

**THE INFLUENCE OF MIRAA TRADE ON BOYS AND GIRLS
PARTICIPATION IN PRIMARY SCHOOL EDUCATION IN TIGANIA
CENTRAL DIVISION, MERU COUNTY, KENYA**

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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DEDICATION

To my father Mr. Samwel Murungi, my mother Mrs. Florence Mwerotia and my wife
Rebecca Kagwiria.

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TABLE OF CONTENTS

Title page	i
Declaration.....	ii
Dedication.....	iii
Acknowledgement.....	iv
Table of Contents	v
List of Tables	ix
List of Abbreviations.....	x
Abstract.....	xi

CHAPTER ONE

INTRODUCTION

1.1 Background of the study	1
1.2 Statement of the problem.....	5
1.3 Purpose of the study.....	5
1.4 Objectives of the study.....	6
1.5 Research questions.....	6
1.6 Significance of the study.....	7
1.7 Limitations of the study	7
1.8 Delimitations of the study	8
1.9 Assumptions of the study.....	8

1.10 Definition of terms.....	8
1.11 Organization of the study	9

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction	10
2.2 Miraa trade and boys’ and girls’ participation in primary schools.....	10
2.3 Influence of Miraa trade on boys’ and girls’ enrolment in primary schools.....	16
2.4 Influence of Miraa trade on boys’ and girls’ retention in primary schools.....	19
2.5 Influence of Miraa trade on boys and girls transition rate in primary schools	22
2.6 Influence of Miraa trade on boys’ and girls’ completion of primary schools.....	25
2.6 Summary of reviewed literature	28
2.7 Theoretical framework.....	30
2.8 Conceptual framework.....	32

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction	35
3.2 Study design	35
3.3 Target population.....	36
3.4 Sampling procedure and sample size.....	36
3.5 Research instruments	37

3.6 Pilot study.....	38
3.7 Validity of research instruments.....	38
3.8 Reliability of research instruments.....	39
3.9 Data collection procedure.....	39
3.10 Data analysis techniques.....	40
3.11 Ethical consideration.....	40

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction.....	41
4.2 Response rate of respondents.....	41
4.3 Demographic data of respondents.....	42
4.4 Data analysis as per study objectives.....	45
4.4.1 Miraa trade and boys' and girls' enrolment.....	45
4.4.2 Miraa trade and boys' and girls' retention.....	52
4.4.3 Miraa trade and boys' and girls' transition.....	57
4.4.4 Miraa trade and boys' and girls' completion rate.....	62

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.....	69
5.2 Summary of major findings.....	69

5.2.1 Findings on Miraa trade and boys’ and girls’ enrolment	69
5.2.2 Findings on Miraa trade and boys’ and girls’ retention	70
5.2.3 Findings on Miraa trade and boys’ and girls’ transition	71
5.2.4 Findings on Miraa trade and boys’ and girls’ completion rate.....	71
5.3 Conclusions of the study	72
5.4 Recommendations from the study	75
5.5 Suggestions for further research.....	76
REFERENCES.....	77

APPENDICES

Appendix I: Introduction letter	79
Appendix II: Questionnaire for pupils.....	80
Appendix III: Questionnaire for teachers	85
Appendix IV: Questionnaire for headteachers.....	91
Appendix V: Research permit.....	98

LIST OF TABLES

Table 4.1 Response Rate.....	42
Table 4.2 Gender distribution of the pupils.....	43
Table 4.3 Age distribution of the pupils.....	43
Table 4.4 Gender distribution of teachers and Headteachers.....	44
Table 4.5 Distribution of teachers and Headteachers by duration worked in Tigania Central Division.....	44
Table 4.6 Headteachers' response on miraa trade and boys' and girls' enrolment.....	46
Table 4.7 Teachers' response on miraa trade and boys' and girls' enrolment.....	48
Table 4.8 Pupils' response on miraa trade and boys' and girls' enrolment.....	50
Table 4.9 Headteachers' response on miraa trade and boys' and girls' retention.....	52
Table 4.10 Teachers' response on miraa trade and boys' and girls' retention.....	54
Table 4.11 Pupils' response on Miraa trade and boys' and girls' retention.....	55
Table 4.12 Headteachers' response on miraa trade and boys' and girls' transition.....	57
Table 4.13 Teachers' response on miraa trade and boys' and girls' transition.....	59
Table 4.14 Pupils' response on Miraa trade and boys' and girls' transition.....	61
Table 4.15 Headteachers' response on miraa trade and pupils' completion rate.....	63
Table 4.16 Teachers' response on miraa trade and boys' and girls' completion rate.....	65
Table 4.17 Pupils' response on Miraa trade and boys' and girls' completion rate.....	67

LIST OF ABBREVIATIONS

EFA	Education for all
FPE	Free Primary Education
GoK	Government of Kenya
KCPE	Kenya Certificate of Primary Education
ILO	International Labour Organization
MDGs	Millennium development goals
MoE	Ministry of Education
NGOs	Non-Governmental organizations
USA	United States of America
USAID	United States Agency for International Development
UK	United Kingdom
UNICEF	United Nations Children's Fund
UBE	Universal Basic Education
DEO	District Education Officer
OXFAM	Oxford Committee for Famine Relief
NACADA	National Agency for the Campaign against Drug Abuse
NACOSTI	National Commission for Science, Technology and Innovation

ABSTRACT

This study aimed at investigating the influence of miraa trade on boys and girls participation in primary school education in Tigania Central Division, Meru County, Kenya. Specifically, the study sought to determine the influence of miraa trade on boys' and girls' enrolment, retention, transition and completion of primary school education in Tigania Central Division, Meru County, Kenya. The study was informed by theory of exploitative child labor. The reviewed literature revealed that miraa growing, trade and use was rampant in many parts of the world where it formed a core source of livelihood for the people, though largely with adverse effects on children's participation in education. Descriptive survey design was employed. The study targeted 17 public primary schools in Tigania Central Division and thus the target population comprised of 17 head teachers, 105 teachers and 1,650 pupils of the sampled schools. Systemic sampling technique was used to select a sample size of 216 primary school pupils, 36 teachers and 12 head teachers who were randomly picked. Structured questionnaires were used to collect primary data from the study respondents. The study data was analyzed using descriptive statistics, specifically frequencies and percentages using Statistical Package for Social Sciences, with the study findings presented in tables. The study established that 80% of the head teachers, 62% of the teachers, 72% of the boys pupils and 77% of the girls did agree that pupils involved in miraa trade do not enroll in school and prefer going to harvest miraa to schooling, showing that miraa trade adversely affected the pupils' enrolment in primary school education. The study also established that 80% of the head teachers, 82% of the teachers, 69% of the boys pupils and 76% of the girls agreed that miraa trade was a major attraction to pupils at the expense of learning in school and that the pupils perceived miraa trade as a source of easy earning opportunity, showing that miraa trade adversely affected the pupils' retention in primary school education. The study established that 64% of the head teachers, 66% of the teachers, 77% of the boys pupils and 74% of the girls did agree that most of the pupils preferred to venture into miraa trade instead of moving on with their education to the next levels, showing that miraa trade adversely affected the pupils' transition in primary school education. The study established that 80% of the head teachers, 60% of the teachers, 54% of the boys pupils and 71% of the girls did agree that miraa trade contributes immensely to failure to complete primary education in the region, showing that miraa trade had a negative influence on the pupils' completion of primary school education. The study concluded that miraa trade had a negative influence on the pupils' enrolment, retention, transition and completion of primary school education in Tigania Central Division, Meru County, Kenya. The study thus recommended that there is need to have monitoring and supervision of the entire miraa trade activities so that it does not compromise the education system leading to poor quality of life in future for the school going boys and girls.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

In agricultural trade where Miraa farming falls, under-age boys and girls are often involved in the entire production process from harvesting, packaging, and selling of the farm produce. Consumption of Miraa and income from Miraa also affects school going boys and girls. However income from Miraa in most cases has both negative and positive effects. The involvement of these under-age boys and girls who are supposed to be in school in these activities leads to irregular school attendance resulting into sustained wastage.

Harvesting activities are generally carried out by adults while children attend classes. A report by Fair Trade USA (2010) estimated that hundreds of thousands of children under age of 18 work in farms harvesting tea, coffee, fruits, flowers and vegetables that support the multi-billion dollar agricultural industry in the United States. Before the age of 18 these children and teens work long hours, under very dangerous conditions, receiving very little pay, while they fail to attend school as they migrate alongside their parents for months (Human Rights Watch,2010). A similar situation was observed in India; Gardiner (2013) noted children are being used in the harvesting fields as a cheap source of labor and not getting any chance to attend school. This was further affirmed by Edmonds (2009) where he noted that in Ghana harvesting activities influence regularity of school attendance where children fail to attend school to assist their families in harvesting cocoa.

Parents are expected to attend to their children's need which sometimes is not the case because they spend lots of their time in the Miraa farms and chewing Miraa in social groups. This influences some of the boy's and girl's to stay away from school and go to chew Miraa with friends at the shopping centers. The major concern is the high population of children that will veer off the school route to emulate those involved in this trade hence addiction to serious substances which in the process leads to jeopardizing their own health and safety and creating difficulties for their families and the public at large. Miraa consumption is widely accepted among the Ameru community but has negative consequences to the academic, social, psychological and physical development of users (World Drug Report, 2005). In Yemen, Kalix and Khan (1994) noted family life is compromised because of Miraa consumption, dissipation of the family income and inappropriate behavior which in many cases leads to irregular school attendance (Elmi,1983). Miraa consumption is also predominantly found in Nigeria with family characteristics as a very important determining factor of children's educational attainment in Nigeria. By the time such children reach adulthood they are often damaged physically, emotionally, morally and intellectually and would have lost the opportunity for an education that would open up a better future and the amount of schooling children today determines the wage they command as adults of tomorrow (ILO, 1996; Ashagrie,1998)

It is an indisputable fact that the more time mothers spend in Miraa business, the more time is lost in nurturing their schooling children and hence leading to poor school attendance (Gatumu et al., 2012). The trend in the examination results is perhaps attributed to the fact that most of long serving Miraa businessmen involved their children in the Miraa business such as harvesting of Miraa, packaging of Miraa

and selling of Miraa and thus denying them time to attend school and to satisfy their basic or physiological needs (Waikenda, 2010).Chewing of Miraa also causes ill health (Anderson et al, 2007),psychiatric disorders (Warfa et al.2007)and socio-economic hardship for the families of mostly male consumers (Borelli and Perali,2004). Dhaifalaha and Santavy (2004). The young shoots of the Miraa shrub are harvested in the early hours of the day by young boys and girls who can climb and swing on the feeble Miraa branches and harvest edible twigs which are sold in markets by the late morning thus affecting the school attendance for the boy's and girl's who participated in the harvesting activity especially in the morning hours because sometimes these children find their way back to school in the afternoon.

As a cash crop it provides employment to many people; farmers, middle men, businessmen, and transporters. In terms of Miraa exports, on daily basis about 5 tones goes to Amsterdam, 7 tons to London and 20 tons to Somalia while over 40 tons is consumed in Kenya and within the region.(Maitai,1996). According to statistics given by Billow Kerrow, Mandera County Senator in his article in Daily Nation July 20th2013 approximately 50 vehicles ferrying Miraa leave the Meru region every morning, with more than a half of them heading to North Eastern. Each vehicle carries about two tons, valued at about Ksh. 5 Million. In North Eastern alone, Kerrow said they spend about Ksh. 100 Million daily on the stuff. In Nairobi and other parts of the country, the figure is even higher. Exports to United Kingdom (UK) alone earned approximately \$60 million annually for traders from Kenya. According to a survey done by the National Authority for the Campaign against Alcohol and Drug abuse (NACADA), North Eastern consumes more than 36 per cent of the production. Meru

consumes less than 10 per cent. This is a clear indication that Miraa trade is a huge business.

Today in Meru County, Khat is consumed by all societal groups regardless of age, sex, affluence, class, education and occupation. According to statistical trends the current use of Miraa in Kenya is 3.9 percent; it also varies by region of residence and gender. Like tobacco products, use of Miraa is largely a male dominated affair. In a study done in North Eastern region, 35.8 percent of the male respondents reported using Miraa. This was closely followed by coast at 12.8 percent. Miraa usage is marginal in Nyanza and Western Kenya. In Eastern region where the bulk of the Miraa comes from, only 9.4 percent reported being current users of the drug. It is also interesting to note that North Eastern region 7.6 percent has the highest proportion of female users of Miraa. Euphoria, alertness and central nervous system stimulation induced by cathinone, the main active constituent derived from khat chewing, makes this habit popular among large numbers of society. Miraa is economic main stay of Meru County and it is regarded as green gold especially in Meru County. Its economic advantages are undoubted fact but social ill should be addressed in equal measures.

In Tigania Central Division Miraa farming, harvesting, trade and Miraa income have influenced boy's and girl's participation in primary school education in the sense that under age children are the ones involved in harvesting of Miraa, pruning and packaging and also fetching banana leaves and ropes from banana fiber which is the material used for packaging. Since all these different stages involved in the process of dispatching Miraa have good payments, it creates job opportunities for these boy's

and girl's hence influencing them to drop out of school, stay idle and others becoming hard core criminals in the instances where Miraa is abused with other narcotic drugs. Despite numerous economic breakthroughs brought about by Miraa trade in Meru county many school drop outs, idleness and theft are reported due to abuse of Miraa just but to mention a few. To this effect it will be a challenge to the residents of Tigania Central Division to meet the Millennium Development Goals which should be achieved by the year 2030.

1.2 Statement of the problem

Miraa trade has numerous effects on school going children. It has both positive and negative impacts. In this regard therefore, this research sets out to assess the influence of Miraa trade on boys' and girls' enrolment, retention, transition and completion of both boys and girls in primary school education in Tigania Central Division, Meru County, Kenya. From the literature reviewed numerous studies have been carried out on the effects of Miraa trade on the livelihood of people in many divisions in Meru County but none had researched on influence of Miraa trade on boy's and girl's participation in primary school education in Tigania Central Division, Meru County, Kenya. Therefore, there was a research gap that exists and needed be filled.

1.3 Purpose of the study

The purpose of this study was to investigate the influence of Miraa trade on boys and girls participation in primary education in Tigania Central Division, Meru County, Kenya.

1.4 Objectives of the study

- i) To determine the influence of Miraa trade on boys and girls enrolment in primary school education in Tigania Central Division, Meru County, Kenya.
- ii) To establish the influence of Miraa trade on boys and girls retention in primary school education in Tigania Central Division, Meru County, Kenya.
- iii) To determine the influence of Miraa trade on boys and girls transition in primary school education in Tigania central Division, Meru county, Kenya.
- iv) To establish the influence of Miraa trade on boys and girls completion rate in primary school education in Tigania central Division, Meru county, Kenya.

1.5 Research questions

The study sought to answer the following questions;

- i) How does Miraa trade influence enrolment of boys and girls in primary school education in Tigania Central Division, Meru County, Kenya?
- ii) How does Miraa trade influence retention of boys and girls in primary school education in Tigania Central Division, Meru County, Kenya?

iii) How does Miraa trade influence transition of boys and girls in primary school education in Tigania Central Division, Meru County, Kenya?

iv) How does Miraa trade influence completion rate of boys and girls in primary school education in Tigania Central Division, Meru County, Kenya?

