

**INFLUENCE OF SELECTED SCHOOL RELATED AND STUDENT RELATED
FACTORS ON THE CHOICE OF AGRICULTURE SUBJECT AMONG
SECONDARY SCHOOL STUDENTS IN URIRI SUB-COUNTY, KENYA**

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**A Thesis Submitted to the Graduate School in Partial Fulfilment of the Requirements
for the Award of the Degree of Master of Science in Agricultural Education of Egerton
University**

EGERTON UNIVERSITY

FEBRUARY, 2016

DECLARATION AND RECOMMENDATION

Declaration

I hereby declare that this is my original work and that it has not been submitted for award of a degree or diploma in this university or any other university.

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Recommendation

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DEDICATION

With great humility, I dedicate this work to my late parents: Cyprian and Margret Ongang'a. I also dedicate it to my wife Lilian, daughter Maggie and son Brayden whom I thank for believing in me even when I faltered. And to my uncle, Joseph and his wife; I will always be grateful to you for this achievement which is all because of you.

ACKNOWLEDGEMENT

The successful completion of this thesis is due to lots of efforts and contribution from various persons and institutions. My special thanks and appreciations go to my very able supervisors; Dr. Agnes O. Nkurumwa and Dr. Jacob J. J. O. Konyango of Egerton University for their consistent technical input, encouragement, mentoring, guidance and availability throughout the period of research. Particularly, I am grateful for their kindness, patience, understanding and readiness to review my numerous drafts. This was a wonderful encouragement to me. Again, I would like to thank members of the Department of Agricultural Education and Extension for their valuable criticism during defences and consultations. They gave me constructive ideas and comments during the writing process. I would especially also like to thank the Migori County Education Office for the help in connecting me with the school principals who availed students during data collection. My gratitude also goes to students in the seven schools in Uriki Sub-County who accepted me into their schools and interacted with me during data collection. My sincere gratitude also goes to my fellow students Jackline Kerubo and Miriam Kyule with whom we encouraged and helped one another with insightful ideas. Above all I would like to give many thanks to my wife Lilian and daughter Maggie for their support and help. They always encouraged and had faith in me. God bless you all.

ABSTRACT

Choice of subjects of study in secondary schools happens globally, more so in the developing countries. In Kenya, the Ministry of Education (MOE) requires that secondary school students register for a minimum of seven and a maximum of nine subjects when they join Form Three. These subjects are grouped into various categories including; Sciences, Languages, Humanities, Technical and Foreign languages. Agriculture is among the many technical subjects from which students select only one. In the recent past, the number of students taking Agriculture has recorded an increase. Due to the key role of Agriculture in the Kenyan economy, it is needful to determine the factors that have led to this upward trend, with a view to contributing to their enhancement. Few studies have sought to study the influence of these factors in Uriri Sub-county. The study therefore sought to determine the influence of selected school related and student related factors on the choice of Agriculture subject among secondary school students in Uriri Sub-county. The study employed ex-post facto research design. The target population was 262 Form Three students who had chosen Agriculture subject in Uriri Sub County. Proportionate stratified random sampling was used to select 152 Agriculture students. A questionnaire with closed ended items was used to collect data. It was given to two experts from the Department of Agricultural Education and Extension, Egerton University to achieve validity. Data collection was preceded by a pilot test with 16 respondents at Suneka Secondary School, Kisii County, whose analysis resulted in a reliability coefficient of 0.78. Data was analysed using SPSS version 22 and presented using frequencies, percentages and means. Inferential statistics (chi-square) was used test hypotheses at 0.05α . The study found out that there is sufficient subject choice information in schools. Career awareness and involvement in peer group activities were found not to have statistically significant influence on the choice of Agriculture subject whereas teaching methods and student's interest were found to have statistically significant influence on the choice of Agriculture. The study recommended that Agriculture teachers use teaching methods that motivate students and that the Young Farmer Clubs be emphasised in teaching of Agriculture.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION	ii
COPYRIGHT	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS AND ACRONYMS	xii
CHAPTER ONE	
INTRODUCTION	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	3
1.3 Purpose of the Study.....	4
1.4 Objectives of the Study.....	4
1.5 Research Question and Hypotheses of the Study.....	4
1.6 Significance of the Study.....	5
1.7 Scope of the Study.....	5
1.8 Assumptions of the Study.....	5
1.9 Limitations of the Study.....	5
1.10 Definition of Terms.....	6
CHAPTER TWO	
LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 History and Development of Agricultural Education.....	8
2.3 Secondary Agriculture Grouping and Selection in Kenya.....	11
2.4 Man-power Creation and Economic Development.....	13
2.5 Career Awareness.....	14
2.6 Teaching Methods in Secondary School Agriculture.....	15
2.7 Peer Influence.....	16
2.8 Students' Interest.....	16
2.9 Theoretical Framework.....	17
2.10 Conceptual Framework.....	18

CHAPTER THREE

RESEARCH METHODOLOGY	20
3.1 Introduction.....	20
3.2 Research Design.....	20
3.3 Location of the Study.....	20
3.4 Target Population.....	20
3.5 Sampling Procedure and Sample Size.....	21
3.6 Instrumentation.....	22
3.7 Data Collection Procedure.....	23
3.8 Data Analysis.....	23

CHAPTER FOUR

RESULTS AND DISCUSSION	25
4.1 Introduction.....	25
4.2 Description of General Information of the Respondents.....	25
4.3 Respondents Information on Subject Choice.....	27
4.4 Information on Career Awareness.....	28
4.5 Information on Agriculture Teachers' Teaching Methods.....	31
4.6 Information on Peers.....	33
4.7 Students' Interest.....	36
4.8 Information on Choice of Agriculture Given Chance Again.....	38
4.9 Answer to Research Question.....	39
4.10 Test of Hypotheses.....	39

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	44
5.1 Introduction.....	44
5.2 Summary of the Study.....	44
5.3 Conclusions.....	45
5.4 Recommendations.....	46
5.5 Suggestions for Further Research.....	46
REFERENCES	47
APPENDICES	53
APPENDIX A: QUESTIONNAIRE FOR FORM THREE AGRICULTURE STUDENTS	53

APPENDIX B: RESEARCH PERMIT.....	56
APPENDIX C: LETTER OF RESEARCH AUTHORISATION.....	57
APPENDIX D: TABLE FOR DETERMINING SAMPLE SIZE.....	58
APPENDIX E: LIST OF SCHOOLS USED IN THE STUDY.....	59

LIST OF TABLES

Table 1: KNEC 2013 Grouping of Subjects.....	12
Table 2: Sample of Students Included in the Study from Different Categories of Schools..	21
Table 3: Summary of Data Analysis.....	24
Table 4: Type of School from which Sampling was done.....	26
Table 5: Respondents' Gender.....	26
Table 6: Provision of Subject Choice Information to Respondents.....	27
Table 7: Information Regarding Career Awareness.....	29
Table 8: Responses Regarding Teaching Methods.....	31
Table 9: Responses on Information Relating to Peer Influence.....	34
Table 10: Information Relating to Student's Interest in Agriculture.....	36
Table 11: Influence of Career Awareness on the Choice of Agriculture Subject.....	40
Table 12: Influence of Teaching Methods on the Choice of Agriculture.....	41
Table 13: Influence of Peers on the Choice of Agriculture Subject.....	42
Table 14: Influence of Students' Interest on the Choice of Agriculture Subject.....	43
Table 15: Table for Determining Sample Size from a Given Population.....	58
Table 16: Table Showing the List of Secondary Schools in Uriri Sub-County.....	59

LIST OF FIGURES

Figure 1: The Conceptual Framework Showing the Relationship between Dependent, Independent and Extraneous Variables.....	19
Figure 2: Number of Respondents Sampled per School.....	25
Figure 3: Likelihood of Respondent Choosing Agriculture Again.....	38

LIST OF ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms were used in the study to refer to the following:

EAEC	East African Examinations Council
FAIM	Friends African Industrial Mission
FAO	Food and Agricultural Organisation
FFA	Future Farmers of America
GOK	Government of Kenya
ICA	International Co-operation Agreement
IDA	International Development Agency
IPAR	Institute of Policy Analysis and Research
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute of Curriculum Development
KIE	Kenya Institute of Education
KNEC	Kenya National Examinations Council
KUCCPS	Kenya Universities and Colleges Central Placement Services
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
NACOSTI	National Commission for Science, Technology and Innovation
SPSS	Statistical Packages for Social Sciences
SSP	School Science Project
UCLES	University of Cambridge Local Examinations Syndicate
USAID	United States Agency for International Development
WB	World Bank

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Making choices is a vital part of life that is crowded with so many options. Education systems are characterised by several optional subjects that students have to choose from. The vocational education in other parts of the world, for example, the USA is characterised by students taking vocational courses with a substantially better understanding of general educational skills (Mustapha & Greenan, 2007). In Malaysia, vocational education, hence technical subjects is meant to produce educated, skilled and motivated workforce. Technical and vocational education is considered as an important measure for development of workforce (Syeda, 2010). In Bangladesh, technical subjects are highly recognized due to their contribution to national development in areas of man-power creation and running of industries (Gazi, 2008). In Africa, Agriculture subject has received an unfair treatment in that it has not been made compulsory, except in South Africa. In other countries like Nigeria, Agriculture is an optional subject chosen alongside others like Islamic Religious Education (Ajidagba, 2010).

In Kenya, only three subjects are compulsory: Mathematics, English and Kiswahili, according to Kenya Institute of Education ([KIE], 2002). It is worth noting that when choosing subjects, students can still avoid Agriculture yet meet the minimum requirement of seven and even later take agricultural courses at the university. Agriculture in Kenya is clustered with several subjects (Home Science, Art and Design, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Technology, Computer Studies, French, German, Arabic, Kenya Sign Language, Music and Business Studies) making it difficult for students to choose. There are other twenty three subjects, Agriculture included, to choose from. A study by Ngesa (2006) revealed that among the optional subjects, Agriculture was ranked fifth in terms of popularity hence there is an increase in the number of students in the recent past (Kenya National Examinations Council [KNEC], 2013). The critical factor therefore is to link these chosen subjects with Kenya Universities and Colleges Central Placement Services (KUCCPS) requirements since admission to Kenyan universities and colleges is pegged on cluster subjects for particular courses.

Subject choice therefore is an integral part of education systems beyond post-secondary school level. Appropriate choice of subjects is a vital step in achieving the educational goals

of the syllabus (Ajidagba, 2010). According to Hughes and Mechur (2004), young people have high ambitions, expecting to be highly educated and have professional careers, yet many do not develop coherent plans that can help them achieve their goals. Two-thirds of secondary school graduates enter into tertiary institutions once they complete their studies to take courses they had chosen while at secondary school. Agriculture as a subject has been offered in Kenyan schools for decades. Just to mention, Uiri Sub-County is home to one of the earliest schools to offer Agriculture in Kenya: Rapogi High School. Other schools in Kenya first to offer Agriculture are Kisii, Narok, Njoro, Kangaru and Bungoma High Schools (Konyango, 2010).

Secondary school students in Uiri Sub-County experience a more complex schooling system characterised by many optional subjects. All these subjects are interconnected in one way or another with post-school and future life options. According to Atweh, Taylor and Singh (2005), the schooling-going years are meant to equip students with skills, knowledge and dispositions to meet their needs for the future citizenship and participation in economic life including employment and careers. Secondary schools must embrace the need to come up with guidelines that help students make informed choices concerning their future studies and work options during various stages of their educational journey.

