students attitudes on choose of agriculture.
3. In your opinion are the individual students attitudes the major influencing factor in the choice of agriculture by students in your school.
(i) Yes (ii) No
(b) Do more boys or girls choose the subject in your school?
(i) Boys () Girls ()

SECTION D: Career aspiration on choice agriculture.

4. How do the following statements influence the choice of agriculture by t	ooys	and	girls in
school.			
☐ 3- Strongly influenced			
☐ 2- Influential			
□ Not influential			
	3	2	1
(i) Career aspirations influence the choice of agriculture			
(ii) Boys than girls choice it for career purposes			
(iii) More Girls than boys prefer agriculture			
(iv) Agriculture is relevant to Job Market			

Thanks for your responses.

APPENDIX IV

QUESTIONNAIRE FOR AGRICULTURE TEACHERS

Dear Respondent,

My name is Esther J. Chemjor, a student at the University of Nairobi carrying out a research study for the award of a Master of Education in comparative and contemporary issues in education. The research study focuses on the factors influencing choice of Agriculture b y boys and girls in public secondary schools in Kajiado County. In the regard I would kindly request you to offer your support by responding to the questionnaire accurately and honestly as this will be critical in ensuring objective answers. The information you will provide will be treated with outmost confidentiality y and the findings of this research knowledge in the area of the subject choice in secondary schools.

SECTION A: General Introduction

1(a) Plea	se include the classific	cation of your school
(i)	National	()
(ii)	Provincial	()
(iii)	Extra County	()
(iv)	District Boarding	()
(v)	District day	()
(b) Kindl	y indicate the category	y of your school
(i) B	oys () (ii) Girls () (iii) Mixed ()
2. Kindly	state your gender	
(i) M	Iale () (ii) Female	()
3. Please	indicate your highest	academic qualification
(i)	Masters () (iii) Deg	gree () (iii) Diploma ()

4. P	lease indicate th	e number of years as	a tea	cher of	f Agri	cult	ture in secondary sc	hool
	(a) Less than o	one year ()						
	(b) $1 - 3$	()						
	(c) 4 - 6	()						
	(d) $7 - 9$	()						
	(e) 10 and ove	r ()						
SEC	CTION B : Peer	r influence on choic	e of a	gricul	ture			
5. P	lease tick the op	tional subjects in for	m thr	ee in y	our sc	choc	ol	
1.	Agriculture	Business studies		Compi	ıter	F	Art & design	1
								_
								_
O	f agriculture by	y using Yes or No if oboys and girls.						e choice
(i)	Classmates		Yes	()	No	()	
(ii) Friends in form	n three	Yes	()	No	()	
(ii	i) As convenien	t for boys	Yes	()	No	()	
(iv	v) Perfect for gir	ls / than boys	Yes	()	No	()	
(v) As a booster su	ıbject	Yes	()	No	()	
,	ŕ	ng despised by peers		,		()	
(v	iii) Since others	are choosing it	Yes	()	No	()	
(b) '	What is the main	n factor in your opini	on tha	at influ	ence s	stud	lents to choose agric	culture as
	an optional subj	ect.						
7.	Kindly indicate	how parents influence	e the	choice	of ag	ricu	ılture by boys and g	girls in
	public secondary	y schools by ticking	true o	r false.				
	г	, coming t		_ 13150	•			
	(i) Parents g	reatly influence the c	hoice	of agr	icultu	re t	y boys and girls	

True () False ()					
(ii) According to parents, agriculture is not important					
True () False ()					
(iii) Agriculture has no better job					
True () False ()					
(iv) Parents feel that agriculture is for boys					
True () False ()					
(v) The subject is better for girls than boys					
True () False ()					
(vi) The subject is easy to pass					
True () False ()					
SECTION C: Students individual attitudes.					
8. Kindly indicate how the student's individual attitude influence the choic	e of ag	gricı	ıltur	e	
5 – Strongly agree					
4 – Agree					
3 – Neutral					
2 – Disagree					
1 – Strongly disagree					
	5	4	3	2	1
	SA	Α	N	D	SD

(a) Agriculture can only be handles by boys

(b) Girls are good farmers hence should choose agriculture			
(c)Agriculture deals with farm work only			
(d) Agriculture subject is time consuming			
(e) Agriculture involves dirty works			
(f) The Agriculture subject is too wide			
(g) It is a manageable subject			
(h) It is good for performance			

SECTION D: Students career aspirations.