1.6 Significance of the study

The findings of this study may be of great significance to various groups beginning with the ministry of education which needs to know the future of education in the regions where learner's participation in education is influenced by trade in Miraa. Meru county government is the other beneficiary because it would be able to regulate Miraa trade so that social ills are reduced as the government is the custodian of its citizens. The study findings may also benefit learners, teachers, parents, stake holders and education officers who would gain by understanding the negative effects of Miraa trade on participation in primary school education by their children and the Government of Kenya which even went ahead to Gazette Miraa as a cash crop. The non-governmental organizations, policy makers and scholars also may benefit from the study recommendations.

1.7 Limitations of the study

The study into the influence of Miraa trade on boys and girls participation in primary school education was relatively new and hence little information on the subject might could be accessed. Lack of up to date data at the education offices and respondents lack of commitment to answer my questionnaires.

1.8 Delimitations of the study

The researcher sensitized the respondents early enough by organizing with the head teachers on the appropriate time and date for conducting the questionnaires. The researcher also moved from school to school to collect the data by myself.

1.9 Assumptions of the study

The study assumed that Miraa was the main economic activity in Meru and that most parents were Miraa farmers.

The study also assumed that pupils in primary school were engaged in Miraa business.

1.10 Definition of terms

Miraa trade refers to an activity based on terms of buying and selling of Miraa with the intent to make profit.

School attendance refers to a measure of the number of children who attend school and the amount of time they are present.

Harvesting of Miraa refers to the process of picking mature / ready Miraa from the Miraa farms.

Selling of Miraa refers to an offer to exchange money or an item of value for Miraa in the market or farm.

Income from Miraa refers to money generated by an entity or individual within a specified time frame, which is generally expressed in monetary terms.

Consumption of Miraa refers to eating or taking in the edible twigs from a Miraa plant.

Child labor is work such as trading in Miraa, herding, milking, harvesting crops, selling, doing household chores, collecting firewood which undermines the rights of the child of school attending age, which affect the academic performance at national examinations.

1.11 Organization of the study

The project was been divided into five chapters. Chapter one was the introduction chapter which presented the background to the study, statement of the problem, objectives, research questions and significance. Chapter two presented literature review where both empirical and theoretical literature is presented. Chapter three presented the research methodology of this study. It contained the research design, population, sample and sampling procedures, research instruments, instrument validity, instrument reliability, data collection procedures and data analysis techniques. Chapter four contained the data analysis, interpretation and interpretation of findings while chapter five presented the summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter dealt with both theoretical and empirical literature related to Miraa trade and its influence on boys and girls participation in education in primary schools. To understand these factors, relevant theoretical underpinnings and empirical studies will be reviewed. The chapter will review the independent variables and dependent variable. It will also identify knowledge gaps that are as a result of analyzing the theoretical and empirical framework.

2.2 Miraa trade and boys' and girls' participation in primary schools

Miraa is a plant grown in the countries around the Red sea and on the eastern coast of Africa. Its twigs are munched by people for its stimulant effect. Countries that grow miraa include Kenya, Ethiopia, Madagascar, Somalia, Sudan, and South Africa. Unlike before when Miraa was consumed by people from the locality where its grown, today due to improved communication network, distribution of Miraa is going far and wide across the globe (Rampes and Cox, 2003)

According to Carrier (2008), Miraa is a distinct cash crop, which attracts very high profits to farmers as it is grown for the local market as well as for international market. Miraa being a cash crop provides employment to many people who are either involved in security, harvesting, transportation, packaging and even selling (Carrier, 2008). According to USAID (2011), Miraa contributed 13.7 and 54 percent of the cumulative and value of the National export respectively in kenya with a growth rate

of 9.7 percent value within the period 2006 to 2010. The overall export value was (\$ 211.5 Million). The main export destination was Somalia with new market opportunity across the world. Miraa is packaged and traded in bundles of varying sizes. Miraa is packaged in small bundles which are put together to make big bundles. It is wrapped in banana leaves in order to remain fresh. It is then wrapped into bundles that dictate the amount to sell each bundle.

In Ethiopia, a number of school children are involved in harvesting, sorting, packing, transporting, loading and unloading khat (UN-Emergencies Unit for Ethiopia, 2004). According to Karega (2013), primary school boys in Meru County Kenya are engaged in khat picking, khat preparation and transportation, working in khat kiosks, selling khat in shops, providing manual labour in khat farms and marketing, and hawking khat in towns. School children miss classes to work for miraa traders from 6 to 9 a.m. and then hang around for the rest of the day chewing Khat (Kinoti, 2007). The Meru North District Strategic Plan (2005-2010) revealed that the labour force in the region consisted 49.7 per cent of the total population and was composed mainly of school going boys who engaged in khat small-scale and micro-enterprises resulting to low levels of school attendance rates. In 2012, the Education Permanent Secretary was concerned over the alarming rate at which boys in the region were missing school to work as casual labourers in miraa farms, which gave them easy money (Sum, 2013).

According to Feyisa and Aune (2005) a large number of young people are involved in transporting and unloading of khat. Carrier (2007) asserts that in Nyambene hills different means are used to transport khat depending on the destination. Young school going age children (pickers) working in Igembe carry bundles from miraa farms to

distribution points as part of their job which earns them money making them to miss school and have no time to focus on their studies. Indeed, not just young pickers but also many farmers trek each morning into towns with “bundas” (bundles of packed miraa) balanced on their heads (Carrier, 2007).

The habit of chewing khat is highly prevalent in East Africa and South-western Arabian Peninsula. The fresh leaves and twigs of the khat shrub have a stimulating effect when chewed. Khat consumption has substantially increased in decades. This is reflected in the recent issue of the World Drug Report (2001) which reported an increase of khat chewing in five countries. Studies by Patel (2008), amongst the Somali migrants in Britain, point out chewing khat as one of the draw backs to education of the youth. When the youth meet to chew khat, they end up taking up a significant portion of their study time chatting as they chew khat. Gebissa (2008), notes child labour as yet another social problem prompted by khat growing in Kenya around Mount Kenya region and its environs.

According to Gebissa (2004), most of the people who chew khat are young people, school going children and farmers in khat growing areas. According to Reda, Ayalu, Asmamaw and Biadgilign (2012) about 28.5 per cent of females and 71.5 per cent of male students in Ethiopia are involved in chewing khat. In Ethiopia, students say that they are using khat to “increase” their concentration levels, examination performance and attention span (Reda, Ayalu, Asmamaw & Biadgilign, 2012). In Saudi Arabia students who chew khat are lazy, sleep a lot and many of them suffer from insomnia. Most of them are less effective at their school work (Ageely, 2009). Maithya (2009) and Sternberg (2003) have reported that students who use khat lose their

concentration span, interest in school work leading to absenteeism and eventual dropping out of school. An academic research carried out by Mohamed, Jibril and Ibrahim (2012), found out some effects of khat on education of children in Somali. According to their findings, khat users spend reasonable amount of time searching for the substance and using it other than concentrating on their studies.

Bridgeland (2006) and ILO (2007) revealed that child-labour is one of the main causes of school dropout. Most of the students who drop out of school worldwide cite jobs to support their parents and siblings as one of the causes of their school dropout. While education is seen as a cornerstone for overcoming poverty and inequality, poverty keeps many children from gaining access to education. UNESCO (2002) observed that, poverty cannot be overcome without specific, immediate and sustained attention to enhancing access to education. Poverty is noted to cause inability to meet direct costs for schooling such as learning materials, food and transport to and from school as well as school uniform.

The situation in contemporary developing countries where child labour is still a serious problem is different from pre-industrial periods in developed nations. Various empirical studies that describes situations in Africa in particular (Cockburn, 2001; UNICEF, 2005) and South Africa (Toor, 2001) where child labour is most concentrated have argued that poverty is the primary reason why children abandon school for work. Several studies done in Malawi, Ghana, Zambia, Ethiopia and Tanzania have reviewed that in many African countries, children are not able to participate in school effectively because they cannot afford the costs (Kelly, 1999).

This bars them from enrolling in schools. Additionally, it contributes to high dropout rates due to massive child labour.

Child labour is generally interpreted as all cases in which children are exposed to harm at work whether or not children are less than 14 years old (UNICEF, 2005). Child labour is a general term covering the entire spectrum of work and related tasks performed by children. Child labour is not a recent phenomenon. It has existed over the centuries not only in the impoverished areas of developing countries, but also in developed countries until the beginning of 20th century (Cunningham & Viazzo, 1996). The negative aspects of child labour were first spot lighted during industrialization in Great Britain when cheap child labour in exploitative factory working conditions became apparent; and it's during this period when the term "child labour" was first coined (UNICEF, 2005).

According to a study done in Eastern Kenya, it was noted that leaders in Mbeere raised concern over khat farming which was undermining the development of boy child in the area. The situation in the public schools was wanting and that some classes had no boys, while in others, the ratio of boys to girls was 1:12. It was noted that, school boys were being caught working in khat fields at the expense of schooling which was destroying the social fabric as well as the life of the boy child. The study further noted that the regions' administrators warned parents who did not take their sons to school of arrest noting that primary education was free and secondary education had been subsidized so that all children could go to school (Sikiru & Babu, 2009).

Khat chewing has become a common habit in Kenya which occurs in groups in social settings. This attracts young people to the habit and peer influence and fear of being labeled a non-conformist plays a vital role in the acquisition of the habit (NCST, 1996; Wanja, 2010). Early studies have shown that chewing is predominantly practiced by men (Kennedy, Teague & Rokaw, 1983). Khat chewers tend to believe that chewing will improve performance in learning hence; learners who use it believe that it will improve understanding and insight (Maithya, 2009). Khat is also believed to improve alertness and to increase work capacity. Workers on nightshifts believe that khat will make them stay awake and delay fatigue. Studies among the Somali commonly found that more men habitually chewed khat than women with 75% of men chewing miraa regularly compared with only 7-10% of the women (Alem et., al 1999). This is consistent with Kangeta Division where males including boys of school going age dominate in chewing khat which affect their school attendance. They idle a lot while chewing khat in their social gatherings therefore remedial measures should be taken to curb the habit before the whole generation is lost (Agence, 2010).

In Mbeere District, youths chew khat unaware of its dangers. Waweru (2012) reported that, the government should put regulatory measures to control participation and use of khat by those less than 18 years, so that the boy-child can remain in school. A study by Wanja (2010) showed that khat abuse exposes the user to various dangers such as students having behavior problems like stress, fatigue, anxiety, bullying and even committing murder. Khat chewing has formed a sub-culture within the schools in Igembe South District with both male teachers and school boys being habitual chewers. It is also noted that khat chewing has become a problem of significant proportion to social and educational importance (Kyalo, 2010). Because of its social

acceptability in the region and its euphoria effects, it seems to play a dominant role in primary school boys' dropout by predisposing them to unstable and abnormal behaviour that may cause them to drop out of school.

A report by NACADA (2008) observed that drugs abuse was rampant among Kenya students. This is a big challenge to the Kenyan society and immediate attention is needed. Drug abuse attacks the brain which is the centre of all human functions (Maithya, 2009; Sternberg, 2003). Students who use khat lose the concentration span; lose interest in school work leading to absenteeism and eventual dropping out of school (Kyalo, 2010). Khat use affect the decision-making process of the students, creative thinking and the development of necessary life and social skills stagnates. A study by Louw (2001) showed that khat use interferes with the awareness of an individual's unique potential and interest thus affecting their career development. Further since most students are in their adolescent stage of development they lose their sense of identity (Kyalo, 2010). This is noted as relevant to the study since in the area, people spend a lot of time chewing khat. This is at the expense of development and because most are not educated, they lack the skills to better use the quick money they earn from khat production. This has eventually led to increased poverty levels in contrast to the expected economic boom due to income from khat. It is this poverty that partly makes the primary school boys drop out of school to work in khat farms for money (Meru North District Strategic Plan, 2005-2010).

2.3 Influence of Miraa trade on boys' and girls' enrolment in primary schools

Trade is very significant in the entire process of production efficiency via specialization, exploitation of economies of scale, and technology transfer, as well as

enriched competition. Globalization helps markets to compete by not only offering new opportunities for sale i.e. exports, but also making available to producers the widest variety of inputs at the maximum quality and lowest prices. According to the World Bank, in the 1990's per capita real income grew more than three times faster for those developing countries that lowered barriers 5.0 percent per annum than for other developing countries (1.4 percent per annum). And while Globalization creates honesty to trade and exposes countries to developments in other economies, including the risk of trade and financial contagion, it also allows for a faster recovery (Gamberoni et al., 2010): A budget that is more exposed is also more flexible because it is less constrained by the limits of local need. Germany, one of major world exporters, is a case in point. In the first quarter of 2009 the economy contracted by 3.4 percent, but by the second quarter of 2010 it was expanding by 2.2 percent.

Oxfam thinks fair trade would be a much more effective poverty reduction mechanism than aid. Even a small increase in developing countries share of world export markets would several times outweigh what they receive in aid (Oxfam 2014.) Oxfam confirms that business models push cost and risk down the supply chain to maximize profit for shareholders. When it comes to trade for agricultural based products, Oxfam warns that, owing to their reliance by poor families in developing countries as their means of livelihood, there is need for governments of such countries to ensure that parents do not fail to enroll their children in school, under the guise of supporting the family to cultivate and sell the produce.

World Bank economists show that the welfare gains from global agricultural reform would shrink by three- quarters, if as little as 2 percent of agricultural tariffs in

developed countries (and 4 percent in developing countries) are classified as sensitive, and are thereby subject to a 15 percent tariff cut. The World Bank (2004) argues that trade tends to increase the availability of wage jobs for women in developing countries; particularly in export sectors, but also acknowledges that certain factors may impede women's ability to benefit from trade expansion. Some of these factors may be especially prevalent among female farmers in sub-Saharan Africa e.g. discrimination, lower skills and gender inequalities in access to resources.

According to a study on the socio-economic effects of Khat chewing in northeastern Kenya, leaders from the northeastern frontier raised concern over poor enrollment to primary schools and particularly among the boy child owing to their involvement in khat business and consumption in the area (Aden et al., 2006). The situation in public schools in Meru and its environs was wanting and some nursery classes had no boys enrolled, while in others, the ratio of boys to girls was 1:12 (Waweru, 2012). It was noted that, school boys were being caught working in khat fields at the expense of schooling which was destroying the social fabric as well as the life of the boy child. Waweru (2012) further noted that the regions' administrators warned parents who did not enroll their sons to school of arrest noting that primary education was free and secondary education had been subsidized so that all children could go to school.

In Somalia, a significant number of school eligible children fail to be enrolled in primary schools owing to their involvement from a very early age in harvesting, sorting, packing, transporting, loading and unloading khat. Given that the Miraa trade is a lifeline for some families in Somalia, this has the consequent of making some children not to be enrolled in schools as their families consider it more beneficial for

the children to support their parents and kin in furthering the khat business (UN-Emergencies Unit for Somalia, 2012). According to Karega (2013), primary school boys in Meru County in Kenya are engaged in khat picking, khat preparation and transportation, working in khat kiosks, selling khat in shops, providing manual labour in khat farms and marketing, and hawking khat in towns which negatively impacts their enrolment to schools for education. Similar sentiments were shared in a study in the region that reported that the region experienced lower enrolment rates for boys in primary schools compared with neighbouring counties and this was attributed to the boy child's early involvement in Khat farming and trade (Mwangi, 2015).