Some of the possible contributors to choice of subjects are: school policy, parental guidance, peer influence, academic ability, intelligence, age, gender, ignorance and accidental choice (Owoyele & Toyobo, 2008). The relative contribution of each factor could be constrained by aspects both within and outside the school, resulting in using subject choice as a tool for selecting, particularly for the less able students. Bery (2004) shows that the key factors that are the major contributors in student selection of subjects include: interest in the subject, perceived usefulness or importance of the subject, ability or success in the subject, career preference, and subject combination for further studies, teachers' advice and the teaching methodology employed. Bordet (2002) looked at the learners' personality as an important determinant in subject and career choices and further argues that personality encompasses student's mental ability and attitude towards the subject. Mental ability, verbal comprehension, word fluency, numerical ability, reasoning ability and memory must be put in consideration when choosing subjects (Wagfield, Battle, Keller & Eccles, 2002).

Involvement in peer group activities plays both a negative and positive role in subject selection (Penizzon & Lesley, 2010). In a few instances, subject choice based on peer

influence may not be good for the students. Peers provide personal and academic support especially when they work in groups. Peer pressure, integrated subject guidance and academic achievement are correlates of subject selection by students (Owoyele, 2007). In some cases, students will visualise what they want to be when they work together in such activities like farm projects and class assignments.

Teachers' role in subject choice is inevitable. If the teacher makes the subject enjoyable by use of appropriate teachings methods students' interest is maintained (Walkington, 1998). A sound student-teacher relationship will help a great deal to build student's attitude towards Agriculture. This in the long run increases their likelihood of choosing the subject. A study by Ohiwerei and Nwosu (2009) revealed that a teacher is the central point of learning in the classroom situation because it is the methods and styles of teaching that create motivation to students. Inappropriate methods and styles of delivery will drive students away from the subject. Interest in the subject on the other hand is a contributor to performance.

Students have misconceptions of Agriculture work-related careers because not only are they unaware of the types of jobs there are in this sector but they also have the impression that all jobs in this area have very low pay (Chee & Leong-Yong, 2011). This study by Chee and Leong-Yong (2011) goes ahead to reveal that most parents will advise their children not to take Agriculture and related careers because there is no future in this field. Improper linkage between trained skills and development needs is a major problem in Kenya. Career awareness is vital when individuals make choices of subjects because many students are not aware of the types of careers a particular subject prepares them for. There are many prospects in Agriculture such as veterinary medicine, farm management as well as teaching of Agriculture, which some students are not aware of. These mixed views called for an in-depth study of the influence of the four factors on choice of Agriculture. A fundamental issue here was to find out if students make choices on their own knowledge of the careers, or the Agriculture teachers play a major role through the various teaching methods employed, or merely the involvement in peer group activities and interest in the subject.

1.2 Statement of the Problem

Agriculture is one of the key drivers of the Kenyan economy, therefore the need to have people enter into Agriculture related careers. Recent literature show that the number of students taking the subject is on the increase. Due to the key role of Agriculture in the Kenyan economy, it is important to maintain the upward trend in the choice of Agriculture among secondary school students. There are many factors that could be responsible for this

upward trend. However, there is little information on their influence on the choice to study Agriculture. This calls for the influence of these factors to be clearly determined so that they can be enhanced. In Uriri Sub-County, few studies, if any, have been done on these factors and their influence on choice of Agriculture subject among secondary school students. This study therefore, sought to determine the influence of a number of school and student related factors namely; career awareness, teaching methods, involvement in peer group activities and students' interest on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

1.3 Purpose of the Study

The purpose of the study was to determine the influence of career awareness, teaching methods, involvement in peer group activities and students' interest on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

1.4 Objectives of the Study

In this study the objectives were:

- i. To determine the extent to which information on subject choice is provided to secondary school students in Uriri Sub-County.
- ii. To determine the influence of career awareness on the choice of Agriculture subject by secondary school students in Uriri Sub-County.
- iii. To determine the influence of teaching methods on the choice of Agriculture subject among secondary school students in Uriri Sub-County.
- iv. To determine the influence of involvement in peer group activities on the choice of Agriculture subject among secondary school students in Uriri Sub-County.
- v. To determine the influence of students' interest on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

1.5 Research Question and Hypotheses of the Study

The study had the following research question:

- i. To what extent is information on subject choice is provided to secondary school students in Uriri Sub-County?

In addition, the following hypotheses were used to guide the study:

H₀₁: There is no statistically significant influence of career awareness on the choice of Agriculture subject by secondary school students in Uriri Sub-County.

H₀₂: There is no statistically significant influence of teaching methods on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

H₀₃: There is no statistically significant influence of involvement in peer group activities on the choice of Agriculture subject by secondary school students in Uriri Sub-County.

H₀₄: There is no statistically significant influence of students' interest on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

1.6 Significance of the Study

The findings from this study may provide information to the future learners on the factors to consider when making choice of subjects and the implication of the decision made today on their future lives. The findings may also be important to the Agriculture teachers in assessing the nature of information on subject choice they give to students so as to make necessary adjustments. Furthermore, the findings may provide useful information to the career teachers on the significant factors affecting students' subject choice.

1.7 Scope of the Study

The study investigated Form Three Agriculture students in Uriri Sub-County in relation to Agriculture subject choice. The extent of information on subject choice, career awareness, teaching methods, involvement in peer groups and students' interest in Agriculture was also investigated.

1.8 Assumptions of the Study

This study was guided by the assumption that students choose Agriculture out of their free will.

1.9 Limitations of the Study

The study sought information from Agriculture students therefore the findings may not be generalised to students in subjects other than Agriculture.

1.10 Definitions of Terms

Agricultural Education: the teaching of Agriculture, natural resources, and land management through hands-on experience and guidance to prepare students for entry level jobs and to further education to prepare them for advanced agricultural jobs (Howel , 2002). This study adopts the same definition.

Agriculture: the art and science of crop production and livestock rearing (Kenya Institute of Education, 2010). This study adopts the same definition.

Career Awareness: the possession of knowledge of the job opportunities available in a field (Hansel, 2009). For the purpose of this study, career awareness refers to information possessed by an Agriculture student on what work or employment opportunities exist after Form Four.

Career: a sequence of positions or a course of continued progress in the life of a person (Curtis & Stewart, 2010). For the purpose of this study, career refers to an occupation a person takes after completing training at a given level.

Choice of Agriculture Subject: the process of deciding on what study subjects to take in schools (American Heritage, 2009). For the purpose of this study, it means the process of decision making by secondary school students, that results in them taking Agriculture as one of their subjects of study.

Co-educational Schools: schools attended by members of both gender (American Heritage, 2009). This study adopts the same definition.

Individual-related factors: learner characteristics such as morale and motivation which influence their decision making (Akey, 2006). This study adopts the same definition.

Involvement in Peer Group Activities: to take part in activities of a class of people (American Heritage, 2009). This study adopts the same definition.

Peer Influence: the process by which members of an identifiable group can be swayed to do what is acceptable to the group (American Heritage [AH], 2009). For the purpose of this study, peer influence refers to the way in which Agriculture students' peers may positively or negatively sway them into choosing to study or not to study secondary school Agriculture.

Peers: persons who are equals of others (Bennars, Otiende & Boisvert, 1994). For the purpose of this study, peers refer to groups of students who take Agriculture and are considered to do most of their activities together in a manner likely to influence their colleagues to take Agriculture.

School-related Factors: day-to-day happenings in school including interaction with teachers and other students that have an impact on learning outcomes (Akey, 2006). This study adopts the same definition.

Secondary School Agriculture Teachers: people who are employed to teach Agriculture at the secondary school level (Howel, 2002). For the purpose of this study, secondary school Agriculture teachers refer to secondary school teachers who teach Agriculture, trained and untrained.

Teaching Methods: generalised styles for lessons which include structured and desired learner behaviour in terms of goals of instruction and an outline of tactics that are necessary to implement the lesson (Torskar, 2011). For the purpose of this study, teaching methods refer to the techniques which the Agriculture teacher uses to deliver the lesson.

Technical Subjects: subjects which are done as a call (Lauglo, 2004). For the purpose of this study, technical subjects refer to those subjects in group IV by KNEC.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the history and development of agricultural education, secondary Agriculture grouping and selection in Kenya, manpower and economic development, career awareness, teaching methods, peer influence and students' interest on the choice of Agriculture. It also discusses the theoretical framework and the conceptual framework.

2.2 History and Development of Agricultural Education

Agricultural education has undergone tremendous changes more so in the developed countries. In the USA, there is a close link between the classroom work and outside the classroom (farm and home) experience. The development of agricultural education has seen so many Acts like The Smith Hughes Vocational Education Act of 1917 and the Future Farmers of America (FFA) of 1928 established with the aim of ensuring that the youths after school continue with Agriculture (Case, 2010). In 1950, the Federal Charter for FFA was put in place to ensure student organization was used in supporting agricultural instruction in public schools.

In 1984 the U.S. Congress authorised Carl D. Perkins Vocational and Technical Educational Act with the purpose of providing federal funding and leadership to increase the quality of career and technical (vocational) education. In 2008, the Office of Vocational and Adult Education, concluded a Memorandum of Understanding with the National FFA Organization (Case, 2010), underscoring the importance of the student organization component of agricultural education in producing productive individuals for the work force who are capable of leading innovation as a component of development. The U.S. Department of Education also elaborated on the role of student organizations in careers and technical education. Later in 2009, the National Quality Program Standards for Secondary Agricultural Education was developed to ensure consistent delivery of high-quality agricultural education programs. For almost a century, the three-circle model of agricultural education has been hailed for connecting theory with practical application and motivational reinforcement necessary for student success. The major difference between the system of education in USA and Kenya -and of course most the African countries-is the fact that students have greater control of their subject choices and they will choose the non-core subjects (electives) based on the states they come from and the school location unlike Kenya where students choose based on other factors.

In other countries like Malaysia, China and Britain, major transitions in agricultural schools are underway as the system is shifting from non-effective academic institutions to vocational education in line with economic reforms. Changes in traditional curricular and teaching methods have been recognized as an important way of strengthening vocational agricultural education system. In the past, agricultural schools were academic institutions called secondary specialized schools that taught a curriculum that was general in nature and the theory taught was semi-vocational. As a result of economic reform movements, a mismatch of teaching strategies and curricula to meet the needs of the new economic realities has become evident in agricultural education (Chen, 2000). In response, agricultural schools have endeavoured to focus on practical training and job-related skills for students in vocational agriculture since 1990s. In addition, the reform efforts have been strengthened by the information obtained from educational systems. Modular teaching approach, competency based education, and student-centred instructions have been tried in some schools with the support from the Ministries of Agriculture and the Food and Agricultural Organization (FAO) of United Nations (UN) (Weng, 1998). Teachers have been identified as key players in this educational transformation.

The introduction of Agriculture as a subject in Kenya can be traced back to 1873 when the Church Missionary Society (CMS) taught Agriculture to the children of freed slaves in Free Town in Mombasa (Konyango, 2010). An attempt to offer agricultural education in the colonial Kenya was undertaken at Alliance High School in 1926, where the first curriculum for Agricultural education was developed (Anderson, 1970). Agriculture was however dropped from the curriculum in 1931 due to the African opposition to the colonial policies on land, education and labour, with separate schools for the three races. The second attempt to promote Agricultural education was done in 1959 by International Co-operation Agreement (ICA) (Stabler, 1969). This proposed the establishment of a school in Maragoli Location where vocational and practical subjects would be taught (Morris, 1976). Chavakali High School was consequently established in 1959 with Agriculture being offered as one of the subjects. Even at that time, African parents still had negative attitude towards Agriculture based on the myth that agricultural qualifications would not lead their sons into descent careers, but end up being farmers. Mutonga (1995) asserts that there was poor enrolment based on the argument that their sons would go to school to hold *jembes* and that Agriculture was not among the subjects examined by the University of Cambridge Local Examinations Syndicate (UCLES).

In 1960, the then Agriculture teacher at Chavakali High School, Robert Maxwell, drafted an Agriculture syllabus entitled “Agriculture Principles and Practices”. After approval of the syllabus by the Ministry of Education, the first group of students sat for exams in November 1963. Majority (87%) of them passed and this further made parents and students develop more interest in the subject (Government of Kenya [GOK], 1967).