Q	In	vour oninior	indicate	how the	following	statements have	influenced	the choice	e of agriculture
フ.	ш	. VOUL ODIIIIOL	i illulcate	now me	TOHOWINE	Statements nave	IIIIIueliceu	the choice	e of agriculture.

- 3- Very influential
- 2 Influential
- 1 Not influential

	3	2	1
	VI	I	NI
(a) Boys than girls choose agriculture for future career purposes			
(b) The girls career aspiration than boys influence them to choose agriculture			
(c) Both boys and girls choose the subject to perfect their future career			
(d) Teachers encourage them to choose agriculture to obtain better grades			
(e) Agriculture leads to low paying jobs			
(f) Those who choose agriculture are confined to the rural setting			

10. Give tv	wo major i	factors in	ıfluencir	ng the o	choice o	of agricul	ture by	boys and	l girls	S

Thank you for your assistance

APPENDIX V

INTERVIEW SCHEDULE FOR PARENTS

1. Gender: Male () Female ()
2. Level of education
3. Occupation
4. (a) What is your role in your children's choice of subjects in secondary schools.
(b) Do you assist your children in choosing the optional subjects?
(c) What influences your children in choosing the optional subject?
5. (a) Is agricultural the most preferred subject in your children's optional subjects?
(b) Do you allow them to choose the subjects freely or you guide them?
(c) Are your children influenced by the peers in choose of agriculture among the
optional subject.
(d) Explain how you guide your children to choose the optional subjects
6. (a) As a parent, how far do you influence your children's choices of agriculture in
secondary schools.
(b) Do you dictate to the children the subjects to choose or allow them to identified
them.
7. (a) Kindly explain if you allow your children to make choices of subjects according to
their individual attitudes.
(b) If the children have a negative attitude towards agriculture, how do you help them?
(c) Is students individual attitudes the main reason for the choice of subject.
8.(a) As a parent how far do you guide your children in the way they choose the subjects

for future career aspirations.

- (b) Please explain two ways of doing these?
- (c) Do your children choose agriculture for future career aspirations?
- 9. (a) In your opinion o you think that agriculture is an important subject?
 - (b) If yes give one reason
 - (c) Briefly explain the importance of agriculture as a subject.

Thank you for your responses

APPENDIX VI

INTERVIEW SCHEDULE FOR EDUCATION OFFICERS

1. Gender: Male () Female ()
2. Period served in the county education office
(i) 1-3 years ()
(ii) $4-6$ years ()
(iii) Over 7 yrs ()
3. (a) Are students in public secondary schools in your county influenced by peers to
choose agriculture as one of the optional subjects?
(b) Explain the extend at which these occurs.
(c) Explain the main factors which influence the choose of agriculture by boys and girls
in secondary school in your county
(d) Do more boys or girls choose agriculture in your county and why?
4.(a) Do the parents and the community have a role in influencing the choice of agriculture
in public secondary schools in your county?
(b) In your opinion do parents encourage more boys or girls to choose agriculture in your
County.
(c) Are the education stakeholders positive about agriculture subject.
(d) As an education officer, what is your role in choice of agriculture by boys and girls in
secondary school.
5.(a) In your opinion are the students' individual attitudes important the choice of
agriculture.
(b) If yes how does this affect the choice of agriculture?

- (c) Does Ministry of Education encourage students to choose agriculture
- (d) Explain how it assist the children
- 6. (a) Kindly explain the important of agriculture in the learner's choice of future career.
 - (b) Are there career areas where students' who have chosen agriculture can be placed?

 Explain
- 7. Give three other factors influencing the choice of agriculture in public secondary schools in your county.
- 8. Briefly suggest ways which can help students understand the benefits of agriculture related careers.

Thank you for your responses



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email:dg@nacosti.go.ke Website: www.nacosti.go.ke when replying please quote 9th Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

NACOSTI/P/16/10127/10760

Date:

5th May, 2016

Esther J. Chemjor University of Nairobi P.O. Box 30197-00100 NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors influencing choice of agriculture by boys and girls in public secondary schools in Kajiado County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Kajiado County for the period ending 3rd May, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Kajiado County before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies** and one soft copy in pdf of the research report/thesis to our office.

DR. STEPHEN K. KIBIRU, PhD. FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Kajiado County.

The County Director of Education Kajiado County.

Research Permit