Miraa trade has negatively influenced both boys and girls in acquisition of education by providing an alternative to schooling where these boys indulge in Miraa peddling and selling both in the farm and in the market while girls are forced to stay at home to cook or look after their siblings while their parents engage in Miraa business. These young boys and girls fail to go to school and enrolment rate goes down day in day out with nothing much to be done because the immediate gains from Miraa trade seem satisfactory. By managing to earn so much money within a short period of time these learners opt for Miraa trade at the expense of schooling hence dropout rate rises as more children are influenced by their peers who exhibit better living standards compared to their peers in school.

2.4 Influence of Miraa trade on boys' and girls' retention in primary schools

Due to desperate need for higher wages, parents allow their children to work with them in plantations so that they can plant or harvest more crops and hence receive a higher rate of pay per hour worked, Oxfam America (2004). Where employers are

aware that children are working in this way, they are required by law to pay the children for this work. However, more often than not these children are not paid at all. As much as agricultural work may be beneficial by generating income and improving nutrition, children don't access education but instead go and either plant or harvest then the work becomes harmful because it is denying them education (Moyi, 2013)

In July 2010 it was reported that the US Department of Labor had included cotton from part of Europe on the list of commodities produced using children as laborers with the US Embassy citing that there was credible evidence of the school children assisting their parents in harvesting cotton, but this formal action met with protest that Tajikistan's effort to end the practice were not being recognized (Radio Free Europe / Radio Liberty.2010).

Children are believed to comprise a quarter of all agricultural workers in Kenya and particularly who wrap Miraa. In 1993 study in Malawi established that the majority of children living in Tobacco estates were working full or part time (78 percent of 10 to 14 years olds and 55 percent of 7 to 9 years old). Issues surrounding Miraa have created an interesting and important dissertation in the producing countries, particularly in Ethiopia (Gebissa 2004; Halu, 2005). No law exists in the country against Miraa (Gebissa, 2008). It is the country's social consciousness that emphasizes the negative aspects of the plant.

In Kenya, children too are engaged in various farming activities. (A study by Joshua 2009) The young shoots of the Miraa shrub are harvested in the early hours of the day and sold in markets by the late morning (Dhaifalaha and santavyb, 2004.) Generally, harvesting is possible 2-3 times a year from a well established rain- fed matured

Miraa plant depending on the age, management practice and the fertility of the soil. Child labor occurs not only in plantations but also on small scale farms.

Generally Miraa is picked at different times of the day depending on its destination but mostly most of it is harvested early in the morning. This early morning, children wake up and head for Miraa farms where they harvest Miraa and by mid-morning they end up making more money compared to those in white collar jobs. Still in the course of the day and late afternoon Miraa headed for far away distances by road especially northern Kenya, Somalia, Sudan and the Coast is harvested since it's transported at night. Therefore the business of harvesting is continuous hence attracting more money to children which influences their participation in primary education.

In Tigania central division and elsewhere where Miraa is grown young boy's and girl's retention rate is low because they are the ones who are deployed to climb up Miraa trees and harvest the edible twigs which in most cases hang on feeble branches that are likely to break hence instead of engaging adults who are very heavy and can break the branches they engage young children who can reach for long branches and swing along without breaking these branches which keep on reproducing the preferred edible twigs. Breaking of these branches means damage to the plant. Children mostly climb these trees bare foot which is a requirement by farmers so that one does not damage the shoots.

2.5 Influence of Miraa trade on boys and girls transition rate in primary schools

The young shoots of the Miraa shrub are harvested in the early hours of the day and sold in markets by the late morning (Dhaifalaha & Santavy, 2004). In some instances, market disputes over sales have led to children selling Miraa being killed (U.S Dept of State, 2006).

In Bidii-making (Tamil Nadu) the younger children said they could devote more time to studies if they did not need to do packing and selling of fish. But at the same time, they said, it was not possible to give up fishing; a minimum specified work, needing two hours each day, had to be done, failing which they were punished. A few of them, meanwhile, were struggling to prove themselves to be good students so that they would also be entitled to a scholarship (like some older children) from the welfare fund (Morova, 2001).

In the prawn-shelling sector in central Africa, children worked in the shed (Warahs) and at home. Contractors preferred that the children worked at the Warah since it was easier for them to control the children, push them into working faster and monitor to ensure there is no stealing. For home based work, children could pack the prawns from the contractor and brought them home. Starting from an early age, the children worked long hours, making it difficult to attend school. They reached the Warahs often at 4 am and continued working until 11.30 pm. Children worked similar hours at home because there are no storage facilities and delay would mean that the highly perishable product would spoil. Children said they could be severely beaten for such a mistake. During Miraa selling, there are many disputes that may be caused by

differences in ideas of the sellers or farmers. This puts the children into an awkward position and the possibility of being injured in the process of the fights is damn high.

In Tigania Central Division some children have inherited pieces of land planted with Miraa from their grandparents and others from their parents and during evenings they pick Miraa for sale in the evenings and when ready for harvesting and go to sell at tea joints where adults socialize and in the process this kind of exposure brings with it decay of morals and deviation from school line. It is in this respect that you find boy's and girl's who are lured into these kind of activities end up breaking the continuity of their education at different stages of their primary school education especially at the beginning of the school year where learners are subjected to repetition due to poor performance their teachers.

According to an article on Standard Newspaper (2014, June 6th), leaders in Meru County had raised concern over the poor boys' transition rates in both primary and secondary schools in the county owing to engagement in khat farming and trade. The leaders called on parents to be responsible in ensuring that their children attended schools all through. According to Nacada, the situation in public schools in areas of North Imenti in particular and other places in Meru in general was worrying in terms of low pupils transition rates between primary to secondary schools as well as within the primary and within the secondary schools. The agency argued that there was need for concerted efforts from education stakeholders to revert the situation (Nacada, 2011). In an empirical study done in Miraa growing areas in Ethiopia, it was noted that, school boys were being caught working in khat fields at the expense of schooling which was destroying the social fabric as well as the life of the boy child. The study

further noted that the regions' administrators warned parents who did not encourage their sons to keep schooling of dire consequences (Alem et al., 1999).

According to a study done in Somalia, a significant number of school children are involved in various Miraa related activities including harvesting, sorting, packing, transporting, loading and unloading khat. This means that majority skips school or drop out altogether which implies low transition rates in both lower and upper schools in the country (Mohamed, 2016). Similar observations were made in a study done in Kenya which noted that primary school boys in Khat growing regions in the country are engaged in khat picking, khat preparation and transportation, working in khat kiosks, selling khat in shops, providing manual labour in khat farms and marketing, and hawking khat in towns. As a result, transition rates in both primary and secondary schools are adversely affected as school going children in these areas fail to continue with their studies in favour of working and trading in miraa related ventures (Karega, 2013).

Miraa trade has negatively influenced both boys and girls transition rates in schools by providing an alternative to schooling where these boys indulge in Miraa peddling and selling both in the farm and in the market while girls are forced to stay at home to cook or look after their siblings while their parents engage in Miraa business. These young boys and girls fail to go to school and transition rate goes down day in day out with nothing much to be done because the immediate gains from Miraa trade seem satisfactory. By managing to earn so much money within a short period of time these learners opt for Miraa trade at the expense of schooling hence dropout rate rises as

more children are influenced by their peers who exhibit better living standards compared to their peers in school (Aden et al., 2006).

According to Feyisa and Aune (2005) a large number of young students in khat growing regions fail to proceed with their education as they are involved in transporting and trading of khat. Young school going age children (pickers) working in Igembe carry bundles from miraa farms to distribution points as part of their job which earns them money making them to discontinue with schooling as they have no time to focus on their studies. Indeed, not just young learners but also many high school learners engage in Miraa trade activities which could in part explain the reported low transition rates in the area (Muriithi, 2009).

2.6 Influence of Miraa trade on boys' and girls' completion of primary schools

Women involvement in Miraa trade and consumption sessions were less common until some years ago when the habit of Miraa chewing increased rapidly causing serious problems for the family and the socioeconomic situation (Khalil,1998). Students and a number of staff members in higher education institutions and high schools are using Miraa to “increase” their concentration levels and attention span (Lemessa, 2001). Excessive consumption of Miraa is said to induce symptoms of hallucination or illusion, intoxication and short energy boosting effect. Extended use is also reported to cause emaciation and this may be as a result of suppressed appetite, and impotence.

Consumption rates are much higher among northern Somalis in the Horn of Africa than among those from the south (Cassanelli, 1986) and this is likely to be reproduced

in the Diaspora communities also. Consumption is also complex in relation to Ethiopians and Kenyans. Khat consumption has spread across ethnic, social and religious boundaries in both countries, but is still closely linked to specific segments of the population. In Ethiopia, khat is very much seen as a Muslim habit. Many Christians consequently disapprove of it, even presenting it as a social pollutant (Gebissa, 2004 ;)

Ayana and Mekonen, 2004; Adugna et al 1994). In Kenya, khat is associated with Muslims from the north and the coast and with the Ameru, an ethnic group occupying the heart land of khat cultivation in highland eastern Kenya. Khat has also in recent years become popular in Kenya with youth in urban centers (Carrer, 2007). Parents could chew two bundles in a session, and the majority chewed between 6p.m. and midnight, the average session lasting six hours a situation which would make them forget to prepare their children for class

In Ethiopia Randall (2011) Miraa chewing often plays a dominant role in celebrations, meetings, marriages and other gatherings. Miraa use has even been prevalent in the Somali military. It has been issued to soldiers in their daily rations with the intention of inhibiting their need for food and sleep as well as increasing their aggression. (1) The amount of Miraa chewed per user is 100 to 200g of leaves and stems over 3 to 4 hours. The tender leaves and stems, which lose their potency 1 day after harvest, are chewed and the juice is swallowed (Osol, 2009) Miraa has a sweet taste and an astringent action. Large amounts of liquids are consumed while chewing because of the dryness induced by the plant (Morrish, 2009).

Several studies across the globe have reported Miraa as a harmful activity on health. Many different compounds are found in Miraa including alkaloids, terpenoids, flavonoids, sterols, glycosides, tannins, amino acids, vitamins and minerals. The major pharmacological and toxic effect comes from the phenyl alkylamines and the cathedulins. The effects of Miraa include severe gastro-intestinal system complications and the nervous system disorders and also affect cardiovascular, respiratory, endocrine and genital-urinary systems. The effects on the nervous system resemble those of amphetamine with differences being quantitative. The main toxic effects include increased blood pressure, tachycardia, insomnia, anorexia, constipation, general malaise, irritability, migraine and impaired sexual potency in men (Wabe and Mohamed, 2012)

In Tigania Central Division Miraa trade has brought dire consequences to boy's and girl's who are involved in Miraa trade directly or indirectly including those who chew it. Firstly Miraa chewing leads to a state of sleeplessness and all night the user experiences illusions and fantasizes issues. During class time these children sleep in class hence conflict between them and their teachers. Consumption of Miraa interferes with one's concentration in class since it brings along different feelings depending on the mindset of the user. It might bring with it feelings of despair, hope, wealth, power, prostitution, courage and even insecurity depending on the variety consumed and one's mood. Therefore boy's and girl's who consume Miraa are not an exception in these experiences. This influences their education negatively hence many end up playing truancy and this makes it hard for them to complete their primary school education by not doing K.C.P.E examination.

2.6 Summary of reviewed literature

Investing in people's education improves a country's general welfare, economic growth and poverty reduction (Kithao, 2015). Education has immense impact on society. It is a great equalizer if all children have equal opportunity to take advantage of it (Patel et al., 2005). It trains the mind to think and make correct decisions (Sikiru & Babu, 2009). Through it, knowledge and information are received and spread throughout the society, and in order to achieve the United Nations Sustainable Development Goal on Universal Basic Education (UBE) by 2030, governments particularly in developing countries must allocate enough money for public provision of education (Cohn & Johnson, 2006). Education is essential for enhancing a country's competitiveness in the global market (Aden et al., 2006). However, in Kenya, and particularly in miraa growing regions, education has been characterized by declining enrolment, retention, transition and low completion rates.

The literature reviewed has established that Miraa trade negatively impact on the boys and girls participation in primary school education (Save the Child, 2011; Bird and Higgins, 2009; Wairagu, 2007 and Rodriguez and Sanchez, 2009) among others. It is evident from the reviewed studies that in most of the regions where Miraa is grown. The literature further showed the different effects of Miraa trade on both boys and girls participation in primary school education. For instance Akresh and De Walque (2008) established that school enrolment, retention, transition and completion rate for boys are more affected than girls.

In addition, the reviewed literature shows that primary school children in different countries in the world are highly engaged in miraa business activities such as; picking,

packing, transporting, buying, selling and providing cheap labour in miraa farms. The literature review further proves that engagement of school children in miraa business activities results to low enrolment in schools, low school attendance rate, lack of time for studies, low concentration in class and low transition and completion rates (Karega, 2013). Moreover, the reviewed literature shows that more boys than girls are involved in the trade and their education is more affected by the trade than that of girls (Kinoti, 2007). The reviewed literature also shows that as primary school children participate in miraa trade activities, chewing miraa becomes part and parcel of their life style. They chew khat because they believe it improves their attention, flow of ideas and performance in examinations (Carrier, 2005). However a number of the reviewed studies revealed that chewing khat results to low concentration levels in class and lack of adequate time to concentrate on school work (Carrier, 2005).

Indulgence in illicit and licit drugs by the youth has become a major problem among the youths worldwide (Hassan et al., 2017). Studies in childhood drug use conducted in various settings reveal that, uses of drugs significantly contribute to delinquency among the youth (Kithao, 2015). There is need therefore to understand the influence of miraa trade on the education of the primary school pupils and then develop intervention strategies to control any adverse influence noted. This study was based on the informed opinion that awareness as an aim has a directional or vector structure; that is there is a movement towards a goal, which springs from impulse directed towards an outcome. Awareness is therefore the pivotal point of addressing any future intervention strategies for the school going pupils. There is no better stage for these interventions than an evaluation of the influence of miraa trade on pupils' participation in primary school education in Kenya.

However, the reviewed literature does not clearly indicate if involvement of pupils in miraa trade in miraa growing counties in Kenya has any influence on their participation in primary school education. Tigania central division in Meru County is a huge producer of miraa. Given the lack of studies evaluating the influence of miraa trade on pupils' participation in schooling, there was need to investigate the influence of the miraa trade on boys' and girls' participation in primary school education in the area, which was the focus of this study.

2.7 Theoretical framework

The study was guided by Theory of Exploitative Child Labor (Kenneth and Swinnerton) the theory is based on two key features; first, parents have imperfect information about whether employment opportunities available to their children are exploitative or not. Second, firms choose whether or not to exploit their child workers. In early policy- oriented discussion of child labor, it was often assumed that all work by children is necessarily harmful. By the mid-1990s, it became more commonly understood that some work could be beneficial to children, since it could allow them to achieve at least a subsistence level of consumption or to acquire skills. In this spirit, the term exploitative child labor generally came to distinguish certain work that was clearly harmful to the children involved (Organization for economic Cooperation and Development, 1996, Swinnerton, 1997).