In the period 1963-1964, the Chavakali pilot project was evaluated and it was resolved that Agriculture be rolled out to more schools. Therefore in late 1964, six more schools were included in the pilot scheme (Maxwell, 1965; Morris, 1976). These schools included Rapogi (in the current Uriri Sub-County), Kisii, Narok, Njoro, Kangaru and Bungoma High Schools (Konyango, 2010). These were financed by the United States Agency for International Development (USAID) and the Kenyan government. During the period of 1965-1976, the collaboration between USAID and the Kenyan government provided funds for construction of workshops in schools teaching Agriculture as well as the technical training of Agriculture teachers on various teaching methods at Egerton College (currently Egerton University). Due to the strict conditions that were set for schools to meet before being allowed to offer Agriculture, only one thousand students were taking Agriculture in secondary schools by 1966.

After the successful implementation of the project funded by USAID, International Development Association (IDA) (a branch of the World Bank (WB) expanded the programme in Kenya in 1967. It chose thirteen schools in the programme so that at the end of 1967, twenty schools were teaching Agriculture (Maxwell, 1965). According to Kenya Government Development Plan of 1970-1974 (GOK, 1970), the government pledged to make agricultural education more relevant to the societal needs. It stated partly:

“.....government will continue with its efforts to render secondary school to social and economic needs. In practice this means that there will be a rapid increase in the number of lower secondary schools offering practical studies in Agriculture.....” p 460.

According to Morris (1976), by 1975, ninety four secondary schools of the possible one thousand schools in the country were offering Agriculture. In the Kenya Government Development Plan of 1974-1978 (GOK, 1973), it was clearly outlined that twenty six multi-stream schools would be equipped for the present course and thirty-six one-stream schools would be given facilities for a modified low-cost course. According to Ngumy (1988), the

trend continued so that by 1980, just over one hundred schools out of the possible one thousand seven hundred and sixty were offering Agriculture for examinations.

When the 8-4-4 system of education came into force in 1985, all public primary and secondary schools were required to offer Agriculture. This however was not fully implemented because in primary schools, Agriculture was taught and examined alongside Science while in secondary schools, it was not made compulsory, but chosen among the other optional subjects. By the time the first group of 8-4-4 students sat for exams in 1989, around two thousand six hundred schools were offering Agriculture both in Form One and Form Two (Kathuri, 1990).

2.3 Secondary Agriculture Grouping and Selection in Kenya

To date, secondary school Agriculture in Kenya is optional (Vandenbosch, 2006). When students join Form One, they take subjects in various categories. In many Kenyan schools, a good percentage of students take Agriculture, more so, in cases where few or no other technical subjects are offered due to unavailability of teachers for such subjects. The grouping of Agriculture can be traced back to 1959 when it was introduced at Chavakali High School. UCLES grouped Agriculture with Sciences, meaning Agriculture teachers would teach it with any Science subject (Konyango, 2010). The East African Examinations Council (EAEC) Agriculture (code 527) was entitled “Agriculture Principles and Practices”. Other subjects under Sciences category included: General Science (500), Physics (532), Chemistry (548), Biology (550), Physical Science (561), Human Biology (575) and School Science Project (SSP) Physics with SSP Chemistry (571) (KIE, 1985). In the period 1970-1981, there were minor changes as Agriculture code changed to 551 however the title and the grouping did not change.

The change in grouping came in 1985 when the KIE (KIE, 1985) syllabus regrouped Agriculture with technical subjects. Consequently in 1987, KNEC released guidelines regrouping Agriculture with technical subjects such as Home Science, Art & Design, Woodwork, Metal Work, Building Construction, Power Mechanics, Electricity, Drawing & Design, Aviation Technology and Computer Studies from which students would choose only one (KNEC, 1987). This grouping continued up to 2002. Due to the demanding nature of Agriculture, some students rather opt for less demanding ones without knowing that Agriculture equips them with skills, knowledge and dispositions needed after school (Atweh *et al.*, 2005). The above grouping did not consider Agriculture as a core subject despite the position it occupies in the Kenyan economy.

A study by Mwiria (2002) showed that technical subjects in secondary schools are less popular with most schools limiting to less expensive ones and that the students will choose subjects depending on the schools they have been admitted to. These subjects are also associated with weak students. According to Vandebosch (2006), some African countries (such as South Africa) but not Kenya, have made Agriculture compulsory hence high enrolment. One of the reasons why secondary Agriculture is offered in these countries is to counter the negative attitude towards farming and the subject as a whole, whose occupational choices are limited, and expose students to skills they would need to land in Agriculture- related careers.

Following the reforms in the examination system in 2002, students are required to take a minimum of seven and a maximum of nine subjects when they enter Form Three (Ministry of Education Science and Technology [MOEST], 2001). Students can have seven or eight subjects without choosing from technical subjects as shown in Table 1.

Table 1

KNEC 2013 Grouping of Subjects

Group	Subjects
I	English, Kiswahili, Mathematics – <i>all compulsory</i> ,
II	Option A: (Biology, Physics, Chemistry, Biology for the blind)- <i>Biology for the blind or at least any two subjects</i> Option B: General Science- <i>compulsory for this option</i>
III	History and Government, Geography, Christian Religious Education (CRE), Islamic Religious Education (IRE), Hindu Religious Education (HRE)- <i>at least one subject must be offered, students cannot take CRE with IRE or HRE</i>
IV	Home Science, Art and Design, Agriculture, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Technology and Computer Studies- <i>Agriculture is grouped with technicals hence in this group</i>
V	French, German, Arabic, Kenya Sign Language, Music and Business Studies- <i>only one subject taken</i>

KNEC, (2013)

The final changes by KNEC took place in 2010, giving the students opportunity to choose either option A or B. However these changes did not improve the position of Agriculture.

According to Woolman (2001), the education system in Kenya has been under criticism for overloading students with subjects thus contributing to some of its failures. A report by FAO (1997) showed that at times students lack interest in Agriculture, therefore will only enrol for it when they do not qualify for other subjects.

2.4 Man-power Creation and Economic Development

The aims of secondary Agriculture can be summarised as that of increasing knowledge and basic principles and practices among learners and also developing self reliance, resourcefulness, problem solving abilities and occupational outlook in Agriculture (KIE, 2002). In relation to Agriculture subject choice and man-power development, it can be viewed from the second, third, fourth, fifth, sixth, seventh, eighth and ninth objectives of secondary school agricultural education (KIE, 2002). These objectives include: *promoting interest in Agriculture, demonstrating farming as a dignified and profitable occupation, enhancing skills needed in carrying out agricultural activities, providing background for further studies in Agriculture, developing self-reliance, resourcefulness and problem solving abilities in Agriculture, developing occupational outlook in Agriculture, schools to take part in national development through agricultural activities and create awareness of the role of Agriculture in industrial and technological development.*

These objectives are meant to help the learners to change their attitudes towards Agriculture hence contribute positively in economic development. According to Karuku (2013), if you want to reduce poverty, improve food security and protect natural resources, there is no better place to start with other than Agriculture. Kathuri (1990) compares Kenya with other African countries and concludes that the rate of economic growth is related to growth in agricultural sector and lack of growth in this sector leads to stagnant economic growth. According to WB (1988), when there is no education, no development will occur because only educated people have skills necessary for sustainable economic growth and quality life. This argument is supported by Sheffield (1971) who says that lack of agricultural growth slows economic growth. According to Bessey (1972), 70 percent of those living in rural areas derive their livelihood from Agriculture, therefore the need to offer relevant agricultural education to the youth cannot be ignored. Vandenbosch (2006) blames the African syllabuses that are overloaded with classroom work hence inadequate preparation of learners for manpower demands in the field of Agriculture. When choosing Agriculture therefore, it is important to carefully look into these objectives.

2.5 Career Awareness

A study by Gicharu, (2015) revealed that students were particularly keen about their perceptions of areas of study and were not certain about what Agriculture-related careers are due to little information. Hansel (2009) however argues that students enrol for agricultural courses because they have certain degree of preference for Agriculture-related careers. In the Kenyan context, students may be admitted to universities to take Agriculture-related courses irrespective of whether they took it in secondary schools. KUCCPS which admits government-sponsored students to Kenyan universities and colleges has always admitted students without even basic knowledge in Agriculture to study courses in Agriculture therefore they find it cumbersome tackling such courses.

In the previous years, students' enrolment in secondary school Agriculture used to be low due to its being associated with farm work but this has changed (Hansel, 2009). Vandenbosch (2006) reveals that some students take the subject because they wish for careers in Agriculture. A study by Ngumy (1988) showed that a good number of students are willing to take up agricultural careers after completing secondary school. According to the 1989-1998 WB report, entitled *Human Capital and Agricultural Productivity*, a very large number of school leavers will work outside the civil service and because the private sector cannot absorb all of them, they will seek employment opportunities in agricultural and non-formal sector (WB, 1988). There are lots of opportunities in Agriculture. One can study veterinary medicine, forestry and Agriculture teaching to list but a few.

Looking at the Kenyan situation once again, secondary school students normally choose their subjects before they sit the final exams (Hewitt, 2010). After KCSE results, students are admitted to universities or colleges to pursue different courses. Because students lack adequate information of career opportunities, their choices are based on perceptions of the jobs and subjects they have taken and also the directions they get from career teachers (Chee and Leong-Yong, 2011).

The theory of social learning asserts that an individual's learning about work and ability to perform various tasks are necessary for one to succeed in that particular career. According to Ryan and Bryan (2011), the secondary school system should give students the opportunity to practice what they can do much and with passion in Agriculture, being a practical subject. Peronne, Ginna, Worthingtone and Chatrand (2010) say that career indecisiveness is a developmental process through which individuals pass on the road to making career choices. It is further argued that career unawareness and indecisiveness is

negatively related to adjustment and well-being of students. Appropriate subject choice is a vital process in the achievement of the secondary agricultural education's aim of pursuing further studies in Agriculture (Ajidagba, 2010).

2.6 Teaching Methods in Secondary School Agriculture

In the classroom context, the teacher is a trainer, one who is in constant contact with his students, helping them to make rational choices in the agricultural fields of study. Students consult teachers on subject choice and career options. In most cases, they are unlikely to go against what their teachers tell them as they consider them well informed about the opportunities available (Kamuri, 2013). The teaching methodologies the teacher uses will influence the learners' attitude towards the subject.

A study by Perrone et al. (2010) showed that the role model supportiveness and quality of the teacher-student relationship will influence to some extent student's choice of the subject. In the teaching of Agriculture therefore, the teacher's adoption of learner-centred methods such as project, group discussions, field trips and problem-solving techniques may contribute to the choice of the subject. Since teachers are rushing to complete the syllabus, they will adopt teacher-friendly methods at the expense of the learner. Students are more motivated when they are exposed to the real world than when they are confined in class where the teacher is the centre of all learning activities.

According to Konyango (2010) and Robin (2008), the role of motivation is to involve learners by doing. A role model is a person whose behaviour is imitated by others. This aspect of teaching can be reinforced especially when students have encounters with guest speakers, people who have vast experience in Agriculture. Robin further says that a good teacher should demonstrate confidence and love for the subject they teach if their students are to like the subject. This includes attempt to create conducive environment within the classroom that will energise, direct and sustain students' performance. This helps to encourage students work towards building positive attitude in the Agriculture and attainment of educational and school goals.

Agriculture teachers also have influence on the students' personal development in making the choice to become a teacher, both as a role model and by the type of activities that involve the students in the educational programme (Lawver & Torres, 2011). Through grouping of students in class, they label students as bright or weak. This study, also says that some Agriculture teachers encourage the brightest of their students to enter in their teaching occupation, ignoring the less bright ones.

Teachers can also contribute to declining enrolments in their subjects. The teacher can make his classroom a place worth learning (Korir, 1996). Teachers also select students for their courses. Davies, Shqiponje, Hutton, Adnett and Coe (2004) are of the opinion that expectations held by the teacher will guide the students along routes appropriate for them. Social background will also exert influence on the probability of being entered for a subject by different students. School managers also have the idea that certain subjects are only good for a particular group of students. Students are usually attracted to the subject when they think they have high chances of passing it. They shun options they are likely to fail in and aggravate towards the ones in which they think they can do well (Lauglo, 2004).

2.7 Peer Influence

Peer influence affects the development of a child. A study by Bennars *et al.* (1994) show that the relationship between the child and the peer will positively or negatively influence the way they adjust to subjects they learn at school. Peers will influence each other in various ways. Firstly, peers take up certain roles that influence the child to evaluate his/her performance, realise his/her place and assume a place in the group. This is common in Agriculture especially when students work in groups as is the case of the Young Farmers Clubs (YFCs). Secondly, peers assign each other certain roles and each will try to take on appropriate traits that go with such roles. Each group members have the opportunity to do what they can do best. Thirdly, peers compare themselves with others in their class performance and make judgement with their own value. Therefore this cadre of friends may end up taking similar subjects.

Indecisiveness comes about as a result of insufficient opportunities for learning, including vivacious learning through role models. Davies *et al.* (2004) says that social background may operate through peer groups at the school attended. Peer effects on academic achievement have spill-over effects on subject choice. Students' choice of subjects could also be influenced by aspirations of the peer group, or through the expectations that the school has on the peer group.

2.8 Students' Interest

Studies show that a good number of students have in-built interest in Agriculture and Agriculture-related studies based on their family background or the mentorship they get in their surroundings. Interest is the inherent liking of what you do (Omolola, 2008). Merlin (2009) outlines students' interest as one of the major factors for choosing the subject. It is further argued that students will be more interested in Agriculture if they find the learning

environment more enabling for them so as to explore their abilities and passions. Hedjazi and Omidi (2008) argue that student personal interest in Agriculture and grade point average are key determinants of students' attitudes in the agricultural subjects. Studies by Kochung and Migunde (2011) further reveal that a good percentage of students are motivated by their interests, also noting that interest is further shaped by the environment, the people they interact with as they grow and personal experiences both at home and at school. Some students consider some subjects enjoyable and easier to handle thus they believe they are the only options available for them even if they are far divorced from their career aspirations (Kamuri, 2013).

2.9 Theoretical Framework

This study was based on decision-making theory by Paton (2008) who argues that educational decision-making is a complex process influenced by multiple factors. People are bound by "horizons for action" which are determined by external job and educational opportunities as well as personal perception of what is possible, desirable and appropriate. In this respect, what is available, what is perceived to be possible, and what is perceived as desirable can alter the range of available options. There are three main elements of this theory. Firstly, decision-making is part of wider choice of lifestyle influenced by social context. Secondly, decision-making is part of on-going life course. Finally, decision-making revolves around interaction with others, so that decisions are outcomes of negotiations between social networks of friends and teachers among others (Paton, 2008).

Young people in the process of making decision are viewed as long-term and others short-term planners. Long-term planners are students who are able to make decisions early enough on life on choice of subjects. Short-term planners only plan in times of crisis (Ball, Maguire & Macrae, 2006). Foskett, Dyke and Maringe (2004) see subject choice as an outcome of interaction between context (social/peer environment and lived environment), choice influencers (institutional and social- teachers' teaching methods) and choosers (learners- through interest in particular subjects) who act according to factors specific to individuals including perceptions, interest and aspirations. There are therefore variations in students' numbers in particular subjects. These factors also have great influence on chances of Agriculture subject being taken by the students if they were to choose again.

In this model, choice is seen as a dynamic process where all elements exist and all processes occur in a continuous basis, therefore the individual chooser is continuously subjected to each of the influencing elements and processes. Subject choice therefore is a dynamic

process influenced by factors both intrinsic (chooser) and extrinsic (teacher, peers etc.). Each of these factors should aid the student make rational choices when taking the subjects to study.

2.10 Conceptual Framework

Borrowing from the decision-making theory, the dependent variable was the choice of Agriculture subject. The variable was measured by looking at the possibility of choosing Agriculture again if given a chance. The independent variables which influence the choice of Agriculture were: school-related (career awareness, teaching methods and involvement in peer group activities) and individual-related (students' interest in the subject). The influence of career awareness, teaching methods, involvement in peer group activities and students' interest were measured as either low or high based on the index scores generated from the questions.

The interaction between independent and dependent variables is further influenced by extraneous variables. According to Kothari (2008) extraneous variables are independent variables that are not related to the purpose of the study, but may have an effect on the dependent variable. The extraneous variables for this study were student's ability in the subject and the range of subjects offered by the school. To control the influence of student's ability in the subject, the researcher randomly sampled students of all abilities in Agriculture to be involved in the study. To control the effect of range of subjects offered by the school, the researcher only sampled those schools where Agriculture is offered. The relationship between variables is illustrated in Figure 1.

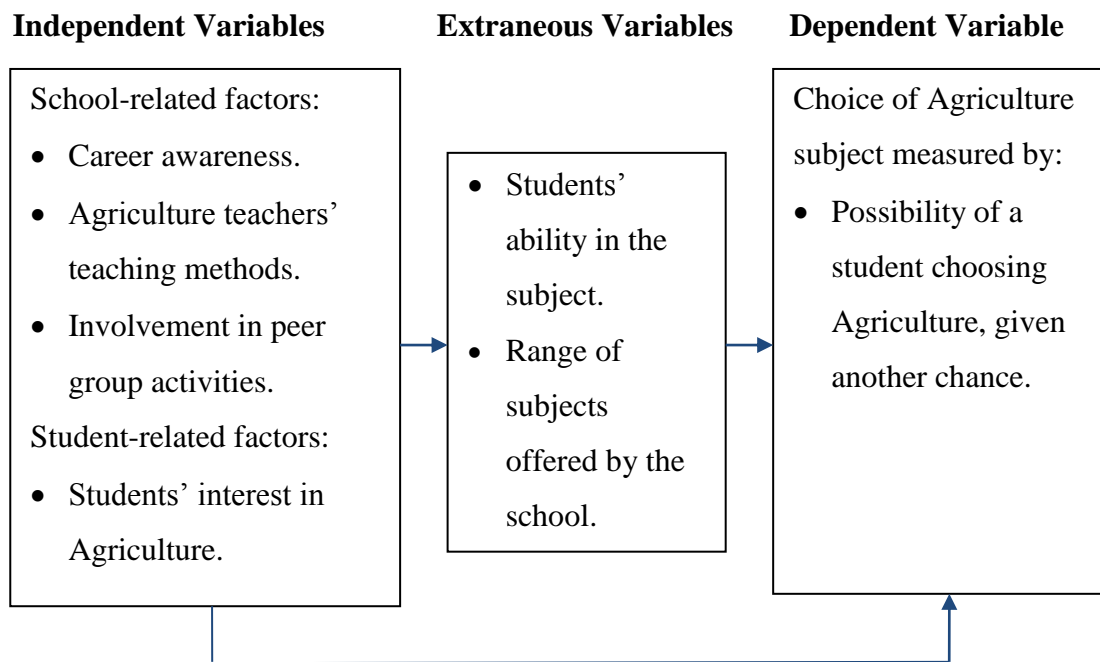


Figure 1. The Conceptual Framework Showing the Interaction between Dependent, Independent and Extraneous Variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a description of how the study was conducted. It includes research design, location of the study, target population, sampling procedure and sample size, instrumentation, data collection procedures and data analysis.

3.2 Research Design

The study adopted the ex-post facto research design. The design was more suitable for this study because the researcher sought to find out the subject's already established opinions regarding the research objectives (Kombo & Tromp, 2006). The respondents were studied after the choice of study subjects had been done. In this design, causes (independent variables) are described in real setting based on the subjects' views. The researcher analysed the views of the subjects based on responses to questions in the data collection tool.

3.3 Location of the Study

The study was conducted in Uriri Sub-County of Migori County. The Sub-County is bordered by Awendo Sub-County to the East, Suna East Sub-County to the South, Nyatike Sub-County to the West and Ndhiwa Sub-County to the North. The Sub-County is of high agricultural potential. Majority of people here are tobacco and sugarcane farmers, through which they are able to send their children to school. Because the majority of parents here are agriculturalists, and most students in these schools come from within the Sub-County, it means that most of the students have some background in Agriculture. It is also worth mentioning that majority of schools here are mixed/co-educational day and boarding. The Sub-County has seven-teen secondary schools. It also has various categories of schools i.e. mixed/co-educational schools and single gender schools, therefore making it suitable for the study. In the Sub-County, Agriculture is offered in all schools making all schools in the area fit for this study.

3.4 Target Population

The target population of this study composed of secondary school students in Uriri Sub-County. The accessible population was Form Three students, from whom 262 who have chosen Agriculture as one of their subjects of study were drawn. Form Three students were considered appropriate because at this level, they have just done subject choice and they also have room to make changes in subjects before they join Form Four when registration

for KCSE is eventually done. These were students who had made their decisions as far as the subjects of study are concerned.

3.5 Sampling Procedure and Sample Size

The acceptable rule in determining sample size is to have a large sample as much as possible (Mugenda & Mugenda, 2003). There were about 262 Form Three Agriculture students in Uriri Sub-County. The Sub-County was chosen since all schools offer Agriculture and at Form Three, students have already made subject choices. A table for determining sample size (Krejcie & Morgan, 1970) was used to get 152 Form Three Agriculture students (Appendix D). Kathuri and Pals (1993) recommend a minimum sample of 100 respondents therefore a sample of 152 was appropriate to take care of attrition. Proportionate stratified random sampling was used in this study to get the number of students in each school category among the 17 schools (Appendix E). A formula by Kathuri and Pals (1993) was used to obtain the number of members from each stratum (school type) which was arrived at as follows:

$$n_i = N_i/N * n$$

Where;

n_i = Number of members in the sample from stratum i

N_i = Number of members in the population from stratum i

N = Number of members in the entire population

n = Sample size

i = 1, 2, 3 schools types

Table 2

Sample of Students Included in the Study from Different Categories of Schools

School type	Number of schools	Number of Schools Sampled	Total Agriculture students	Sample size
Boys'	2	1	60	33
Girls'	2	1	32	18
Mixed/Co-educational	13	5	170	101
Total	17	7	262	152

From the seven-teen schools in the Sub-County, only seven were picked by simple random sampling to provide the sample for this study.

3.6 Instrumentation

A researcher-constructed questionnaire consisting of two sections was used to acquire relevant information from the respondents. The questionnaire was constructed using Likert scale. Closed-ended items were used. The questionnaire collected information on the extent to which information on subject choice was provided, awareness about agricultural careers and exposure to various teaching methods in Agriculture. It also provided information on the extent to which involvement in peer group activities and students' interest influenced the choice of Agriculture subject.

3.6.1 Validity

Validity, according to Mugenda and Mugenda (2003), is defined as the accuracy and meaningfulness of inferences, which are on the research results. To achieve validity the researcher gave the instrument to two experts from the Department of Agricultural Education and Extension in the Faculty of Education and Community Studies of Egerton University. They went through to check the content, face and construct validities, in reference to the study objectives so that each of the specific objectives would be captured in the questionnaire. Improvements were done accordingly.

3.6.2 Reliability

A reliable data collection instrument is one that yields dependable results (Mugenda & Mugenda, 2003). To test the reliability of the instrument, a pilot test was done in Suneka secondary school in Kisii County. The County was selected for pilot study because Kisii High School where Agriculture was first offered under the USAID programme is found here. The school was chosen for the pilot study because it is safe distance from Uriri Sub-County therefore avoiding contamination of the study schools. Pilot testing of the questionnaire was done to help reveal ambiguous items and poor wording of questions. It also helped identify problems that would be encountered during the administration of the questionnaires. It further helped in understanding if the respondents understood the questions. Mugenda and Mugenda (2003) recommend that 10% of the sample size be used in testing for reliability of a research instrument. Consequently 16 students were involved.