Amab K. Basu and Nancy H. Chau (2003, 2004) develop a model in which the only way for rural parents to smooth consumption across lean and harvest seasons is through an interlink credit-labor contract (bonded labor). They show that if bonded child labor occurs in equilibrium, then households would have been better had parents

made a commitment to keep their children out of work. An effective commitment would have led to much higher parental wages. On this basis of this implication for household welfare, Basu and Chan classify bonded child labor as exploitative. Time spent working makes it less likely that children are able to draw educational benefit from their time to work both in and outside the home undermines their rights to education as well as to play and participate in family and community work.

This approach is relevant to the current study because although households in Tigania Central Division may be motivated by expected future returns to educate their children, lack of know how may prevent them from enrolling or withdrawing their children in primary schools. This lack of knowhow is mainly attributed to the frequent flow of cash from either Miraa harvesting or sale which meets their immediate needs hence they compromise on education. This habit has led to assumption of high life style and extravagant spending. Due to this lack of knowhow households have opted for Miraa trade and ignored acquisition of formal education. At the end, they end up employing the educated class to manage their wealth who eventually end up misappropriating and embezzling their funds.

2.8 Conceptual framework

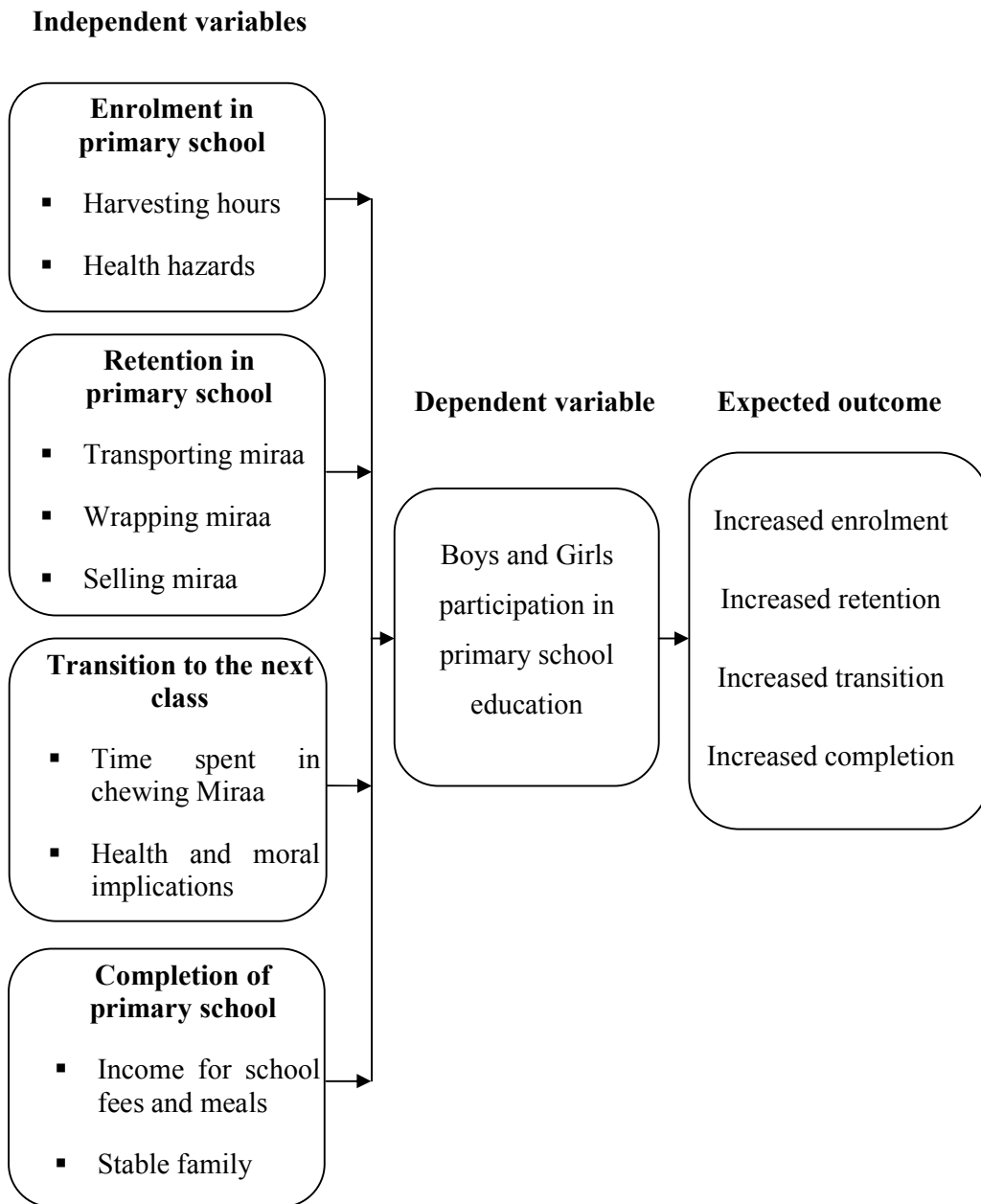


Figure 2.1 Influence of miraa trade on boys and girls participation in primary school education in Tigania Central Division, Meru County, Kenya

A conceptual frame work may be defined as the abstract logical structure of meaning that guide the development of the study (Mugenda and Mugenda, 2003). The conceptual framework is a diagrammatic representation of the relationship between the study variables. The conceptual framework presents a visual overview of the study's independent variable(s) and the dependent variable and thus helps to provide a quick glimpse of the study's key variables (Mugenda & Mugenda, 2009). The dependent variable in this study was boys' and girls' participation in primary education. Boys' and girls' participation in primary education is influenced by several factors that will constitute the independent variables. Based on the literature review, the independent variables likely to influence boys' and girls' participation in primary education included; enrolment, attendance, transition and completion of primary education and trade in Miraa in the area.

The literature showed that primary school pupils miss school in order to pick, pack and transport miraa for traders. They also miss school or some lessons to participate in buying and selling miraa because the business brings very good earnings to them. This results to high levels of absenteeism and lack of time to focus on their studies. The children also chew miraa. Involvement of pupils in picking, packing and transporting miraa from miraa farms to business centres, participation of pupils in buying and selling miraa and involvement of pupils in chewing miraa are all attributes of miraa trade that could lead low pupils participation in primary school education. This could also result to very low levels of concentration in class during the process of instruction and lack of time to focus on their studies. As such, is it apparent that the results of engagement in miraa trade activities by boys and girls in miraa growing regions are their low participation in educational/learning activities.

There is no doubt that education is pivotal to a country's sustainable development. With this consideration this research project sought to investigate the influence of miraa trade on boys and girls participation in primary school education in Tigania Central Division, Meru County, Kenya. Specifically, the focus was on the influence of miraa trade on boys and girls enrolment, retention, transition and completion rates in primary school education in the said region. It is hoped that the findings of this study would illuminate the continued debate on the influence of illicit and licit drugs on children's education in the country.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was adopted for the study. This chapter focused on the study design, target population, sample and sampling procedures, research instruments, instrument validity, instrument reliability, data collection procedures and data analysis techniques.

3.2 Study design

The study used a descriptive survey design. According to Mugenda and Mugenda (2008) descriptive survey research design is a method which enables the researcher to summarize and organize data in an effective and meaningful way.

The design was chosen for this study as it helped to describe the state of affairs as they exist without manipulation of variables. It also permitted the researcher to obtain useful data in a relatively short period of time, and it was used to seek public opinion regarding issues affecting society. The study design also provided an accurate account of the characteristics, for example behavior, opinions, abilities, beliefs and knowledge of a particular individual. This study also investigated and described the nature of the prevailing conditions pertaining to the teacher's knowledge of situation or group. In this case it was adopted to find out the influence of Miraa trade on boy's and girl's participation in primary education in Tigania Central Division, Meru County, Kenya.

3.3 Target population

According to Kothari (2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. Mugenda and Mugenda (2008) explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. This definition assumes that the population is not homogenous. The target population of this study was 17 public primary schools in Tigania Central Division, 17 head teachers of the sampled schools, 105 teachers and 1,650 pupils of the sampled schools (D.E.O Tigania Central Division, 2015)

3.4 Sampling procedure and sample size

According to Orodho and Kombo (2002) sampling is the process of collecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group. Nasubuga (2000) argues that no specific rules on how to obtain an adequate sample have been formulated. He suggests that in a homogeneous situation a small sample would be required while a heterogeneous variable situation a large sample is required. The study was sample 17 schools in Tigania central Division. From the sampled schools, the study used purposive sampling to select the twelve head teachers to participate in the study. This was because the technique produces estimates of overall population parameters with great precision (Nasubuga, 2006). To sample the pupils, each of the 17 sampled schools was stratified into classes, whereby the study considered students from lower primary to upper primary. The sample size of the study was thus 12 head teachers, 36 teachers and 216 pupils.

3.5 Research instruments

The primary data for the study was obtained using questionnaires. A questionnaire is a form that features a set of questions designed to gather information from respondents and thereby accomplish the researchers' objectives (Grewal and Levy, 2009). The study employed structured questionnaire as instruments of data collection. Questionnaires are appropriate because they are completely anonymous. In addition, it is a relatively economical method in cost and time, of soliciting data from a large number of people and the time for checking on facts and pondering on questions can also be taken by respondents, which tend to lead to more accurate information (Williman, 2005). Moreover, questionnaires are easy to administer due to alternative answers provided to the respondents and also enhances easy analysis. The questionnaire was in two parts. Part A is demographic information and part B is related to activities of Miraa trade that were assumed to affect the boy's and girl's regular school attendance.

This study also used interview schedule as a method of data collection. Interview was used in collecting data from the parents and teachers. The reason for using interview was that they were easy to administer since questions are already prepared. The investigator followed a rigid procedure and finds answers to a set of pre-conceived questions through personal interviews (Kothari, 2004). Interview also eliminates many sources of bias common to other instruments. This is because questions asked are usually confidential between the researcher and the respondent. Interviews clarify points that are not clear collected from key informants by the use of interview schedule.

3.6 Pilot study

To establish reliability of research instruments a pilot study was carried out in 60 pupils from 3 schools from the nearby division. The schools were purposively selected to ensure that they bore the same characteristics as the schools in the study area. The study identified schools in nearby division to control the “hallo effect” and to widen the applicability of the study. The tests was done so as to find out whether the terms in used resonated with boy’s and girl’s response. The study also verified their content for accuracy consistency and ensure that ambiguous information was removed while deficiencies and weakness were noted and corrected in the final instruments.

3.7 Validity of research instruments

Validity indicates the degree to which an instrument measures what it is supposed to measure; the accuracy, soundness and effectiveness with which an instrument measures what it is intended to measure (Kothari, 2004) or the degree to which results obtained from the analysis of the data actually represent the phenomena under study (Mugenda and Mugenda, 2008). In this study content validity was sought. The research instrument was availed to the lecturers in the Department of Education Foundations from the university of Nairobi and peers who established content validity to ensure that the items are adequately representative of the subject area being studied. To validate the research instruments, the study sought the expert opinion of the supervisors and pilot study and any proposed adjustments was covered.

3.8 Reliability of research instruments

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Nsubuga, 2000). The researcher carried out a pilot study among 20 pupils and 5 teachers. The pilot study was conducted among pupils and teachers that would not participate in the main study. The reliability of the instrument was estimated using Cronbach's Alpha Coefficient which is a measure of internal coefficient through test- retest method. . This involved administering the same questionnaire to the same group of respondents at two separate times after a lapse of one week. Babbie (1973) says that instrument may be pretested on a sample of at least ten (10) respondents who would not have to be in the same representative sample during the main study.

3.9 Data collection procedure

The researcher initially sought permission from the Ministry of higher education through National council of science and technology, the county education office and University of Nairobi authority to carry out the research in the identified area of study. During the school visits the researcher obtained permission from the head teachers thereafter would communicate with the respondents about the purpose of the intended study and book appointments for the data collection. After familiarization, data was then collected from the respondents using the aforementioned instruments. The researcher personally distributed the questionnaires and the completed interview schedules were verified and collected from the respondents within a period of five days from the day of their distribution.

3.10 Data analysis techniques

Data from the field was checked for completeness, accuracy, precision and relevance. The data was keyed into statistical package software for social sciences for analysis. Analysis of data was done using descriptive statistics specifically frequencies and percentages, with the study findings presented in tables.

3.11 Ethical consideration

The researcher observed four universal ethical principles, including respect for participants and researcher explained the purpose of the study, what would be expected of them (Kothari, 2004). In this regard, all participants had to give their consent before the study and the fact that their perception was voluntary.

The participants were also informed about their right to withdraw consent of participation at any time without penalty. In addition, participants were assured that all information they would provide would be kept confidential. This study guarded against the potential possibility of invading the privacy and security of the researcher, the quality of research and the rights of the research participants. Ethical considerations adhered to included informed consent, anonymity, privacy and confidentiality.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis of data on the study on the influence of miraa trade on boy's and girl's participation in primary school education in Tigania Central Division, Meru County, Kenya. The specific objectives of the study were; To determine the influence of Miraa trade on boys' and girls' enrolment in primary school education in Tigania Central Division, Meru County, Kenya; To establish the influence of Miraa trade on boys' and girls' retention in primary school education in Tigania Central Division, Meru County, Kenya; To determine the influence of Miraa trade on boys and girls transition in primary school education in Tigania central Division, Meru county, Kenya; and To establish the influence of Miraa trade on boys' and girls' completion rate in primary school education in Tigania central Division, Meru county, Kenya. The first part of the chapter covers analysis of the background information while rest of the analysis is guided by the study's four specific objectives.

4.2 Response rate of respondents

The study had a sample size of 216 pupils, 36 teachers and 12 head teachers to whom questionnaires were administered to and the outcomes are as indicated in Table 4.1.

Table 4.1 Response Rate

	Pupils		Teachers	Head teachers
	<u>Boys</u>	<u>Girls</u>		
Questionnaires administered	120	96	36	12
Questionnaires returned	111	89	25	10

As indicated in Table 4.1, only 200 pupils (111 boys and 89 girls), 25 teachers and 10 head teachers returned the questionnaires duly filled in contributing to a response rate of 92.5 percent for the boys pupils, 92.7 percent for the girls pupils, 69.4 percent for teachers and 83.3 percent for head teachers. This response rate was sufficient and representative and conforms to Mugenda and Mugenda (2008) stipulation that; a response rate of 50 percent is adequate; 60 percent is good while 70 percent and over is excellent for analysis and statistical reporting.

The first part of the analysis was concerned with the descriptive analysis/statistics of the respondents' background information. This was mainly to ascertain the suitability of the respondents in participating in this study.

4.3 Demographic data of respondents

This section provides background information about the study respondents. The background information that was sought in the study included; gender and age of the pupils as well as gender and number of years that the teachers and Headteachers had worked in Tigania Central Division. The results are as described hereafter.

4.3.1 Distribution of Pupils by Gender

Table 4.2 Gender distribution of the pupils

	Frequency	Percent
Male	100	50
Female	100	50
Total	200	100

As for the gender of the pupils, the study ensured gender parity in selecting the participants and hence, as illustrated in Table 4.2, 50 percent of the pupils were male while 50 percent were female. This ensured that the responses from the pupils were gender representative.