After piloting, Cronbach's Alpha coefficient was computed to determine reliability of the instrument. A coefficient of 0.70 or more implies that there is a high degree of reliability (Kombo & Tromp, 2006). The same threshold was adopted in this study. A reliability coefficient of 0.78 was obtained. This was within the threshold for reliability testing and therefore the instrument was found to be consistent and reliable.

3.7 Data Collection Procedure

The researcher obtained a letter of approval from Egerton University Graduate school and research permit from National Commission for Science, Technology and Innovation (NACOSTI) (Appendices B & C) to conduct research in the area selected. The researcher then liaised with the County Education Office and the County Commissioner's offices in the area to arrange for data collection. The researcher then explained the purpose and the content of the questionnaire to the respondents then distributed them to respondents in the sampled schools. The respondents were given twenty minutes to fill-in the questionnaires after which the researcher collected them.

3.8 Data Analysis

The collected data was first cleaned up for any errors such as incompleteness or inaccurate marking of responses. Data was then coded and recorded to reduce mass for ease of analysis. Data was then entered into the computer for analysis using Statistical Packages for Social Sciences Version 22. Data on the dependent variable was summarised as: Possibility of a student choosing Agriculture given another chance was summarised into categories of: 1=No, 2=Not sure, 3=Yes.

Data on hypotheses one and three were measured as indices generated from respondent's rating of five statements, each with a maximum of three. The maximum score would be fifteen implying that the higher the score, the higher the career awareness and involvement in peer groups activities respectively. Data on hypotheses two and four were measured as indices generated from respondent's rating of five statements, each with a maximum of five. The maximum score would be twenty-five implying that the higher the score, the higher preference for teaching methodology and interest in Agriculture respectively. These data were analysed using chi-square at 0.05 α significance level.

Table 3

Summary of Data Analysis

Hypotheses	Independent variable	Dependent variable	Statistical test
H ₀₁ : There is no statistically significant influence of career awareness on the choice of Agriculture subject by secondary school students in Uriri Sub-County	Career awareness	Choice of Agriculture subject	Chi-square
H ₀₂ : There is no statistically significant influence of teaching methods on the choice of Agriculture subject among secondary school students in Uriri Sub-County	Teaching methods	Choice of Agriculture subject	Chi-square
H ₀₃ : There is no statistically significant influence of the involvement in peer group activities on the choice of Agriculture subject by secondary school students in Uriri Sub-County.	Involvement in peer group activities	Choice of Agriculture subject	Chi-square
H ₀₄ : There is no statistically significant influence of students' interest on the choice of Agriculture subject by secondary school students in Uriri Sub-County.	Interest in Agriculture	Choice of Agriculture subject	Chi-square

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter gives the findings on the general information of the respondents, availability of subject choice information, career awareness, teaching methods, involvement in peer group activities and students interest in Agriculture. It also provides findings regarding possibility of choosing Agriculture given another chance. Discussions of the findings are presented alongside the results and organized according to the objectives.

4.2 General Information of the Respondents

The study randomly sampled 152 Agriculture students from the three school types. The school types as mentioned earlier are: boys' girls' and mixed or co-educational.

4.2.1 Respondents' School

The study was conducted in seven schools out of the seventeen available in the Uriri Sub-County.

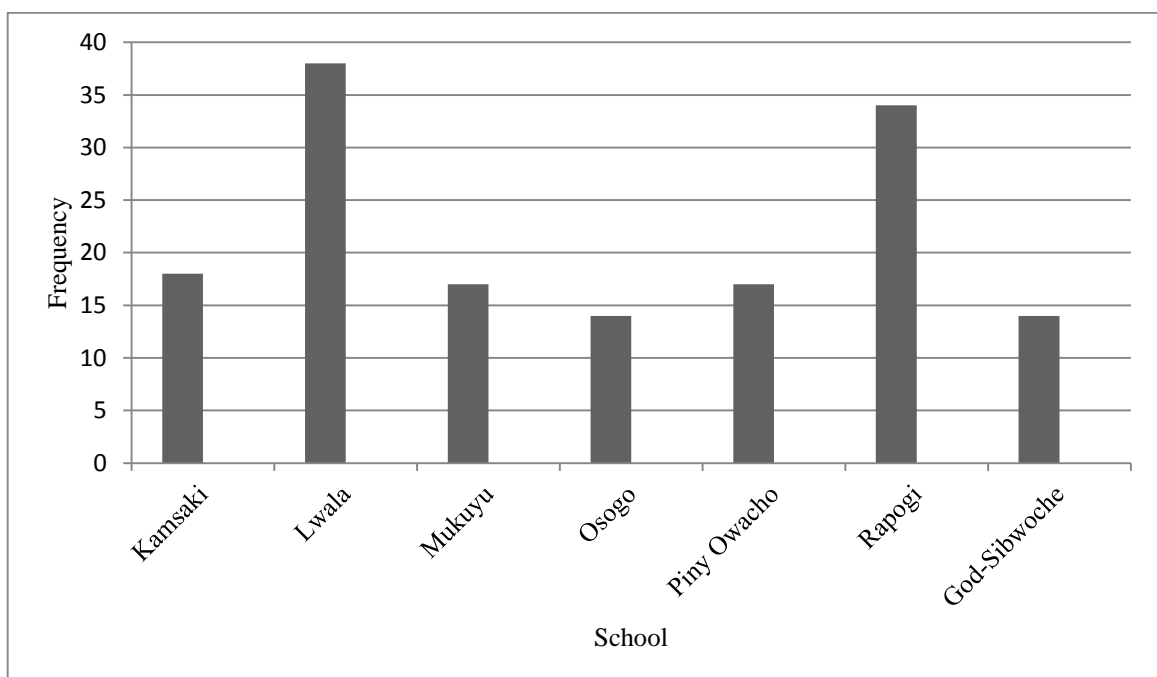


Figure 2. Number of Respondents Sampled per School

4.2.2 Distribution of Respondents by School Types

The school types categorised into boys' girls and mixed/co-educational were investigated so as to provide information on the distribution of respondents. The categories of schools are shown in Table 4.

Table 4

Type of School from Which Sampling was Done (n=152)

School type	Frequency	Percent
Boys'	33	21.7
Girls'	18	11.8
Mixed/Co-educational	101	66.4
Total	152	100

Though the respondents were sampled from different school categories, most (66.4%) were from mixed/co-educational schools. On the other hand, 21.7 percent were from boys' and 11.8 percent from girls' schools. Since most schools in the Sub-County are mixed/co-educational, it was apparent that majority of the respondents were derived from those schools through proportionate stratified random sampling.

4.2.3 Distribution of Respondents by Gender

The Sub-County has the three school categories as earlier mentioned where boys and girls are distributed. Table 5 gives the summary distribution of the respondents by gender.

Table 5

Respondents' Gender (n=152)

Gender	Frequency	Percent
Male	103	67.8
Female	49	32.2
Total	152	100

The results show that the majority (67.8%), of the respondents were males. This could be interpreted to mean that more boys than girls have chosen Agriculture as one of their subjects of study. Gender of the respondents was considered in this study because based on this, boys and girls may be presented with different opportunities as far as the choice of Agriculture subject is concerned. A study by Owoyele and Toyobo (2008) revealed that more boys than girls would register for Agriculture because the subject is considered more masculine hence more boys than girls would register for it based on this perception.

4.3 Information on Subject Choice

In Objective One, the study sought to provide descriptive information on the availability of subject choice information to the respondents. This information was important because it provided the impetus on the level of subject choice information the respondents had.

In the study, the researcher sought to find out if the respondents are provided with information on subject choice. Table 6 shows the distribution of the respondents according to availability of information on subject choice and the sufficiency of the information provided.

Table 6

Provision of Subject Choice Information to Respondents (n=152)

Question	Option										Total	
	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		f	%
	f	%	f	%	f	%	f	%	f	%	f	%
Provision of subject choice information to respondents	3	2.0	4	2.6	1	0.7	78	51.3	66	43.4	152	100
Sufficiency of subject choice information	6	3.9	13	8.6	3	2.0	66	43.8	63	41.7	152	100
Averages	4.5	3.0	8.5	5.6	2	1.4	72	47.6	64.	42.6	152	100
Index scores		.7		1.3		.4		11.9	5	10.7		

The results show that majority (94.7%) of the respondents agreed to having been provided with information on subject choice with 51.3 percent and 43.4 percent of the respondents agreeing (A) and strongly agreeing (SA) respectively. A minimal number (0.7%) of the respondents were not sure (NS). Moreover, 2.6 percent of the respondents disagreed (D) that they are provided with information on subject choice while 2.0 percent strongly disagreed (SD) that they received information on subject choice. The implication of this is that majority of respondents receive information regarding subject choice in their schools. The significance of this information for this study is that availability of information on subject choice may influence decision making when choosing subjects to study in upper secondary schools-form three and four.

In this study, sufficiency of subject choice information was used to show that the information given to respondents is enough to influence their decisions by making them aware during decision making. More than half of the respondents (84.5%) said that they receive sufficient subject choice information with 41.7 percent strongly agreeing (SA) and 43.8 percent agreeing (A). Only 2.0 percent of the respondents were not sure (NS). However, 12.5 percent of the respondents said there is no sufficient subject choice information with (8.6%) disagreeing (D) and (3.9%) strongly disagreeing (SD). The implication of this is that majority of the respondents received enough subject choice information. Sufficiency of subject choice information was considered an important aspect of this study because it is important in creating awareness in the respondents when making subject choices due to the fact that they have several optional subjects to from which to choose. It can be said therefore that information regarding subject choice is available and to a large extent with an index score of 22.6 (11.9 + 10.7) out of the possible 25.0.

Githaiga (2011) noted that boys and girls faced some problems in their choice of K.C.S.E subjects. Such problems included lack of guidance, discouragement from friends and peers as well as difficulties in particular subjects.

4.4. Information on Career Awareness

The researcher sought to find out whether the level of awareness in agricultural careers influences their chances of choosing to study Agriculture in secondary schools. Table 7 shows the findings.

Table 7

Information Regarding Career Awareness (n=152)

Question	Option						Total	
	No		Not sure		Yes		f	%
	f	%	f	%	f	%	f	%
provision of career information to respondents	18	11.8	1	.7	133	87.5	152	100
Sufficiency of information on agricultural occupation	21	13.8	4	2.6	127	83.6	152	100
Current decision on occupational field	10	6.6	18	11.8	124	81.6	152	100
View on usefulness of agriculture studied today in future	3	2.0	4	2.6	145	95.4	152	100
Opinion on importance of career choice presently	9	5.9	10	6.6	133	87.5	152	100
Averages	12	8.0	8	4.9	132	87.1	152	100
Index scores		1.2		.7		13.1		

Respondents were asked to indicate if they receive career information at their schools. From the table, majority (87.5%) of the respondents received career information in schools. Only 0.7 percent said they were not sure (NS) while 11.8 percent said they did not receive career information. It is evident therefore that most respondents in the study location agreed that they receive career information.

The respondents were asked to indicate whether the career information they received in their schools was sufficient. Majority (83.6%) of the respondents agreed that there was sufficient career information provided to them. On the other hand, 2.6 percent were not sure (NS) if the information provided was sufficient, while 13.8 percent indicated that the career information they receive was not sufficient. It can therefore be stated that majority of the respondents accepted there is sufficient career information, therefore are career aware.