4.3.2 Distribution of Pupils by Age

Table 4.3 Age distribution of the pupils

	Frequency	Percent
10-12 years	80	40
13-14 years	70	35
Above 14 years	50	25
Total	200	100

Table 4.3 indicates that 40% of the pupils were aged 10-12 years, 35% were aged 13-14 years while 25% were aged above 14 years, implying that they were old enough to understand the influence of miraa trade on their participation in primary school education.

4.3.3 Distribution of Teachers and Headteachers by Gender

Table 4.4 Gender distribution of teachers and Headteachers

	Teachers		Head teachers	
	Frequency	Percent	Frequency	Percent
Male	16	64	6	60
Female	9	36	4	40
Total	25	100	10	100

From the findings in Table 4.2, majority of the head teachers (60 percent) and teachers (64 percent) were male while 40 percent of head teachers and 36 percent of teachers were female. This implied that Tigania Central Division has more males headteachers and teachers than female counterparts which partly could be attributed to non-conducive environment from Miraa trade that made female teachers shy away from working in the division.

4.3.4 Distribution of Teachers and Headteachers by Duration Worked in the Area

Table 4.5 Distribution of teachers and Headteachers by duration worked in Tigania Central Division

	Teachers		Head teachers	
	Frequency	Percent	Frequency	Percent
Less than 1 years	6	24	2	20
1-5 years	12	48	4	40
6-10 years	7	28	3	30
Over 10 years	5	20	1	10
Total	25	100	10	100

Table 4.5 indicates that most of the teachers (48 percent) and headteachers (40 percent) had worked in Tigania Central Division for 1-5 years, while 28 percent of teachers and 30 percent of head teachers had worked for 6-10 years. This implies that most of the teachers and head teachers had worked in Tigania Central Division for long enough to understand the influence of miraa trade on boy's and girl's participation in primary school education, hence they gave high quality of information.

4.4 Data analysis as per study objectives

4.4.1 Miraa trade and boys' and girls' enrolment

The first objective was to determine the influence of Miraa trade on boys' and girls' enrolment in primary school education in Tigania Central Division, Meru County, Kenya. The respondents were to indicate their level of agreement with various statements relating to the influence of Miraa trade on boys' and girls' enrolment. The responses were rated on a four-point Likert scale where: 4 = Strongly Agree (SA), 3 = Agree (A), 2 = Disagree (D), 1 = Strongly Disagree (SD). The findings in percentages are presented separately for the pupils, teachers and head teachers while the interpretation of the findings of the objective is presented after the pupils' findings.

Table 4.6 Headteachers’ response on miraa trade and boys’ and girls’ enrolment

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade has exposed pupils to money at an early age	0	0	80	20	0	20	50	30
miraa trade is more preferred to schooling by pupils	0	0	80	20	0	10	70	20
pupils involved in miraa trade do not enroll in school	0	0	60	40	0	0	70	30
miraa trade has made pupils to drop out of school	0	0	75	25	0	10	80	10
pupils prefer going to harvest miraa to schooling	0	0	72	28	0	10	60	30
pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education	0	20	60	20	0	0	60	40

According to the findings in Table 4.6, majority of the head teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ enrolment in primary school education.

More specifically, the headteachers’ percentages for the respective statements relating to the influence of Miraa trade on boys’ enrolment were as follows; miraa trade has exposed pupils to money at an early age (agree=80 percent; strongly agree=20 percent); miraa trade is more preferred to schooling by pupils (agree= 80 percent; strongly agree=20 percent); pupils involved in miraa trade do not enroll in school (agree=60 percent; strongly agree=40 percent);miraa trade has made pupils to drop out of school (agree= 75 percent; strongly agree=25% percent); pupils prefer going to

harvest miraa to schooling (agree=72 percent; strongly agree=28 percent); and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education (disagree=20 percent; agree=60 percent; strongly agree=20 percent).

In addition, more specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on girls' enrolment were as follows; miraa trade has exposed pupils to money at an early age (disagree=20 percent; agree=50 percent; strongly agree=30 percent); miraa trade is more preferred to schooling by pupils (disagree=10 percent; agree=70 percent; strongly agree=20 percent); pupils involved in miraa trade do not enroll in school (agree=70 percent; strongly agree=30 percent); miraa trade has made pupils to drop out of school (disagree=10 percent; agree= 80 percent; strongly agree=10 percent); pupils prefer going to harvest miraa to schooling (disagree=10 percent; agree=60 percent; strongly agree=30 percent); and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education (agree=60 percent; strongly agree=40 percent).

Table 4.7 Teachers’ response on miraa trade and boys’ and girls’ enrolment

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade has exposed pupils to money at an early age	0	12	58	30	0	20	64	16
miraa trade is more preferred to schooling by pupils	0	4	82	14	0	16	72	12
pupils involved in miraa trade do not enroll in school	0	14	62	24	0	14	48	38
miraa trade has made pupils to drop out of school	0	8	70	22	0	4	80	16
pupils prefer going to harvest miraa to schooling	0	0	74	26	0	12	68	20
pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education	4	4	66	26	0	0	76	24

According to the findings in Table 4.7, majority of the teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ enrolment in primary school education.

More specifically, the teachers’ percentages for the respective statements relating to the influence of Miraa trade on boys’ enrolment were as follows; miraa trade has exposed pupils to money at an early age (disagree=12 percent; agree=58 percent; strongly agree=30 percent); miraa trade is more preferred to schooling by pupils (disagree=4 percent; agree=82 percent; strongly agree=14 percent); pupils involved in miraa trade do not enroll in school (disagree=14 percent; agree=62 percent; strongly

agree=24 percent); miraa trade has made pupils to drop out of school (disagree=8 percent; agree=70 percent; strongly agree=22 percent); pupils prefer going to harvest miraa to schooling (agree=74 percent; strongly agree=26 percent); and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education (strongly disagree=4 percent; disagree=4 percent; agree=66 percent; strongly agree=26 percent).

And, more specifically, the teachers' percentages for the respective statements relating to the influence of Miraa trade on girls' enrolment were as follows; miraa trade has exposed pupils to money at an early age (disagree=20 percent; agree=64 percent; strongly agree=16 percent); miraa trade is more preferred to schooling by pupils (disagree=16 percent; agree=72 percent; strongly agree=12 percent); pupils involved in miraa trade do not enroll in school (disagree=14 percent; agree=48 percent; strongly agree=38 percent); miraa trade has made pupils to drop out of school (disagree=4 percent; agree=80 percent; strongly agree=16 percent); pupils prefer going to harvest miraa to schooling (disagree=12 percent; agree=68 percent; strongly agree=20 percent); and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education (agree=76 percent; strongly agree=24 percent).

Table 4.8 Pupils’ response on miraa trade and boys’ and girls’ enrolment

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade has exposed pupils to money at an early age	0	7	66	27	0	4	61	35
miraa trade is more preferred to schooling by pupils	3	6	60	31	0	10	55	35
pupils involved in miraa trade do not enroll in school	0	16	72	12	0	6	77	17
miraa trade has made pupils to drop out of school	0	6	81	13	1	8	74	17
pupils prefer going to harvest miraa to schooling	3	12	61	24	0	7	73	20
pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education	0	0	74	26	0	0	82	18

The findings in Table 4.8 indicate that majority of the pupils from Tigania Central Division, Meru County agreed that Miraa trade influenced boys’ and girls’ enrolment in primary school education.

More specifically, the percentages for the respective statements relating to the influence of Miraa trade on boys’ and girls’ enrolment were as follows; miraa trade has exposed pupils to money at an early age (boys: disagree=7 percent; agree=66 percent; strongly agree=27 percent, girls: disagree=4 percent; agree=61 percent; strongly agree=35 percent); miraa trade is more preferred to schooling by pupils (boys: strongly disagree=3 percent; disagree=6 percent; agree=60 percent; strongly agree=31 percent, girls: disagree=10 percent; agree=55 percent; strongly agree=35 percent);

percent); pupils involved in miraa trade do not enroll in school (boys: disagree=16 percent; strongly agree=12 percent, girls: disagree=6 percent; agree=77 percent; strongly agree=17 percent); miraa trade has made pupils to drop out of school (boys: disagree=6 percent; agree=81 percent; strongly agree=13 percent, girls: strongly disagree=1 percent; disagree=8 percent; agree=74 percent; strongly agree=17 percent); pupils prefer going to harvest miraa to schooling (boys: strongly disagree=3 percent; disagree=12 percent; agree=61 percent; strongly agree=24 percent, girls: disagree=7 percent; agree=73 percent; strongly agree=20 percent); and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education (boys: agree=74 percent; strongly agree=26 percent, girls: agree=82 percent; strongly agree=18 percent).

The findings imply that the low boys' and girls' enrolment in primary school education in Tigania Central Division, Meru County could be attributed to Miraa trade in the region. Through the Miraa trade, both boys and girls were prematurely exposed to earning and hence their desire to participate in Miraa trade at the expense of education. It is noteworthy that by the virtue of pupils' households relying on Miraa trade, the pupils had plenty of opportunity to be involved in Miraa related activities such as harvesting, hence unknowingly getting into a vicious cycle of the trade that diminished their interest in education as it was lucrative and addictive. The pupils who came from economically deprived households were more vulnerable to the Miraa trade and hence most failed to enroll in school to work as bread winners for their families given the high cost of living.

4.4.2 Miraa trade and boys' and girls' retention

The second objective was to establish the influence of Miraa trade on boys and girls' retention in primary school education in Tigania Central Division, Meru County, Kenya. The respondents were to indicate their level of agreement with various statements relating to the influence of Miraa trade on boys' and girls' retention. The responses were rated on a four-point Likert scale where: 4 = Strongly Agree (SA), 3 = Agree (A), 2 = Disagree (D), 1 = Strongly Disagree (SD). The findings in percentages are presented separately for the pupils, teachers and head teachers while the interpretation of the findings of the objective is presented after the pupils' findings.

Table 4.9 Headteachers' response on miraa trade and boys' and girls' retention

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade foster negative attitude among pupils towards schooling	0	0	80	20	0	20	70	10
miraa trade is a major attraction to pupils at the expense of learning in school	0	0	80	20	0	10	60	30
pupils perceive miraa trade as a source of easy earning opportunity	0	0	60	40	0	0	80	20
through miraa trade pupils are lured to sexual exploitation	0	0	75	25	0	10	70	20

According to the findings in Table 4.9, majority of the head teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys' and girls' retention in primary school education.

More specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on boys' retention were as follows; miraa trade foster negative attitude among pupils towards schooling (agree=80 percent; strongly agree=20 percent); miraa trade is a major attraction to pupils at the expense of learning in school (agree=80 percent; strongly agree=20 percent); pupils perceive miraa trade as a source of easy earning opportunity (agree=60 percent; strongly agree=40 percent); and that through miraa trade pupils are lured to sexual exploitation (agree=75 percent; strongly agree=25 percent).

And, more specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on girls' retention were as follows; miraa trade foster negative attitude among pupils towards schooling (disagree=20 percent; agree=70 percent; strongly agree=10 percent); miraa trade is a major attraction to pupils at the expense of learning in school (disagree=10 percent; agree=60 percent; strongly agree=30 percent); pupils perceive miraa trade as a source of easy earning opportunity (agree=80 percent; strongly agree=20 percent); and that through miraa trade pupils are lured to sexual exploitation (disagree=10 percent; agree=70 percent; strongly agree=20 percent).

Table 4.10 Teachers' response on miraa trade and boys' and girls' retention

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade foster negative attitude among pupils towards schooling	0	0	78	22	0	12	60	28
miraa trade is a major attraction to pupils at the expense of learning in school	2	4	82	12	0	8	72	20
pupils perceive miraa trade as a source of easy earning opportunity	4	8	60	28	0	0	64	36
through miraa trade pupils are lured to sexual exploitation	0	6	71	23	0	0	76	24

The findings in Table 4.10 indicates that majority of the teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys' and girls' retention in primary school education.

More specifically, the teachers' percentages for the respective statements relating to the influence of Miraa trade on boys' retention were as follows; miraa trade foster negative attitude among pupils towards schooling (agree=78 percent; strongly agree=22 percent); miraa trade is a major attraction to pupils at the expense of learning in school (strongly disagree=2 percent; disagree=4 percent; agree=82 percent; strongly agree=12 percent); pupils perceive miraa trade as a source of easy earning opportunity (strongly disagree=4 percent; disagree=8 percent; agree=60 percent; strongly agree=28 percent); and that through miraa trade pupils are lured to sexual exploitation (disagree=6 percent; agree=71 percent; strongly agree=23 percent).

Further, more specifically, the teachers' percentages for the respective statements relating to the influence of Miraa trade on girls' retention were as follows; miraa trade foster negative attitude among pupils towards schooling (disagree=12 percent; agree=60 percent; strongly agree=28 percent); miraa trade is a major attraction to pupils at the expense of learning in school (disagree=8 percent; agree=72 percent; strongly agree=20 percent); pupils perceive miraa trade as a source of easy earning opportunity (agree=64 percent; strongly agree=36 percent); and that through miraa trade pupils are lured to sexual exploitation (agree=76 percent; strongly agree=24 percent).

Table 4.11 Pupils' response on Miraa trade and boys' and girls' retention

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade foster negative attitude among pupils towards schooling	14	8	66	12	7	13	58	22
miraa trade is a major attraction to pupils at the expense of learning in school	4	7	69	20	0	5	76	19
pupils perceive miraa trade as a source of easy earning opportunity	4	11	71	14	0	8	76	16
through miraa trade pupils are lured to sexual exploitation	0	0	38	62	0	0	56	44

According to the findings in Table 4.11, majority of the pupils from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys' and girls' retention in primary school education.

More specifically, the percentages for the respective statements relating to the influence of Miraa trade on boys' and girls' retention were as follows; miraa trade foster negative attitude among pupils towards schooling (boys: strongly disagree=14 percent; disagree=8 percent; agree=66 percent; strongly agree=12 percent, girls: strongly disagree=7 percent; disagree=13 percent; agree=58 percent; strongly agree=22 percent); miraa trade is a major attraction to pupils at the expense of learning in school (boys: strongly disagree=4 percent; disagree=7 percent; agree=69 percent; strongly agree=20 percent, girls: disagree=5 percent; agree=76 percent; strongly agree=19 percent); pupils perceive miraa trade as a source of easy earning opportunity (boys: strongly disagree=4 percent; disagree=11 percent; agree=71 percent; strongly agree=14 percent, girls: disagree=8 percent; agree=76 percent; strongly agree=16 percent); and that through miraa trade pupils are lured to sexual exploitation (boys: agree=38 percent; strongly agree=62 percent, girls: agree=56 percent; strongly agree=44 percent).

This implies that Miraa trade contributed to decline in boy's and girls' retention in primary school education in Tigania Central Division, Meru County. Their direct participation in the trade as labourers or as traders denied them an opportunity to concentrate in their studies and eventually dropping out, hence the low retention rate. The miraa trade fostered negative attitude towards learning among the pupils, thus the declining retention in primary education. It also gave the pupils a false impression that they did not need to go through the education as they were already making money, incentivizing them to drop out. Most importantly, girls who were actively involved in the trade, were sexually exploited and got into early marriages. Such eventualities made them drop out of school, hence dwindling retention of pupils.