The researcher sought to find information on whether the respondents had decided on their occupational fields or not at the time of this study. The implication was that if the respondents have decided on their occupational fields then they are aware of career options available in Agriculture and if they have not then they are not career aware. From the

findings, 81.6 percent of the respondents showed that they have absolutely decided on their occupational field, 11.8 percent were not sure while 6.6 percent indicated that they had not decided on the occupations they would take after school. It is apparent that most respondents make their occupational choices once they have chosen the subjects of study at Form Three level. It can also be said that the number that is not sure may end up training at college or university level in subjects they did not study in secondary schools. This information was important since if the respondents had decided on their occupational fields, it would help them in making rational decision hence opting for Agriculture. Some studies show that students go into subjects without proper knowledge of what future prospects are there when such subjects are studied (Ryan & Bryan, 2011).

The respondents were asked to indicate if they think the content studied in Agriculture would assist them in their future lives. Few (2.0%) of the respondents indicated that what they study in Agriculture will not be useful in their future lives, 2.6 percent showed that they were not sure of the usefulness of this information in their future lives but majority (95.4%) indicated that what they study in Agriculture would be useful in their future lives. This had the implication that majority of the respondents understand why they study Agriculture as it would impact in their future lives either as full time farmers or people employed in private or public sector.

The respondents were asked to indicate if career choice was important at the time of the study. Career choice ideally should be done when students are in secondary schools, not after joining universities and colleges. It was found out that 5.9 percent of the respondents did not think career choice was important at present time while 6.6 percent were not sure whether it is important or not. Majority (87.5%) said that career choice was important and should be done at the present time. The implication of this was that even though majority of the respondents knew that career choice should be done alongside subject choice, a few were not sure and others still thought it was not necessary to do career choice during subject choice or while in secondary school. This could also mean that in their thinking, career choice can be done when one joins college to specialise in a subject area. They might not be aware that certain courses go with cluster subjects for which one has to attain minimum score to be able to study that area.

The study therefore found out that majority of the respondents had high career awareness with a mean index score of 13.1 out of the maximum score of 15, indicating 87.1 percent career awareness. A career awareness index of 13.1 was obtained after scoring the respondents' responses on a scale of 1-3, out of the total of five questions.

4.5 Information on Agriculture Teachers' Teaching Methods

In Objective Three, the study sought to find descriptive information on the teaching methods by Agriculture teachers. The responses are shown in Table 8.

Table 8

Responses Regarding Teaching Methods

Question	Option										Total	
	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		f	%
	f	%	f	%	f	%	f	%	f	%		
Agriculture teacher encourages asking of questions	6	3.9	3	2.0	1	0.7	44	28.9	98	64.5	152	100
Agriculture teacher's teaching efficiency	1	0.7	1	0.7	6	3.9	40	26.3	104	68.4	152	100
Teacher's variation of teaching methods	2	17.1	31	20.4	3	2.0	37	24.3	55	36.2	152	100
Teacher's attentiveness to students	2	19.1	35	23	6	3.9	37	24.3	45	29.6	152	100
Level of student fulfilment	1	9.9	23	15.1	6	3.9	61	40.1	47	30.9	152	100
Averages	1	10.2	19	12.2	4	2.9	44	28.8	70	45.9	152	100
Index scores	5	2.6	3.1	.7	7.2	11.5						

The respondents were asked to indicate if the Agriculture teachers encouraged asking of questions in during the lessons. Most (64.5%) of the respondents strongly agreed (SA), 28.9 percent agreed (A), 0.7 percent were not sure (NS), 2.0 percent disagreed (D) and 3.9 percent strongly disagreed (SD). This implied that majority (83.3%) of the respondents were encouraged by their Agriculture teachers to ask questions in class. Some 0.7% was not sure if the teachers encourage them to ask questions while 5.9% were not encouraged to ask questions. This information is important in this study because it is assumed that the teacher has a great influence in the respondents' subject choices especially when they encourage them. Bekleyen (2012) asserts that teacher factors such as kindness and being listening with patience are important in providing a relaxed classroom environment which encourages learning. This study further says that some teachers' behaviour is disturbing because they

don't listen patiently to their learners therefore the learner feels discouraged in subjects handled by such teachers.

The respondents were asked their views on whether the Agriculture teacher is efficient in teaching. Most of the respondents (68.4%) strongly agreed (SA) that the Agriculture teacher was efficient in teaching. It was also found out that 26.3 percent agreed (A) that teacher is efficient in teaching. However, 3.9 percent of the respondents were not sure (NS) if the Agriculture teacher is efficient in teaching. On the other hand, 0.7 percent of the respondents disagreed (D) and another 0.7 percent strongly disagreed (SD). From the data, it means therefore that majority (94.7%) of the respondents accepted the fact that the Agriculture teacher is efficient in teaching, 3.9 percent are not sure while only 1.4 percent said their Agriculture teacher is not efficient.

The variation of teaching methods is aimed at making respondents enjoy the subject Agriculture. It was found that less than half (36.2%) of the respondents strongly agreed (SA) that the Agriculture teacher uses a variety of teaching methods. About a quarter (24.3%) of the respondents stated that they disagree (D), 2.0 percent were not sure (NS). 20.4 percent disagreed (D) while 17.1 percent strongly disagreed (SD). It can be noted that more than half (60.5%) of the respondents concurred that the teacher uses a variety of teaching methods in Agriculture, 2.0 percent not sure while 37.5 percent did not concur that the teacher uses a variety of teaching methods.

The respondents were asked their opinions on whether the Agriculture teacher pays attention to them. Learners have varied characteristics hence different needs based on individual characteristics. It can be said that 29.6 percent of the respondents strongly agreed (SA) that the Agriculture teacher paid attention to them. Moreover, 24.3 percent agreed (A) that the teacher paid attention to them. Those who were not sure (NS) that the Agriculture teacher pays attention to them were 3.9 percent while 23.0 percent disagreed (D) that the teacher pays attention to them. Another 19.1 percent of the respondents strongly disagreed (SD) that the teacher pays attention to them. It can also be stated that slightly more than half (53.9%) of the respondents accepted that the teacher paid attention to them, while 3.9 percent were not sure and 42.1 percent said the Agriculture teacher did not pay attention to them.

On whether the Agriculture teacher accepted their ideas and if they get fulfilled, it was found out that 30.9 percent of the respondents stated to strongly agree (SA) that the Agriculture teacher accepts their ideas in class. 40.1 percent agreed (A) that the Agriculture

teacher accepts their ideas. On the other hand, 3.9 percent were not sure (NS), 15.1 percent disagreed (D) while 9.9 percent of the respondents strongly disagreed (SD). Majority (71%) of the respondents stated that they feel most fulfilled because the teacher accepts their ideas. 3.9 percent of the respondents were not sure while 25.0 percent did not accept being most fulfilled. The implication of this is that when the students' ideas are accepted, they feel more encouraged therefore can choose to like and take the Agriculture subject.

It was therefore found out that majority (74.7%) of the respondents are highly influenced by the teaching methods with a mean index score of 18.7 (i.e. 7.2+11.5) out of the possible 25.0. This is consistent with a study by Githaiga (2011) which revealed that teachers influenced students on what subjects to take, and also influenced them to take the subjects that they teach.

4.6 Information on Involvement in Peer Activities

The fourth objective sought to find out the influence of peers on choice of Agriculture subject. Group activities that facilitate learning in schools are considered to be peer-controlled. The responses are shown in Table 9.

Table 9

Responses on Information Relating to Peer Influence

Question	Option						Total	
	Not at all		To some extent		Very much			
	f	%	f	%	f	%	f	%
Extent of involvement in group activities	21	13.8	1	.7	130	85.5	152	100
Membership to YFC and Agriculture discussion group	No		Not sure		Yes		Total	
	77	50.7	6	3.9	69	45.4	152	100
Opinion on ease passing Agriculture when studied with friends	9	5.9	4	2.6	139	91.5	152	100
Worth of Agriculture according to friends	42	27.6	26	17.1	84	55.3	152	100
Majority of respondents' friends are in Agriculture class	63	41.4	8	5.3	81	53.3	152	100
Averages	42	27.9	9	4.9	101	67.2	152	100
Index scores	3.2		.7		11.1			

This study sought information on the extent of involvement in peer group activities such as discussions, doing group assignments and participation in study groups. It was found that 13.8 percent of the respondents were not at all involved in peer group activities, 0.7 percent were involved only to some extent while majority (85.5%) were very much involved. It can be said therefore that in Uriri Sub-County, few students are not involved in peer group activities. Most of them are very much involved and this has an implication on learning in that peers tend to learn better when they carry their activities in groups. They tend to copy each other as positive role models. This concurs with a study by Davies et al. (2004) which asserts that students tend to learn better when they do their learning activities together.

YFCs and Agriculture discussion groups aid learning in schools. About half of the respondents (50.7%) said they have not been members of YFCs and Agriculture discussion group. Few respondents (3.9%) were not sure with the implication that they might not be of the understanding of YCSs and discussion groups. Just less than half (45.4%) of the respondents indicated that they have been members. This implies that they have been doing

most of their learning activities together as members of a discussion group or YFCs. These findings are however inconsistent with that of Njoroge, Mwangi and Udoto (2014) which found out that belonging to YFC was very high at 75 percent at Form Three in Rongai Sub-County of Nakuru County, Kenya. This could also be due to the fact that most schools in Uriri Sub-County are mixed day with limited facilities, as opposed to boarding schools that are well endowed with teaching and learning facilities.

The study sought to find out if in the opinion of the respondents, Agriculture subject is easy to pass when they study it together with their friends. From the responses, 5.9 percent indicated that Agriculture is not at all easy to pass when studied with friends while 2.6 percent indicated that they were not sure. This implied that for those 5.9 percent of the students in Uriri Sub-County, being in groups and studying Agriculture with friends does not in any sense make it an easy subject. This would mean that even if an individual student belongs to YFCs, he or she would still need to put in extra personal efforts in order to be a high achiever in Agriculture. It was however noted that 91.5 percent of the respondents said that Agriculture is indeed an easy subject to pass when studied with friends. This implies that the fact that these students belonged to YFCs, they have been assisting one another in a way or another with their studies therefore making Agriculture appear easy to pass.

The study sought to find out if the respondents' friends value Agriculture by considering it a worthwhile subject. From the findings, it is apparent that 27.6 percent of the respondents did not think Agriculture is a worthwhile subject. This is a striking percentage based on the fact that Agriculture is the backbone of the economy. This could mean that they have not developed the right attitude in the subject therefore do not see its usefulness. This is in line with the findings of Mangal (2009) who found out that many young people view farming and Agriculture in general as hard, backbreaking and dirty work with little self esteem. If students' friends/peers think that a subject is worthwhile and most of them are enrolled in it, then it is also likely that the students' perception about the subject will be mediated through the group's opinion (Caldwel, 2012).

The study sought to find out if majority of the respondents' friends are in Agriculture class. It was found out that 41.4 percent of the respondents did not have most of their friends in Agriculture class while 5.3 percent indicated that they were not sure if most of their friends are in Agriculture class. More than half (53.3%) showed that most of their friends are in Agriculture class. This information is of importance because some students could be interested in being with their friends, therefore taking Agriculture.

It was therefore found out that peer influence was high with an index score of 11.1 out of the possible 15, indicating a high of 67.2 percent. The implication of this was that respondents could register or fail to register for Agriculture subject because their friends have registered for it or not.

4.7 Students' Interest

The fifth study objective sought to determine the influence of respondent's interest in Agriculture on the choice of the subject. The responses are shown in Table 10.