4.4.3 Miraa trade and boys' and girls' transition

The third objective was to determine the influence of Miraa trade on boys and girls transition in primary school education in Tigania central Division, Meru county, Kenya. The respondents were to indicate their level of agreement with various statements relating to the influence of Miraa trade on boys' and girls' transition. The responses were rated on a four-point Likert scale where: 4 = Strongly Agree (SA), 3 = Agree (A), 2 = Disagree (D), 1 = Strongly Disagree (SD). The findings in percentages are presented separately for the pupils, teachers and head teachers while the interpretation of the findings of the objective is presented after the pupils' findings.

Table 4.12 Headteachers' response on miraa trade and boys' and girls' transition

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
most pupils in class six prefer miraa trade than proceeding to class seven and eight	0	0	28	72	0	20	40	40
peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels	4	16	64	16	0	10	70	20
miraa trade is a major contributor to dropping out of school for early marriages in the community	4	10	70	16	0	0	90	10
most of the pupils prefer to venture into miraa trade instead of joining secondary school	0	4	32	64	0	30	60	10

According to the findings in Table 4.12, majority of the headteachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys' and girls' transition in primary school education.

More specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on boys' transition were as follows; most pupils in class six prefer miraa trade than proceeding to class seven and eight (agree=28 percent; strongly agree=72 percent); peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels (strongly disagree=4 percent; disagree=16 percent; agree=64 percent; strongly agree=16 percent); miraa trade is a major contributor to dropping out of school for early marriages in the community (strongly disagree=4 percent; disagree=10 percent; agree=70 percent; strongly agree=16 percent); and that most of the pupils prefer to venture into miraa trade instead of joining secondary school (disagree=4 percent; agree=32 percent; strongly agree=64 percent).

And, more specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on girls' transition were as follows; most pupils in class six prefer miraa trade than proceeding to class seven and eight (disagree=20 percent; agree=40 percent; strongly agree=40 percent); peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels (disagree=10 percent; agree=70 percent; strongly agree=20 percent); miraa trade is a major contributor to dropping out of school for early marriages in the community (agree=90 percent; strongly agree=10 percent); and that most of the pupils

prefer to venture into miraa trade instead of joining secondary school (disagree=30 percent; agree=60 percent; strongly agree=10 percent).

Table 4.13 Teachers’ response on miraa trade and boys’ and girls’ transition

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
most pupils in class six prefer miraa trade than proceeding to class seven and eight	0	8	72	20	0	12	60	28
peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels	0	15	66	19	0	8	60	32
miraa trade is a major contributor to dropping out of school for early marriages in the community	0	4	81	15	0	0	84	16
most of the pupils prefer to venture into miraa trade instead of joining secondary school	4	8	76	12	0	8	88	4

According to the findings in Table 4.13, majority of the teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ transition in primary school education.

More specifically, the teachers’ percentages for the respective statements relating to the influence of Miraa trade on boys’ transition were as follows; most pupils in class six prefer miraa trade than proceeding to class seven and eight (disagree=8 percent; agree=72 percent; strongly agree=20 percent); peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels

(disagree=15 percent; agree=66 percent; strongly agree=19 percent); miraa trade is a major contributor to dropping out of school for early marriages in the community (disagree=4 percent; agree=81 percent; strongly agree=15 percent); and that most of the pupils prefer to venture into miraa trade instead of joining secondary school (strongly disagree=4 percent; disagree=8 percent; agree=76 percent; strongly agree=12 percent).

In addition, more specifically, the teachers' percentages for the respective statements relating to the influence of Miraa trade on girls' transition were as follows; most pupils in class six prefer miraa trade than proceeding to class seven and eight (disagree=12 percent; agree=60 percent; strongly agree=28 percent); peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels (disagree=8 percent; agree=60 percent; strongly agree=32 percent); miraa trade is a major contributor to dropping out of school for early marriages in the community (agree=84 percent; strongly agree=16 percent); and that most of the pupils prefer to venture into miraa trade instead of joining secondary school (disagree=8 percent; agree=88 percent; strongly agree=4 percent).

Table 4.14 Pupils’ response on Miraa trade and boys’ and girls’ transition

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
most pupils in class six prefer miraa trade than proceeding to class seven and eight	6	15	56	23	7	22	61	10
peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels	3	20	47	30	0	11	74	15
miraa trade is a major contributor to dropping out of school for early marriages in the community	6	9	74	11	0	0	88	12
most of the pupils prefer to venture into miraa trade instead of joining secondary school	2	16	67	15	4	9	75	12

According to the findings in Table 4.14, majority of the pupils from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ transition in primary school education.

More specifically, the percentages for the respective statements relating to the influence of Miraa trade on boys’ and girls’ transition were as follows; most pupils in class six prefer miraa trade than proceeding to class seven and eight (boys: strongly disagree=6 percent; disagree=15 percent; agree=56 percent; strongly agree=23 percent, girls: strongly disagree=7 percent; disagree=22 percent; agree=61 percent; strongly agree=10 percent); peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels (boys: strongly

disagree=3 percent; disagree=20 percent; agree=47 percent; strongly agree=30 percent, girls: disagree=11 percent; agree=74 percent; strongly agree=15 percent); miraa trade is a major contributor to dropping out of school for early marriages in the community (boys: strongly disagree=6 percent; disagree=9 percent; agree=74 percent; strongly agree=11 percent, girls: agree=88 percent; strongly agree=12 percent); and that most of the pupils prefer to venture into miraa trade instead of joining secondary school (boys: strongly disagree=2 percent; disagree=16 percent; agree=67 percent; strongly agree=15 percent, girls: strongly disagree=4 percent; disagree=9 percent; agree=75 percent; strongly agree=12 percent).

From the foregoing, it was deduced that Miraa trade negatively influenced boys and girls transition in primary school education in Tigania central Division, Meru county. The transition in primary school education was on the decline from the resultant effects of Miraa trade including; boys and girls preference of the Miraa trade to learning where they chose to forfeit their education for earning, engagement in early marriages, and negative peer influence from non-student interaction. There was significant drop in the number of pupils who transited to the next level of learning with a higher percentage being boys than girls due to pupils' engagement in Miraa trade or their family being Miraa traders where the pupils became socialized with the trade prematurely.

4.4.4 Miraa trade and boys' and girls' completion rate

The fourth objective was to establish the influence of Miraa trade on boys' and girls' completion rate in primary school education in Tigania central Division, Meru county, Kenya. The respondents were to indicate their level of agreement with various

statements relating to the influence of Miraa trade on boys’ and girls’ completion rate. The responses were rated on a four-point Likert scale where: 4 = Strongly Agree (SA), 3 = Agree (A), 2 = Disagree (D), 1 = Strongly Disagree (SD). The findings in percentages are presented separately for the pupils, teachers and head teachers while the interpretation of the findings of the objective is presented after the pupils’ findings.

Table 4.15 Headteachers’ response on miraa trade and pupils’ completion rate

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade contributes immensely to failure to complete primary education in the region	0	0	80	20	0	0	70	30
few pupils sit for KCPE due to high dropout rates related to miraa trade	0	0	80	20	0	10	70	20
miraa trade has made many pupils to repeat classes due to absenteeism from school	0	0	60	40	0	10	80	10
boys/girls from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education	0	0	90	10	0	0	70	30

According to the findings in Table 4.15, majority of the head teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ completion rate in primary school education.

More specifically, the headteachers’ percentages for the respective statements relating to the influence of Miraa trade on boys’ completion rate were as follows; miraa trade

contributes immensely to failure to complete primary education in the region (agree=80 percent; strongly agree=20 percent); few pupils sit for KCPE due to high dropout rates related to miraa trade (agree=80 percent; strongly agree=20 percent); miraa trade has made many pupils to repeat classes due to absenteeism from school (agree=60 percent; strongly agree=40 percent); and that boys from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education (agree=90 percent; strongly agree=10 percent).

More specifically, the headteachers' percentages for the respective statements relating to the influence of Miraa trade on girls' completion rate were as follows; miraa trade contributes immensely to failure to complete primary education in the region (agree=70 percent; strongly agree=30 percent); few pupils sit for KCPE due to high dropout rates related to miraa trade (disagree=10 percent; agree=70 percent; strongly agree=20 percent); miraa trade has made many pupils to repeat classes due to absenteeism from school (disagree=10 percent; agree=80 percent; strongly agree=10 percent); and that girls from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education (agree=70 percent; strongly agree=30 percent).

Table 4.16 Teachers’ response on miraa trade and boys’ and girls’ completion rate

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade contributes immensely to failure to complete primary education in the region	4	20	60	16	0	12	80	8
few pupils sit for KCPE due to high dropout rates related to miraa trade	8	12	68	12	4	20	72	4
miraa trade has made many pupils to repeat classes due to absenteeism from school	0	24	48	28	0	16	60	24
boys/girls from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education	0	20	56	24	0	8	80	12

According to the findings in Table 4.16, majority of the teachers from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ completion rate in primary school education.

More specifically, the teachers’ percentages for the respective statements relating to the influence of Miraa trade on boys’ completion rate were as follows; miraa trade contributes immensely to failure to complete primary education in the region (strongly disagree=4 percent; disagree=20 percent; agree=60 percent; strongly agree=16 percent); few pupils sit for KCPE due to high dropout rates related to miraa trade (strongly disagree=8 percent; disagree=12 percent; agree=68 percent; strongly agree=12 percent); miraa trade has made many pupils to repeat classes due to

absenteeism from school (disagree=24 percent; agree=48 percent; strongly agree=28 percent); and that boys from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education (disagree=20 percent; agree=56 percent; strongly agree=24 percent).

And, more specifically, the teachers' percentages for the respective statements relating to the influence of Miraa trade on girls' completion rate were as follows; miraa trade contributes immensely to failure to complete primary education in the region (disagree=12 percent; agree=80 percent; strongly agree=8 percent); few pupils sit for KCPE due to high dropout rates related to miraa trade (strongly disagree=4 percent; disagree=20 percent; agree=72 percent; strongly agree=4 percent); miraa trade has made many pupils to repeat classes due to absenteeism from school (disagree=16 percent; agree=60 percent; strongly agree=24 percent); and that girls from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education (disagree=8 percent; agree=80 percent; strongly agree=12 percent).

Table 4.17 Pupils’ response on Miraa trade and boys’ and girls’ completion rate

	Boys				Girls			
	SD	D	A	SA	SD	D	A	SA
miraa trade contributes immensely to failure to complete primary education in the region	0	15	54	31	6	11	71	12
few pupils sit for KCPE due to high dropout rates related to miraa trade	14	21	45	20	16	9	57	18
miraa trade has made many pupils to repeat classes due to absenteeism from school	0	5	75	20	6	13	62	19
boys from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education	2	16	61	21	0	4	83	13

According to the findings in Table 4.17, majority of the pupils from Tigania Central Division, Meru County were in agreement that Miraa trade influenced boys’ and girls’ completion rate in primary school education.

More specifically, the percentages for the respective statements relating to the influence of Miraa trade on boys’ and girls’ completion rate were as follows; miraa trade contributes immensely to failure to complete primary education in the region (boys: disagree=15 percent; agree=54 percent; strongly agree=31 percent, girls: strongly disagree=6 percent; disagree=11 percent; agree=71 percent; strongly agree=12 percent); few pupils sit for KCPE due to high dropout rates related to miraa trade (boys: strongly disagree=14 percent; disagree=21 percent; agree=45 percent; strongly agree=20 percent, girls: strongly disagree=16 percent; disagree=9 percent;

agree=57 percent; strongly agree=18 percent); miraa trade has made many pupils to repeat classes due to absenteeism from school (boys: disagree=5 percent; agree=75 percent; strongly agree=20 percent, girls: strongly disagree=6 percent; disagree=13 percent; agree=62 percent; strongly agree=19 percent); and that boys from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education (boys: strongly disagree=2 percent; disagree=16 percent; agree=61 percent; strongly agree=21 percent, girls: disagree=4 percent; agree=83 percent; strongly agree=13 percent).

From these findings, it is evident that Miraa trade impacted negatively on the boys' and girls' completion rate in primary school education in Tigania central Division, Meru county. The boys and girls education was seriously threatened by Miraa trade as a good number of them dropped out of school to engage in Miraa trade as laborer or traders to earn a living hence could not sit for their KCPE. From their involvement in Miraa trade, both boys and girls concentration in class or absenteeism resulted to poor performance that led to their repeating of classes hence diminishing their completion rate in primary education. Conversely, they also suffered from negative peer influence due to their involvement in miraa trade where they interacted with delinquent youth. This increased their propensity to be involved in delinquent behaviours that had a negative impact on their learning process and eventually their completion rate.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes and presents the research findings from the study. It has been organized to provide a concise summary, conclusions, recommendations and areas suggested for further research.

5.2 Summary of major findings

5.2.1 Findings on Miraa trade and boys' and girls' enrolment

The study established that Miraa trade influenced boys' and girls' enrolment in primary school education. Further, the study established that; miraa trade has exposed pupils to money at an early age; miraa trade is more preferred to schooling by pupils; pupils involved in miraa trade do not enroll in school; miraa trade has made pupils to drop out of school; pupils prefer going to harvest miraa to schooling; and that pupils from poor family backgrounds offer cheap labour in miraa farms to finance their family basic needs at the expense of their education.

Therefore, the low boys' and girls' enrolment in primary school education in Tigania Central Division, Meru County could be attributed to Miraa trade in the region. Through the Miraa trade, both boys and girls were prematurely exposed to earning and hence their desire to participate in Miraa trade at the expense of education. It is noteworthy that by the virtue of pupils' households relying on Miraa trade, the pupils had plenty of opportunity to be involved in Miraa related activities such as harvesting, hence unknowingly getting into a vicious cycle of the trade that diminished their

interest in education as it was lucrative and addictive. The pupils who came from economically deprived households were more vulnerable to the Miraa trade and hence most failed to enroll in school to work as bread winners for their families given the high cost of living.

5.2.2 Findings on Miraa trade and boys' and girls' retention

The study established that that Miraa trade influenced boys' and girls' retention in primary school education. More specifically, on the influence of Miraa trade on boys' and girls' retention the study confirmed that; miraa trade foster negative attitude among pupils towards schooling; miraa trade is a major attraction to pupils at the expense of learning in school; pupils perceive miraa trade as a source of easy earning opportunity; and that through miraa trade pupils are lured to sexual exploitation respectively.

Thus, Miraa trade contributed to decline in boy's and girls' retention in primary school education in Tigania Central Division, Meru County. Their direct participation in the trade as laborer's or as traders denied them an opportunity to concentrate in their studies and eventually dropping out, hence the low retention rate. The miraa trade fostered negative attitude towards learning among the pupils, thus the declining retention in primary education. It also gave the pupils a false impression that they did not need to go through the education as they were already making money, incentivizing them to drop out. Most importantly, girls who were actively involved in the trade, were sexually exploited and got into early marriages. Such eventualities made them drop out of school, hence dwindling retention of pupils.

5.2.3 Findings on Miraa trade and boys' and girls' transition

The study confirmed that Miraa trade influenced boys' and girls' transition in primary school education. More specifically, in relation to the influence of Miraa trade on boys' and girls' transition, the study revealed that; most pupils in class six prefer miraa trade than proceeding to class seven and eight; peer pressure influence pupils to venture into miraa trade instead of moving on with their education to the next levels; miraa trade is a major contributor to dropping out of school for early marriages in the community; and that most of the pupils prefer to venture into miraa trade instead of joining secondary school respectively.

Therefore, Miraa trade negatively influenced boys and girls transition in primary school education in Tigania central Division, Meru county. The transition in primary school education was on the decline from the resultant effects of Miraa trade including; boys and girls preference of the Miraa trade to learning where they chose to forfeit their education for earning, engagement in early marriages, and negative peer influence from non-student interaction. There was significant drop in the number of pupils who transited to the next level of learning with a higher percentage being boys than girls due to pupils' engagement in Miraa trade or their family being Miraa traders where the pupils became socialized with the trade prematurely.

5.2.4 Findings on Miraa trade and boys' and girls' completion rate

In addition, the study established that Miraa trade influenced boys' and girls' completion rate in primary school education based. More specifically, in relation to the influence of Miraa trade on boys' and girls' completion rate, it was established

that; miraa trade contributes immensely to failure to complete primary education in the region; few pupils sit for KCPE due to high dropout rates related to miraa trade; miraa trade has made many pupils to repeat classes due to absenteeism from school; and that boys from miraa growing areas are influenced by their peers to work in the miraa plantations at the expense of their education respectively.

From these findings, it is evident that Miraa trade impacted negatively on the boys' and girls' completion rate in primary school education in Tigania central Division, Meru County. The boys and girls education was seriously threatened by Miraa trade as a good number of them dropped out of school to engage in Miraa trade as laborer or traders to earn a living hence could not sit for their KCPE. From their involvement in Miraa trade, both boys and girls concentration in class or absenteeism resulted to poor performance that led to their repeating of classes hence diminishing their completion rate in primary education. Conversely, they also suffered from negative peer influence due to their involvement in miraa trade where they interacted with delinquent youth. This increased their propensity to be involved in delinquent behaviours that had a negative impact on their learning process and eventually their completion rate.

5.3 Major Conclusions of the study

Based on the findings of the study, the study draws the following major conclusions as per the study objectives;

On objective one, the low boys' and girls' enrolment in primary school education in Tigania Central Division, Meru County could be attributed to Miraa trade in the

region. Through the Miraa trade, both boys and girls were prematurely exposed to earning and hence their desire to participate in Miraa trade at the expense of education. It is noteworthy that by the virtue of pupils' households relying on Miraa trade, the pupils had plenty of opportunity to be involved in Miraa related activities such as harvesting, hence unknowingly getting into a vicious cycle of the trade that diminished their interest in education as it was lucrative and addictive. The pupils who came from economically deprived households were more vulnerable to the Miraa trade and hence most failed to enroll in school to work as bread winners for their families given the high cost of living.

On objective two, Miraa trade contributed to decline in boy's and girls' retention in primary school education in Tigania Central Division, Meru County. Their direct participation in the trade as laborer's or as traders denied them an opportunity to concentrate in their studies and eventually dropping out, hence the low retention rate. The miraa trade fostered negative attitude towards learning among the pupils, thus the declining retention in primary education. It also gave the pupils a false impression that they did not need to go through the education as they were already making money, incentivizing them to drop out. Most importantly, girls who were actively involved in the trade, were sexually exploited and got into early marriages. Such eventualities made them drop out of school, hence dwindling retention of pupils.

On objective three, Miraa trade negatively influenced boys and girls transition in primary school education in Tigania central Division, Meru county. The transition in primary school education was on the decline from the resultant effects of Miraa trade including; boys and girls preference of the Miraa trade to learning where they chose to

forfeit their education for earning, engagement in early marriages, and negative peer influence from non-student interaction. There was significant drop in the number of pupils who transited to the next level of learning with a higher percentage being boys than girls due to pupils' engagement in Miraa trade or their family being Miraa traders where the pupils became socialized with the trade prematurely.

On objective four, Miraa trade impacted negatively on the boys' and girls' completion rate in primary school education in Tigania central Division, Meru county. The boys and girls education was seriously threatened by Miraa trade as a good number of them dropped out of school to engage in Miraa trade as laborer or traders to earn a living hence could not sit for their KCPE. From their involvement in Miraa trade, both boys and girls concentration in class or absenteeism resulted to poor performance that led to their repeating of classes hence diminishing their completion rate in primary education. Conversely, they also suffered from negative peer influence due to their involvement in miraa trade where they interacted with delinquent youth. This increased their propensity to be involved in delinquent behaviours that had a negative impact on their learning process and eventually their completion rate.

On the overall, the study notes that miraa trade is significant in explaining boy's and girl's participation in primary school education in Tigania Central Division, Meru County. Therefore, miraa trade has a significant influence on boy's and girl's participation in primary school education in Tigania Central Division, Meru County.

5.4 Recommendations from the study

The following recommendations were drawn thereto;

1. The study recommends that the national and county government should institute strict instructions to the relevant government security apparatus to ensure that pupils that do not go to school are enrolled to continue with primary education.
2. The study recommends that the national and county government through ministry of education should undertake a campaign to educate the residents of Miraa growing regions on the need for the pupils to participate in primary education. This should be coupled with strict rules to punish parents and guardians who allow the pupils to participate in Mira trade value chain at the expense of the primary education.
3. The study found out that Miraa trade negatively influenced boys and girls transition in primary school education in Tigania central Division, Meru County. The study recommends that the ministry of education should work closely with the school management to ensure the transition of the pupils to secondary education by addressing the barriers behind failure to transit.
4. The study established that Miraa trade impacted negatively on the boys' and girls' completion rate in primary school education in Tigania central Division, Meru County. The study recommends that the ministry of education should closely monitor the progression of pupils to ensure they successfully complete their primary education. The head-teachers should be tasked to report any

pupils who do not complete their education for necessary action to be taken by Ministry of education officials.

5.5 Suggestions for further research

The study recommends that since this study was conducted in primary schools only, then;

1. Similar studies should be extended and undertaken in secondary schools .
2. The study should also be carried out in other miraa growing regions in Meru County for comparison and generalization of the study findings on the influence of miraa trade on boy's and girl's participation in primary school education.
3. The study targeted only the pupils, teachers and head teachers and therefore parents were isolated and could play a key role on their opinion thus, future research should focus on parents so as to get to know their opinion and contribution towards a similar study.

REFERENCES

- Aden, A., Dimba, E.A., Ndolo, U.M., & Chindia, M.L. (2006). Socio-economic effects of Khat chewing in northeastern Kenya. *East African Medical Journal*, 83(1), 69 - 73.
- Affinnih, Y.H. (2002). Health, social, economic costs, and drug control policy, substance use and misuse. Revisiting Sub - Saharan African countries' drug problems. *Journal of Social Studies*, 37(3), 265 - 290.
- Alem, A., Kebede, D., & Kullgren, G. (1999). The prevalence and socio-demographic correlates of khat chewing in Butajira, Ethiopia. *Acta Psychiatrica Scandinavica Supplement*, 39(7), 84 - 91.
- Armstrong, E. (2008). Research Note. Crime, Chemicals and Culture: On the Complexity of Khat. *Journal of Drug Issues*, 38(2), 631 - 648.
- Anderson, D., Beckerleg, S., Hailu, D., & Klein, A. (2007). *The Khat controversy: Stimulating the debate on drugs*. Berg: Oxford Press.
- Bass, L.E. (2004). *Child Labor in Sub-Saharan Africa*. Boulder: Lynn Rienner.
- Beckerleg, S. (2008). Khat special edition: Introduction. *Substance Use and Misuse*, 43(5), 746 - 761.
- Carrier, N. (2008). Is Miraa a drug: Categorizing Kenyan khat. *Substance Use & Misuse in Ethiopia*. Substance Use & Misuse. Special Issue: Khat: Use, users and unresolved
- Elmi, A.S. (1983). The chewing of khat in Somalia. *Journal of Ethnopharmacology*, 8(2), 163 - 176.
- Gebissa, E. (2008). Scourge of life or an economic lifeline? Public discourses on khat. *Cathaisues*, 43(6), 784 - 802.
- Hailu, D. (2005). Supporting a nation: Khat farming and livelihoods in Ethiopia. *Drug and Alcohol Today*, 5(3), 22-29.
- Houghton, P. (2005). *UK Miraa ban to cost Kenya \$250m a year*. Retrieved from <http://www.somalilandtimes.net/sl/2005/205/24.shtml>. Date accessed 3 February, 2018.
- Kalix, P., & Khan, I. (1984) Khat: Anamphetamine – like plant material. *Bulletin of the World Health Organization*, 6(2), 681 - 686.
- Klein, A., & Beckerleg, S. (2007). Building Castles of Spit - The role of khat chewing in worship, work and leisure' in Goodman J., Lovejoy P. and Sherrat A. (eds.) *Consuming habits (new edition)*. London: Routledge.

- Klein, A. (2007). Khat and the creation of tradition in the Somali Diaspora. In: *Fountain, J., & Korf, D.J. Drugs in society: European perspectives* (pp.51-61). London: Routledge
- NACADA. (2006). *Alcohol, Tobacco (Cigarettes), Bhang and Miraa Inhalants prescription (Volume 19)*. Nairobi, Kenya
- Ott, R.L., & Longnecker, M. (2001). *An introduction to statistical methods and data analysis, 5th edition*. Florence, KY: Cengage Learning
- Patel, S.L., Wright, S., & Gammampila, A. (2005). *Khat Use Among Somalis in Four English Cities*. NACRO, 47/05. London: Home Office.
- Sikiru, L., & Babu, S.M. (2009). Miraa Catha Edulis: Academic, Health and Psychosocial Effects on Mature Students. *African Journal of Drug & Alcohol Studies*, 8(2), 51-58.
- Simons, J.A, Irwin, D.B., & Drinnien, E.A. (1987). *From Psychology – The Search for Understanding, Maslow’s Hierarchy of needs*. New York: West Publishing Company.
- Soenens, B., & Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in 3 life domains: The role of parents and teachers' autonomy support. *Journal of Youth and Adolescence*, 34(6), 589-604.
- Waikenda, (2010). *World Peasants: Organization of Miraa Trade*: Accessed from www.prophet.nabii@yahoo.com. Date accessed, 12/2/2018.
- Warfa, N., Klein, A., Bhui, K., Leavey, G., Craig, T., & Stansfeld, S.A. (2007). Khat use and mental illness: A critical review. *Social Science & Medicine*, 65(2), 309-18.
- Warfa,N., Klein,A., Bhui, K., Leavey,G., Craig,T., Stansfeld, S. (2007). Association between Khat use and mental disorders: an emerging paradigm. *Social Science and Medicine*, 65(2), 339-47.
- World Bank (2007). *Towards Q at Demand Reduction*. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/06/26/000090341_20070626112355/Rendered/PDF/397380YE.pdf

APPENDICES

Appendix I: Introduction letter

Japheth Kilemi Sammy

P.O Box 61-60607

Mikinduri.

CELL: 0720664682

The Sub-County Education Officer, Tigania Central Division,

P.O. Box 259

Muthara, Meru.

Dear Sir/ Madam,

RE: LETTER OF INTRODUCTION

I am a Master of Education student at the University of Nairobi and in my final year of study. As part of the requirements for the award of the degree of Master of Education, I am undertaking a research on **“The Influence of Miraa trade on boy’s and girl’s participation in primary school education in Tigania Central Division, Meru County, Kenya”**.

In this regard, I am kindly requesting for your support in terms of time, and by responding to the attached questionnaire.

Kindly spare some time to complete the attached questionnaire as honestly and correctly as possible.

Thank you in advance

Yours sincerely,

Japheth Kilemi Sammy

Appendix II: Questionnaire for pupils

My name is Japheth Kilemi Sammy, a student at the University of Nairobi carrying out a research study on “**The influence of Miraa trade on boys and girls participation in primary school education in Tigania central division in Meru County**”.

Kindly tick () the appropriate response or respond as indicated.

SECTION A: Background information

- 1) Please indicate your gender
 - Male []
 - Female []
- 2) Kindly indicate your age
 - a. 10-12 years []
 - b. 13-14 years []
 - c. 14 years and above []

SECTION B: Influence of Miraa trade on boys and girls enrolment in primary school education.

- 3) Are children of school going age involved in Miraa trade?
Yes () No ()
- 4) How is Miraa trade carried out?
a) Daily () b) Weekly () c) Monthly ()
- 5) Miraa trade influences enrolment of boys and girls in your school?
Yes () No ()
- 6) Please indicate the extent to which you agree with the following statements on boys and girls involvement in Miraa trade using the following scale.
SA - - - Strongly agree, A----agree, SD-Strongly disagree, D-Disagree
- 7) Kindly indicate the extent to which you Strongly agree (SA), Agree (A), Disagree (D),and Strongly Disagree (SD) on the following factors on Miraa trade that influence boys and girls

STATEMENTS	SA	A	SD	D
My family trades in Miraa every day.				
I help in selling Miraa for my family				
I have been involved in Miraa trade by providing transport services to the market place.				
My parent ask me to stay home to look after my siblings as they trade in Miraa				
My parents allow me to look for banana leaves for packaging Miraa				
I am paid to package Miraa into bundles				
I am involved in harvesting Miraa family on school days				

7. Kindly indicate the extent to which you SA-Strongly, A- Agree, SD- Strongly Disagree, SD-Strongly Disagree on the following factors on Miraa trade that influence boys and girls enrolment in primary schools in Tigania Central division, Meru county.

	SA	A	D	SD
Miraa trade has exposed boys to money at an early age				
Miraa trade has exposed girls to money at an early age				
Miraa trade has made boys to be absent from school				
Miraa trade has made girls to be absent from school				
Boys prefer Miraa trade to schooling				
Girls prefer Miraa trade to schooling				
Boys involved in Miraa trade do not enroll in school				
Girls involved in to Miraa trade do not enroll in school				
Most boys are involved in Miraa trade than girls				
Most girls are involved in Miraa trade than boys				
Parents send their boys to work in Miraa farms				
Parents send their girls to work in Miraa farms				

SECTION C: Influence of Miraa trade on boys and girls retention in primary school education

8. Does Miraa trade make boys and girls not to attend school regularly?

Yes [] No []

9. Kindly indicate the extent to which you Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) on the following statements related to the influence of Miraa trade on boys and girls retention in primary school education.

	SA	A	D	SD
Miraa trade has made boys to drop out of school				
Miraa has made girls to drop out of school				
Boys go to harvest Miraa instead of schooling				
Girls go to harvest Miraa instead of schooling				
Boys go to trade in Miraa when prices are high instead of schooling				
Girls go to trade in Miraa when prices are high instead of schooling				
Miraa trade makes boys from poor families not to go to school				
Miraa trade makes girls from poor families not to go to school				
School boys offer cheap labour in farms instead of schooling				

10. Kindly indicate whether Miraa trade influences retention of boys and girls in primary school education by ticking your response using the scale that follows;

SA - Strongly Agree, A-Agree, SD-Strongly Disagree, D-Disagree.