Table 10

Information Relating to Student's Interest in Agriculture (n=152)

Question	Option										Total	
	Strongly disagree		Disagree		Not sure		Agree		Strongly agree		f	%
	f	%	f	%	f	%	f	%	f	%		
Agriculture is enjoyable	2	1.3	1	0.7	5	3.2	36	23.7	108	71.1	152	100
Feeling good about attending Agriculture lessons	1	0.7	3	2.0	3	2.0	39	25.7	106	69.6	152	100
Confidence in understanding difficult Agriculture concepts	2	1.3	18	11.8	4	2.6	62	40.8	66	43.4	152	100
Agriculture surely understood	15	9.9	25	16.4	6	3.9	56	36.8	50	32.9	152	100
Agriculture is interesting	0	0.0	0	0.0	2	1.3	32	21.1	118	77.6	152	100
Averages	4	2.6	9	6.2	4	2.6	45	29.6	90	58.9	152	100
Index scores		.7		1.6		.7		7.3		14.7		

The respondents were asked to give their opinion of the view that Agriculture is enjoyable. From the data, it can be shown that 71.1 percent of the respondents strongly agreed (SA), 23.7 percent agreed (A), 3.3 percent were not sure (NS), 0.7 percent disagreed (D) while 1.3 percent strongly disagreed (SD). Therefore, almost all respondents (94.8%) said that

Agriculture is enjoyable. Only 2.0 percent did not agree that Agriculture is enjoyable while 3.2 percent were not sure.

The respondents' opinions were sought on their feelings about attending Agriculture lessons. From these results, 69.6 percent of the respondents strongly agreed (SA) that they feel good about attending Agriculture lessons. 25.7 percent agreed (A) while 2.0 percent were not sure (NS). On the other hand, 2.0 percent and 0.7 percent disagreed (D) and strongly disagreed (SD) respectively. Majority (95.4%) feel good about attending Agriculture lessons while 2.7 percent do not feel good about attending Agriculture lessons. This high percentage of students who feel good about attending Agriculture lessons could be due to the fact that Agriculture learning, unlike other subjects is hands-on, real life experiences are fun and students are therefore motivated to learn (Committee for Middle School Improvement & Georgia Department of Education, 2014)

The respondents were asked if they understand difficult concepts in Agriculture. From the results, it was shown that 43.4 percent of the respondents strongly agreed (SA) that they understand difficult concepts in Agriculture. Moreover, 40.8 percent agreed (A) that they understand difficult concepts in Agriculture while 2.6 percent of the respondents were not sure (NS). Another 11.8 percent said they disagreed (D) while 1.3 percent noted that they strongly disagree (SD). From these figures, it can also be noted that more than two-thirds (84.2%) of the respondents had the opinion that they understand difficult concepts in Agriculture.

The respondents were asked to give their opinion on surety of understanding Agriculture subject. The results showed that 32.9 percent of the respondents strongly agreed (SA) that they were sure of understanding Agriculture, 36.8 percent agreed (A), 3.9 percent were not sure (NS) while 16.4 percent and 9.9 percent disagreed (D) and strongly disagreed (SD) respectively. This shows that majority (69.7 percent of the respondents are sure about understanding difficult concepts in Agriculture and 26.3 percent are not sure about understanding the difficult concepts.

The study sought to find out if Agriculture was interesting to the respondents. From the results, it can be noted that more than three-quarters (77.6%) of the respondents strongly agreed (SA) that Agriculture is interesting, 21.1 percent agreed (A) that the subject is interesting, while 1.3 percent were not sure (NS) that Agriculture is interesting. No respondents strongly disagreed (SD) and disagreed (D). Based on these results, almost all

(98.7%) of the respondents accepted that Agriculture is interesting. Only 1.3 percent was not sure if the subject is interesting.

The study therefore found out that there was a high degree of interest with an index score of 22.0 (i.e. 7.3 + 14.7) out of the possible 25.0, giving an interest level of 88.5 (29.6+58.9) percent. This could be interpreted to mean that majority of respondents are interested in Agriculture. This is contrary to a report by FAO (1997) which showed that at times students lack interest in Agriculture, therefore will only enrol for it when they don't qualify for other subjects. Very few were not interested in Agriculture. This information is significant in this study because interest in the subject could make one choose the subject. Monica and Ciomos (2010) outline students' interest as one of the most important motivational factors as far as learning and subject choice are under discussion.

4.8 Information on Choice of Agriculture Given Chance Again

The study sought to find out information on dependent variables. The respondents were asked if in their view, they could choose Agriculture in the event that subject choice is done again. This information was important because it was used as the indicator of the dependent variable. The results are shown in Figure 3.

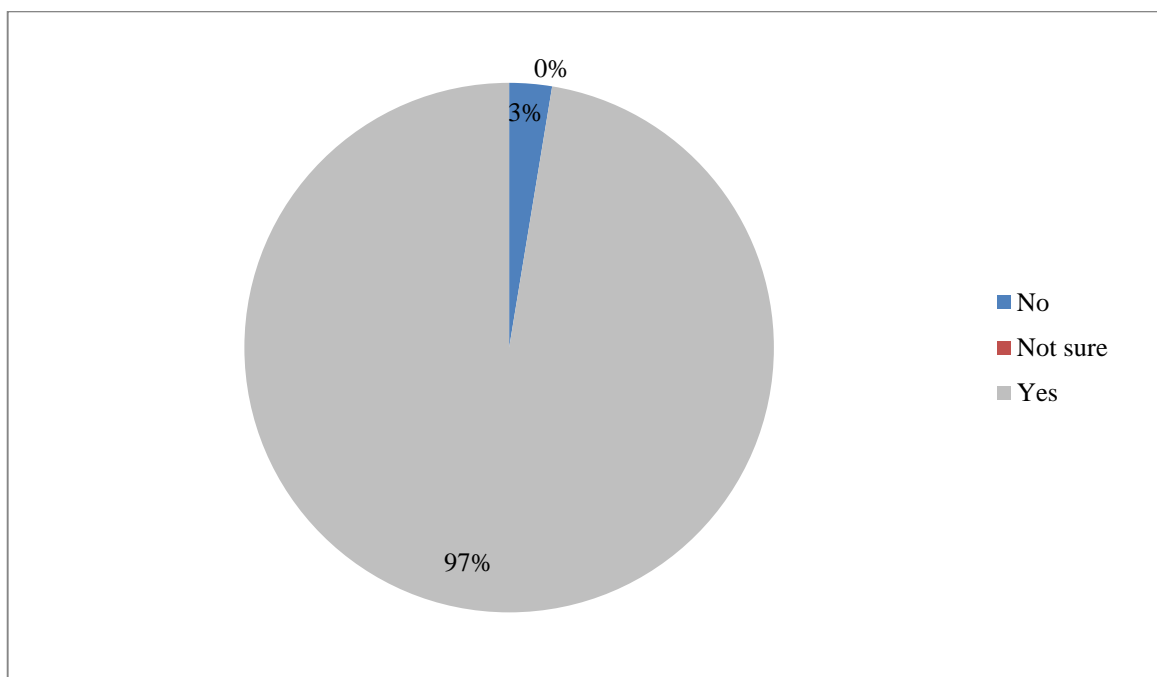


Figure 3. Likelihood of Respondent Choosing Agriculture Again (n=152)

The descriptive statistics show that most of the respondents were still willing to take Agriculture in the event that subject choice was to be done again. This likelihood was very high with 97.0 percent indicating yes while only 3.0 percent indicated they were not willing

with index scores of 2.9 and 0.1 out of the 3.0 maximum possible respectively. The students were sure about the options they had taken since none indicated that they were not sure. These results mean that majority of the respondents will still choose Agriculture subject if they are given another chance to do the choice of subjects. These results could also mean that the respondents did not choose Agriculture subject by mistake but it is a decision they keenly thought to take. This is an indication that students in Uriri Sub-County have high likelihood of choosing Agriculture. While on one hand this could be a positive impression, it might be on the other hand due to the fact that these students are limited by the range of subjects offered by the schools, as was earlier mentioned. As is the case of most schools in Uriri Sub-County, apart from Agriculture, the only other technical subjects offered are Business Studies and Home Science in a few other schools. The other technical subjects such as Computer Studies are common with schools such as Rapogi and Uriri High Schools that are well established and with better learning facilities. Some students mentioned that they were not willing to take Agriculture if they are given opportunity to choose subjects again. These could be learners with misplaced priority, or ones who have not decided on their occupational fields.

4.9 Answer to Research Question

- i. To what extent is information on subject choice provided to secondary school students in Uriri Sub-County?

The researcher sought to find out the extent to which information on subject choice is received by the respondents. The study revealed that information regarding subject choice is available to a very large extent. This is so because 90.2 (i.e. 47.6+42.6) percent of the respondents indicated so. When students are provided with information on subject choice, they are able to make decisions early as far as career choice is concerned.

4.10 Test of Hypotheses

To empirically ascertain the influence of the selected factors on the choice of Agriculture subject among secondary school students in Uriri Sub-County, four hypotheses were formulated and tested at 0.05 level of significance and the results were presented in the following subsections:

4.10.1 Influence of Career Awareness on the Choice of Agriculture Subject by Secondary School Students

H₀₁: There is no statistically significant influence of career awareness on the choice of Agriculture subject by secondary school students in Uriri Sub-County.

A Chi-square test was done to determine the influence of career awareness on the choice of Agriculture subject and the null hypothesis tested at 0.05 α . The results are shown in Table 11.

Table 11

Influence of Career Awareness on the Choice of Agriculture Subject

	Value	Df	Asymp. Sig. (2sided)
Pearson Chi-Square	.587 ^a	2	.746
Likelihood Ratio	1.084	2	.582
Fisher's Exact Test	1.976		
Linear-by-Linear Association	.574 ^b	1	.449
N of Valid Cases	152		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .03.

b. The standardized statistic is -.758

A Pearson Chi-Square value of 0.587 was computed, against the Chi-Square critical of 5.991. The Null Hypothesis is therefore accepted. From the study therefore, there was not enough evidence to indicate that willingness to take Agriculture given another chance is associated with variation in the level of career awareness. This could mean that some students were able to select subjects of study without necessarily relying on career information. While this could have a negative effect on future careers of the students, those students are able to choose subjects on their own without relying on career advice.

4.10.2 Influence of Teaching Methods

H₀₂: There is no statistically significant influence of teaching methods on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

A chi-square test was carried out to determine the influence of teaching methods on the choice of Agriculture subject. The null hypothesis was tested at 0.05 α . The results were as shown in Table 12.

Table 12

Influence of Teaching Methods on the Choice of Agriculture

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.924 ^a	4	.018
Likelihood Ratio	5.149	4	.272
Fisher's Exact Test	6.374		
Linear-by-Linear Association	.011 ^b	1	.918
N of Valid Cases	152		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .08.

b. The standardized statistic is -.103

A Pearson Chi-Square value of 11.924 was computed, against the Chi-Square critical of 9.488 at 0.05 level of significance and 4 degrees of freedom. Since the Chi-Square computed is greater than Chi-Square critical, the Null Hypothesis is therefore rejected. The study suggested that subject choice indicated by the willingness to choose Agriculture given another chance is significantly influenced by the teaching methods employed by the Agriculture teacher. The implication is that students when making subject choices heavily rely on their teachers based on the variety of teaching methods that such teachers employ in the delivery of Agriculture content. The other implication of this is that some Agriculture teachers have made the classroom environment worth for learning (Korir, 1996) due to the nature of content delivery hence students just like the teachers and the subjects they teach. Bekleyen (2012), states that some teachers have positive attitudes towards their students and react positively even when students make mistakes. This gives them encouragement.

4.10.3 Influence of Peers

H₀₃: There is no statistically significant influence of involvement in peer group activities on the choice of Agriculture subject by secondary school students in Uriri Sub-County.

To determine whether there was significant influence of involvement in peer group activities on the choice of Agriculture subject, Chi-square was used to test this hypothesis at significance level of 0.05α and the results presented in Table 13.

Table 13

Influence of Peers on the Choice of Agriculture Subject

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.452 ^a	2	.798
Likelihood Ratio	.410	2	.815
Fisher's Exact Test	2.856		
Linear-by-Linear Association	.401 ^b	1	.526
N of Valid Cases	152		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .03.

b. The standardized statistic is .634.