	SA	A	D	SD
Miraa trade has made boys to create negative attitude towards schooling				
Miraa trade has made girls to create negative attitude towards schooling				
Many boys prefer trading in Miraa to schooling to get money				
Many girls prefer trading in Miraa to schooling to get money				

Boys believe Miraa trade brings easy money compared to schooling				
Girls believe Miraa trade brings easy money compared to schooling				
Boys are lured into early marriages by sugar mummies				
Girls are lured into early marriages by sugar daddies				
Few boys remain in school while others go to work in Miraa farms				
Few girls remain in school while others go to work in Miraa farms				

SECTION D: Influence of Miraa trade on boys and girls transition in primary school education.

11. In your opinion, do you think that boys are easily influenced by Miraa trade than girls hence more likely to drop out of school instead of transitioning to the next class?

Yes ()

No ()

12. Kindly indicate whether transition rate from one class to another by boys and girls in your school is influenced by Miraa trade on the provided statements by ticking the answer that best describe your responses using the scale that follows;

SA - Strongly Agree, A- Agree, SD-Strongly Disagree, D-Disagree.

	SA	A	D	SD
Most class six boys prefer trading in Miraa rather than proceed to class eight				
Most class six girls prefer trading in Miraa rather than proceed to class eight				
Peer pressure influences more boys to drop out of school				
Peer pressure influences more girls to drop out of school				
More boys are lured into early marriages during transition to class seven and eight				

Most girls are lured into early marriages during transition to class seven and eight				
Many boys opt to trade in Miraa after K.C.P.E than going to secondary school				
Many girls opt to trade in Miraa after K.C.P.E than going to secondary school				

SECTION D: Influence of Miraa trade on boys and girls completion in primary school education

13. Has Miraa trade made boys and girls not to complete their primary school education?

Yes () No ()

14. The following statements relates to the influence of Miraa trade on boys and girls completion of primary school education. Indicate using the scale given below.

Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

	SA	A	D	SD
Miraa trade has made boys fail to complete their primary school education				
Miraa trade has made girls fail to complete their primary school education				
Few boys sit for their K.C.P.E due to high dropout rate				
Few girls sit for their K.C.P.E due to high dropout rate				
Miraa trade has made boys to repeat classes due to absenteeism from school				
Miraa trade has made girls to repeat classes due to absenteeism from school				
Boys from Miraa growing areas are influenced by peers to work in plantations rather than attend school				
Girls from Miraa growing areas are influenced by peers to work in plantations rather than attend school.				

Thank you for taking your time to participate in this study

Appendix III: Questionnaire for teachers

My name is Japheth Kilemi Sammy, a student at the University of Nairobi carrying out a research study on “the influence of miraa trade on boys and girls participation in primary school education in Tigania Central Division, Meru County”. Kindly spare some of your time to indicate the correct option as honestly and correctly as possible.

Kindly tick the appropriate response or respond as indicated.

SECTION A: BACKGROUND INFORMATION

1) Please indicate your gender

Male []

Female []

2) Kindly indicate your age

Below 30 years []

31-40 years []

41-50 years []

51 years []

3) What is your highest professional qualification

Certificate []

Diploma []

Bachelor degree []

Postgraduate degree []

4) Kindly indicate how long you have taught in Tigania Central Division.

Below 5 years []

5-10 years []

11-15 years []

16 and above years []

SECTION B: The influence of miraa trade on boys and girls enrolment in primary school education in Tigania Central Division

5) In your opinion do you think miraa trade has any harm to both boys and girls in relation to enrolment in primary schools?

Yes []

No []

6) Please indicate by ticking appropriately on the table below how Miraa trade influences boys and girls enrolment in primary school education in Tigania central division.

SA, A, D, SD

	SA	A	D	SD
Miraa trade makes parents to neglect boy child and fail to enroll them in school.				
Miraa trade makes parents to neglect girl child and fail to enroll them in school				
Miraa trade has made boys lack interest in education				
Miraa trade has made girls lack interest in education				
Long distance from school has made boys fail to attend school				
Long distance from school has made girls fail to attend school				
More boys than girls attend school in class one for admission but more girls than boys complete primary school education				
More girls than boys attend school in class one for admission but more boys than girls complete primary school education				
Parents involved in miraa trade disregard taking their boy child to school				
Parents involved in miraa trade disregard taking their girl child to school				

Parents neglect to provide basic education needs for their sons until they drop out of school.				
Parents neglect to provide basic education needs for their daughters until they drop out of school				
Boys attend school for enrolment but later quit for miraa trade.				
Girls attend school for enrolment but later quit for miraa				

SECTION C: The influence of Miraa trade on boys and girls retention in primary school education in Tigania central division

7) Kindly indicate by ticking the appropriately on the table below how Miraa trade influences boys and girls retention in primary school education in Tigania central division.

Strongly agree (SA), Agree (A), Disagree (D), Strongly disagree (SD)

	SA	A	D	SD
Girls are highly retained in school than boys who go into miraa trade				
Boys are highly retained in school than girls who go into miraa trade				
Young school girls are lured into early marriages by moneyed men in miraa trade				
Young school boys are lured into early marriages by sugar mummies in miraa trade				
Young school boys climb miraa trees to pick edible twigs hence dropout from school				
Young school girls package harvested miraa twigs for sale hence drop out from school				
In most homes parents assign girls domestic chores hence fail to attend school.				
In most homes parents assign boys domestic chores				

hence fail to attend school.				
During dry season when Miraa is costly boys are paid to water Miraa plants instead of attending school.				
During dry season when Miraa is costly girls are paid to water Miraa plants instead of attending school.				
Boys fail to perform well in class due to activities associated with Miraa trade				
Girls fail to perform well in class due to activities associated with Miraa trade				

SECTION D: The influence of Miraa trade on boys and girls transition in primary school education in Tigania central division.

8) Does Miraa trade affect transition of boys and girls from one class to another?

Yes [] No []

9) In your opinion indicate how influence of Miraa trade has influenced transition rate of boys and girls in primary school as stated

Strongly Agree (SA), Agree (A), Strongly Disagree (SD), Disagree (D)

	SA	A	D	SD
Poor examination results influences boys to leave school during transition period				
Poor examination results influences girls to leave school during transition period				
Miraa trade affects transition patterns of average and over grown boys who drop out of school due to stigmatization				
Miraa trade affects transition patterns of average girls who drop out of school due to stigmatization				
Boys who are asked to repeat in upper classes during transition prefer to go into miraa trade				
Girls who are asked to repeat in upper classes during transition prefer to go into miraa trade				
Boys with big bodies feel misplaced at school and leave				

school for miraa trade				
Girls with big bodies feel misplaced at school and leave school for miraa trade				
Boys who leave school during transition are more than girls				
Girls who leave school during transition are more than boys				

SECTION E: The influence of Miraa trade on boys and girls completion in primary school education

10) Has miraa trade which is prevalent in Tigania Central Division affected boys and girls completion in primary school education

Yes []

No []

11) The following statements relates to the influence of miraa trade on boys and girls education in Tigania Central Division.

Indicate to what extent you agree with each of the statements using the scale provided below;

SA- strongly Agree, A-Agree, D- Disagree, SD- Strongly Agree

	SA	A	D	SD
Miraa trade has made many boys fail to complete their schooling				
Miraa trade has made many girls fail to complete their schooling				
Miraa trade has reduced the number of boys in upper primary school compared to lower primary				
Miraa trade has reduced the number of girls in upper primary school compared to lower primary				
Miraa trade has led to high drop out and repetition rate in boys than girls				

Miraa trade has led to high drop out and repetition in girls than boys				
Miraa trade has influenced boys to offer cheap labour in miraa farms				
Miraa trade has influenced girls to offer cheap labour in miraa farms				
Peer pressure has influenced many boys into miraa trade other than completing their education				
Peer pressure has influenced many girls into miraa trade				

Thank you for taking your time to participate in this study

Appendix IV: Questionnaire for headteachers

My name is Japheth Kilemi Sammy, a student at the University of Nairobi carrying out research study on “The influence of miraa trade on boys and girls participation in primary school education in Tigania central division, Meru County, Kenya”.

Kindly spare some of your time to indicate the correct option as honestly and correctly as possible.

Kindly tick the appropriate response or respond as indicated.

Do not write your name or that of your institution.

SECTION A: Background information

1) Kindly indicate your gender

Male

Female

2) Kindly indicate your age

Below 30 years

31-40 years

41-50 years

51 years and above

3) Kindly indicate your highest professional qualification.

Certificate

Diploma

Bachelor degree

Postgraduate degree

4) How many years have you worked in Tigania Central division in Meru County as a teacher?

Below 5 years

5-10 years

11-15 years []

16 years and above []

5) For how long have you been in the current position in your institution?

Below 5 years []

5-10 years []

11-15 years []

SECTION B: The influence of miraa trade on enrolment of boys and girls in primary school education in Tigania central division, Meru County, Kenya.

6) In your opinion, do you think miraa trade in Tigania central division has any influence on boys and girls participation in primary school education?

Yes []

No []

7) Kindly indicate by ticking appropriately whether miraa trade has influenced boys and girls enrolment in primary school education in Tigania Central Division.

SA- Strongly Agree, A-Agree, SD- Strongly Disagree, D- Disagree.

	SA	A	SD	D
Parent believe that miraa trade brings wealth easily compared to education hence they don't take boys to school.				
Parent believe that miraa trade brings wealth easily compared to education hence they don't take girls to school.				
Parent don't take boys to school for enrolment in class one.				
Parent don't take girls to school for enrolment in class one.				
Boys follow their fathers and elder brothers to trade in miraa hence affect enrolment				
Girls follow their mothers and elder sisters to trade in miraa hence affect enrolment.				
Boys are made to remain at home to look after their				

siblings while parent engages in miraa trade.				
Girls are made to remain at home to look after their siblings while parent engage in miraa trade.				
Most of the schools have fewer boys than girls due to miraa trade.				
Most of the schools have fewer girls than boys due to miraa trade.				
Teachers who trade and munch miraa influences boys into the miraa trade.				
Teachers who trade and munch miraa influences girls into miraa trade.				
Peer pressure influences boys to stay out of school and go to trade in miraa.				
Peer pressure influences girls to stay out of school and go to trade in miraa.				

8. To what extent do you agree with the following factors that involve Miraa trade and influence on enrolment of boys and girls in primary school education as indicated.

In the scale below.

SA-Strongly Agree, A-Agree , SD-Strongly Disagree, D-Disagree

Miraa trade is carried out everyday hence boys have daily opportunity for harvesting and transporting miraa to the market				
Miraa trade is carried out everyday hence girls have daily opportunity for harvesting and transporting miraa to the market.				
Rich Miraa traders influence girls into the trade with hope to be rich like them instead of enrolling in school.				

Many boys enroll in class one but less than half complete school				
Many girls enroll in class one but less than half complete school				
More girls complete their education than boys who end up in miraa trade				
More boys complete their education than girls who end up in miraa trade				
Boys develop positive attitude during their enrolment and admission than girls who drop out of school				
Girls develop positive attitude during their enrolment and admission than boys who drop out school				
Miraa trade has made more girls complete their education than boys who end up into miraa trade				
Miraa trade has made more boys complete their education than girls who end up into miraa trade.				

SECTION C: The influence of miraa trade on boys and girls retention in primary school education in Tigania central division

12) Kindly indicate by ticking the appropriately on the table below how miraa trade influences boys and girls retention in primary school education in Tigania central division.

Strongly agree (SA), Agree (A), Disagree (D), Strongly disagree (SD)

	SA	A	D	SD
Girls are highly retained in school than boys who go into Miraa trade				
Boys are highly retained in school than girls who go into Miraa trade				
Young school girls are lured into early marriages by moneyed men in Miraa trade				
Young school boys are lured into early marriages by sugar mummies in Miraa trade				

Young school boys climb Miraa trees to pick edible twigs hence dropout from school				
Young school girls package harvested Miraa twigs for sale hence drop out from school				
In most homes parents assign girls domestic chores hence fail to attend school.				
In most homes parents assign boys domestic chores hence fail to attend school.				
During dry season when Miraa is costly boys are paid to water Miraa plants instead of attending school.				
During dry season when Miraa is costly girls are paid to water Miraa plants instead of attending school.				
Boys fail to perform well in class due to activities associated with Miraa trade				
Girls fail to perform well in class due to activities associated with Miraa trade				

SECTION D: The influence of Miraa trade on transition of boys and girls in primary school education

13) Does Miraa trade in Tigania Central division lead to poor performance of boys due to absenteeism from school?

Yes []

No []

14) Does the number of boys who transit from one class to another increase or decrease

(a) Increase

(b) Decrease

The number of boys who transit from one class to another is more than girls				
The number of girls who transit from one class to another is more than boys				

Large number of boys drop out of school during transition to another class				
Large number of girls drop out of school during transition to another class				
Poor examination results influences girls transition to the next class				
Poor examination results influences boys transition to the nest class				
Boys who don` t qualify to transit to the next class leave school for Miraa trade				
Girls who don` t qualify to transit to the next class leave school for Miraa trade				
Big boys in school are stigmatized by the young ones hence prefer Miraa trade				
Big girls in school are stigmatized by the young ones hence prefer Miraa trade				
Boys who leave school during transition are more than girls				

SECTION E: The influence of Miraa trade on boys and girls completion in primary school education.

18. Has Miraa which is prevalent in Tigania Central division influenced boys completion in primary school education?

Yes [] No. []

19. Has Miraa which is prevalent in Tigania Central division influenced girls completion in primary school education?

Yes [] No []

20. Kindly indicate by ticking the trade statements that follow whether Miraa trade influences boys and girls completion of primary school education using the scale below.

Parents encourage boys to take after them in miraa trade				
Parents encourage girls to look after their siblings while in				

miraa trade.				
Girls who are not able to complete school indulge in miraa trade				
Boys who don't complete school face challenges on matter regarding formal education.				
Parents literacy level affects girls choice of attending school and trading in miraa.				
Boy who engage in Miraa trade get married early.				
Girls who engage in miraa trade get married early.				
Boys who get parcels of land with miraa early from parents don't complete school.				
Girls who get parcels of land with miraa early from parents don't complete school				
Truant girls get alternative pre-occupation in Miraa trade.				

Thank you for taking your time to participate in this study


Appendix V: Research permit

THIS IS TO CERTIFY THAT:
MR. JAPHETH KILEMI SAMMY
of UNIVERSITY OF NAIROBI, 61-60607
mikinduri, has been permitted to
conduct research in Meru County

on the topic: THE INFLUENCE OF MIRAA
TRADE ON BOY'S AND GIRL'S
PARTICIPATION IN PRIMARY SCHOOL
EDUCATION IN TIGANIA CENTRAL
DIVISION, MERU COUNTY, KENYA.

for the period ending:
28th September, 2017

Permit No : NACOSTI/P/16/27424/13874
Date Of Issue : 28th September, 2016
Fee Recieved :Ksh 1000




Applicant's Signature


Sammy
Director General
National Commission for Science,
Technology & Innovation

CONDITIONS

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



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation

RESEACH CLEARANCE
PERMIT

Serial No. 11124

CONDITIONS: see back page