A Pearson Chi-Square value of 0.452 was computed, against the Chi-Square critical of 5.991 at 0.05 level of significance and 2 degrees of freedom. Since the Chi-Square computed is less than Chi-Square critical, the Null Hypothesis is therefore accepted.

Therefore, there was not enough evidence from the study to indicate that significant difference in the willingness to choose Agriculture given another chance is influenced by difference in the level of participation in peer group activities. This could mean that some Agriculture students are able to select the subject irrespective of which subjects their friends (peers) have chosen. While association with particular groups would not have had significant effect on the way students choose subjects, this could be viewed as a positive aspect of peer groups. A study by Bennars *et al.* (1994) showed that the relationship between the child and the peer will positively or negatively influence the way they adjust to subjects they learn at school. This implies that peers have significant ways of influencing one another but when it comes to the choice to study Agriculture, individuals can make their own independent decisions.

4.10.4 Influence of Students' Interest on the Choice of Agriculture Subject

H₀₄: There is no statistically significant influence of students' interest on the choice of Agriculture subject among secondary school students in Uriri Sub-County.

To determine whether there was significant influence of students' interest on the choice of Agriculture subject, Chi-square was used to test this hypothesis at significance level of 0.05α and the results are presented in Table 14.

Table 14

Influence of Students' Interest on the Choice of Agriculture Subject

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.615 ^a	2	.000
Likelihood Ratio	7.726	2	.021
Fisher's Exact Test	10.162		
Linear-by-Linear Association	15.317 ^b	1	.000
N of Valid Cases	152		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .05.

b. The standardized statistic is 3.914.

A Pearson Chi-Square value of 20.615 was computed, against the Chi-Square critical of 5.991 at 0.05 level of significance and 2 degrees of freedom. Since the Chi-Square computed is greater than Chi-Square critical, the Null Hypothesis is therefore rejected.

According to this study therefore, the choice of Agriculture subject, as indicated by the willingness to take Agriculture given another chance, is significantly influenced by students' interest in the subject. The implication was that students would choose Agriculture since they are interested in it. Monica and Ciomos (2010) outline interest as one of the key motivational factors in the students' choice to study a given subject therefore influence learning and development. Interest will therefore go a long way in influencing even how students perform in the subjects they have chosen. When students score well in a subject, they are indeed motivated to learn.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study and draws conclusions from its findings. It also gives recommendations based on the conclusions.

5.2 Summary of the Study

The purpose of the study was to determine the influence of selected school-related factors (career awareness, teaching methods, involvement in peer group activities and students' interest) on the choice of Agriculture subject. Creating career awareness, Agriculture teachers' teaching methods, involvement in peer group activities and individual student interest are relevant factors as far as enrolment in the Agriculture subject within schools is concerned.

The study adopted *ex-post facto* design. For data collection, a structured closed-ended questionnaire was used for individual respondents. Proportionate stratified random sampling was used in this study to get 152 respondents: 33 from boys' schools, 18 from girls' schools and 101 from mixed/co-educational schools. The data was analysed using Statistical Package for the Social Sciences (SPSS) version 22.

From the study it was found out that majority (94.7%) of the respondents agreed to having been provided with information on subject choice. Further, the subject choice information provided was found to be highly sufficient enough (85.5%) to help students in making decisions during subject choice.

The study revealed that career awareness had no significant influence on the number of respondents who chose Agriculture as one of their subjects of study. More than three quarters (87.1%) of the respondents indicated high career awareness at 13.1 out of the possible 15. It also revealed that no respondent in this study was not sure, but they indicated to either having high career awareness or low awareness.

Teaching methods employed by Agriculture teachers were found to significantly influence the students' choice to study Agriculture in secondary schools in Uriri Sub-County. Teaching methods had a very high influence on the respondents, with majority being highly (74.5%) influenced by the teaching methods. When respondents were asked if they had chosen Agriculture because the teacher does not put a lot of pressure on them, it was however found that very few agreed to this, with the majority disagreeing. This meant that

irrespective of the pressure Agriculture teacher puts on the respondents, they would still choose Agriculture.

The study further revealed that involvement in peer group activities had no significant influence on the number of respondents who registered Agriculture as one of their subjects of study. Peer influence was found to be high at 67.2%. It was also revealed that membership to YFC in the study location is still low at 46.1%. This was an indication that there is still need to emphasise on formation and importance of the YFCs in schools.

From the study it was also found out that students' interest in Agriculture statistically influenced the choice of the subject. Interest in Agriculture was found to be very high at 97.0%. Respondents stated that they enjoy the subject and therefore willing to choose it again if they were given another chance of choosing subjects.

5.3 Conclusions

From the study, the following conclusions can be drawn:

- i. The information on subject choice was available for Agriculture students and is sufficient enough to help them in making decision. This information was available to a large extent. It can be said therefore that information on subject choice is sufficiently available to students in Uriri Sub-County.
- ii. Career awareness was found to be high among students in Uriri Sub-County but did not significantly influence the choice of Agriculture subject among secondary school students in Uriri Sub-County.
- iii. Involvement in peer group activities was found to be high among students in Uriri Sub-County but did not significantly influence the choice of Agriculture subject among secondary school students in Uriri Sub-County.
- iv. Agriculture teachers were found to be employing a variety of teaching methods. The study reported that membership to YFC and discussion groups were low among students. This was due to the fact that YFC do not exist in most schools and the fact that Agriculture teachers do not make use of discussion groups as a method of teaching Agriculture. Teaching methods were found to have significant influence on the choice by Form Three students to study Agriculture.
- v. Students' interest in Agriculture was found to be high among secondary school students in Uriri Sub-County. Students' interest was found to have significant influence on the choice by Form Three students to study Agriculture.

5.4 Recommendations

Based on the study's conclusions, the following recommendations are made;

- i. Career awareness was high but with no significant influence on students' choice to study Agriculture therefore teachers are encouraged to enlighten learners on Agriculture-related careers that they can land through studying Agriculture.
- ii. Teaching methods have high influence on subject choice therefore teachers should employ those methods that make learning of Agriculture motivating such as asking of questions.
- iii. Since majority of students in Uriri Sub-County have high interest in Agriculture, and the fact that this significantly influences their choice of the subject, there is need for teacher to use more learner friendly teaching methods so that interest in the subject can be retained.
- iv. Agriculture teachers and other stake-holders should ensure that YFCs exist in schools and are effectively used in teaching of Agriculture.

5.5 Suggestions for Further Research

Following are the suggestions for further research;

- i. A study of school types, both boys' and girls' and how they influence enrolment in Agriculture
- ii. A study on the influence of availability of learning resources in schools and their influence on enrolment in K.C.S.E Agriculture.
- iii. A study to find out awareness, existence and use of YFCs in secondary schools.

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APPENDIX A

QUESTIONNAIRE FOR FORM THREE AGRICULTURE STUDENTS

Dear respondent,

I am Mr. Ongang'a Peter Odhiambo, a Master of Science Agricultural Education student at Egerton University Njoro. As a requirement for the award of the degree of Master of Science in Agricultural Education, I am required to conduct a research and write a report. My study is **Selected Factors Influencing the Choice of Agriculture Subject among Secondary School Students in Uriri Sub-County, Kenya**. Please respond to the questionnaire with utmost honesty in order to facilitate this study. Your identity will be kept confidential. Thank you for accepting to take part in this study.

SECTION A: GENERAL INFORMATION

1. Name _____
2. School _____
3. School type: Boys' [] Girls' [] Mixed/Co-educational [] (tick one)
4. Gender: Male [] Female [] (tick one)
5. Date (dd/mm/yyyy) _____ / _____ / _____

SECTION B:

Please consider each of the following statements and indicate the response that reflects your opinion concerning the influence of career awareness, teaching methods, peers and student interest on the choice of Agriculture subject. Use the key provided. (tick one).

I. INFORMATION ON SUBJECT CHOICE

Key:

Strongly Disagree (SD) =1

Disagree (D) =2

Not Sure (NS) =3

Agree (A) =4

Strongly Agree (SA) =5

Statement	SD	D	NS	A	SA
6. In your school, you provided with information on subject choice					
7. There is sufficient subject choice information provided for students in my school					

II. INFORMATION ON CAREER AWARENESS

Key:

No =1

Not sure =2

Yes =3

Statement	No	Not sure	Yes
8. At my school students receive career information			
9. I have sufficient information on agricultural occupations			
10. I have decided on my occupational field			
11. I am convinced that what I study in Agriculture will be useful in my future life			
12. Career choice is important at present time			

III. INFORMATION REGARDING AGRICULTURE TEACHERS' TEACHING METHODS

Statement	SD	A	NS	A	SA
13. Agriculture teacher often encourages me to ask questions in class					
14. I believe the Agriculture teacher is efficient in teaching his/her class					
15. I have chosen to take Agriculture because the teacher uses a variety of teaching methods					
16. I have chosen Agriculture because the teacher pays attention to me					
17. During Agriculture lesson, I feel most fulfilled because the teacher accepts my ideas					

IV. INFORMATION ON PEERS

Statement	Not at all	To some extent	Very much
18. I have been involved in group activities such as discussion, doing group assignments and participation in study groups			
	No	Not Sure	Yes
19. I have been a member of the Young Farmers Club and Agriculture discussion/study group since I was in Form Two.			
20. Agriculture is an easy subject to pass when studied together with friends			
21. My friends do say that a Agriculture is worthwhile			
22. Most of my friends are in agriculture class			

V. INFORMATION ON STUDENTS' INTEREST

Statement	SD	D	NS	A	SA
23. Agriculture as a subject is enjoyable					
24. I feel good about attending agriculture lessons					
25. I am confident about understanding new concepts in Agriculture					
26. I am sure I understand difficult content in Agriculture					
27. Agriculture is an interesting subject					

VI. INFORMATION ON CHOICE OF AGRICULTURE GIVEN CHANCE AGAIN

Statement	No	Not sure	Yes
28. If given the chance to choose subjects again, I will still choose Agriculture			

Thank you for your participation

APPENDIX C

LETTER OF RESEARCH AUTHORISATION



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@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

Ref: No.

Date:

9th March, 2015

NACOSTI/P/15/7554/4492

Peter Odhiambo Onganga
Egerton University
P.O. Box 536-20115
EGERTON.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Selected factors influencing the choice of agriculture subject among secondary school students in Uiri Sub County, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Migori County** for a period ending **30th September, 2015.**

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

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


DR. S. K. LANGAT, OGW
FOR: DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner
Migori County.

The County Director of Education
Migori County.

APPENDIX D

TABLE FOR DETERMINING SAMPLE SIZE

Table 15

Table for Determining Sample Size from a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: N = population size, S = sample size. Source: (Krejcie & Morgan, 1970)

APPENDIX E
LIST OF SCHOOLS USED IN THE STUDY

Table 16

Table Showing the List of Secondary Schools in Uriri Sub-County

Name	School type	Sampled schools
St. Joseph's School Rapogi	Boys'	√
St. Pius Uriri Boys' High School	Boys'	
Salvation Army Kamsaki Girls School	Secondary Girls'	√
Oruba Girls Secondary School	Girls'	
Mukuyu Mixed Secondary School	Mixed	√
Bishop Linus Okok Osogo Secondary School	Mixed	√
God-Sibwoche Secondary School	Mixed	√
Piny-Owacho Mixed Secondary School	Mixed	√
Bware Mixed Secondary School	Mixed	
Thim-Jope Secondary School	Mixed	
St. Linus Koyieko Secondary School	Mixed	
Lwala Mixed Secondary School	Mixed	√
Arambe Mixed Secondary School	Mixed	
Chunge Secondary School	Mixed	
Oyani Secondary School	Mixed	
Bishop Okinda Achuth Secondary School	Mixed	
Midida Secondary School	Mixed	

Note: √ = sampled school