

**FACTORS INFLUENCING RETENTION OF PUPILS IN PUBLIC PRIMARY
SCHOOLS IN DROUGHT PRONE ZONES OF NORTH – HERR DISTRICT,
MARSABIT 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

I dedicate this research project to my wife Midina Bonaya, our children Talaso, Madaraka and my beloved sisters Robe, Daro and Midina and their children Bombi, Kuli and Junior.

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TABLE OF CONTENT

Content	Page
Title page	i
Declaration	ii
Dedication	iii
Acknowledgement	iv
Table of content	v
List of tables	ix
List of figures	xii
List of abbreviations and acronyms	xiii
Abstract.....	xiv

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study	1
1.2 Statement of the Problem	6
1.3 Purpose of the Study	7
1.4 Objective of the Study	7
1.5 Research Questions.....	8
1.6 Significance of the Study.....	8
1.7 Limitation of the Study	9
1.8 Delimitations of the Study	9
1.9 Assumptions of the Study	10
1.10 Definition of Significant Terms	10
1.11 Organization of the study.....	11

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction	12
2.2 Overview on influence of drought on education	12
2.3 Availability and adequacy of food supplies and pupils’ retention levels in schools...	13
2.4 Household loss of livelihood and pupils retention levels in schools.....	14
2.5 Pupils involvement in household economic activities and their participation levels in schools.....	15
2.6 Effects of conflict over pastures on pupils participation levels.....	16
2.7 Summary of literature review	18
2.8 Theoretical framework	19
2.9 Conceptual framework	20

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction.....	21
3.2 Research design.....	21
3.3 Target population.....	21
3.4 Sample size and sampling procedures.....	22
3.5 Research Instruments.....	23
3.5.1 Validity of the instruments.....	23
3.5.2 Reliability of the instrument	24
3.6 Data collection procedures.....	25
3.7 Data analysis techniques	25

3.8 Ethical considerations.....	26
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CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction.....	27
4.2 Questionnaire return rate.....	27
4.3 Demographic information of respondents.....	28
4.3.1 Demographic information of headteachers.....	28
4.3.2 Demographic information of teachers.....	31
4.4 Effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones.....	34
4.5 Effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones.....	42
4.6 Extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools.....	49
4.7 Effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones.....	55

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.....	64
5.2 Summary of findings.....	64
5.3 Conclusions.....	72
5.4 Recommendations	76
5.5 Suggestions for Further Research.....	77
REFERENCES.....	78

APPENDICES

Appendix I Introductory Letter to Respondents.....	82
Appendix II Questionnaire for the Headteachers.....	83
Appendix III Questionnaire for the Teachers.....	86
Appendix IV Focus Group Discussion for Pupils.....	89
Appendix V Interview for Key Informant.....	90
Appendix VI: Research Permit.....	91
Appendix VII: Authorization Letter.....	92

LIST OF TABLES

Table	Page
Table 1.1 Primary school enrollment for Marsabit County in the 2013 and 2014	5
Table 3.1 Sampling frame	22
Table 4.1 Questionnaire return rate.....	28
Table 4.2 Distribution of headteachers according to age.....	28
Table 4.3 Distribution of headteachers according to duration as headteacher.....	29
Table 4.4 Duration of the headteachers in the current school.....	29
Table 4.5 Distribution of headteachers according to level of education.....	30
Table 4.6 Distribution of teachers according to gender.....	31
Table 4.7 Distribution of teachers according to age.....	31
Table 4.8 Duration teachers has served as teachers.....	32
Table 4.9 Duration of teachers in the current school.....	33
Table 4.10 Distribution of teachers according to level of education.....	34
Table 4.11 Response in whether availability of food has effect on pupils’ retention levels in public primary schools in drought emergency zones.....	35
Table 4.12 Responses on whether drought cause a decline in food production.....	36
Table 4.13 Responses on whether lack of food is threat to participation in education.....	37
Table 4.14 Responses on whether pupils were forced to drop out of school during drought.....	38
Table 4.15 Responses on whether during drought pupils were forced to support their families by doing household work.....	39
Table 4.16 Responses on whether hungry children are not able to school.....	40

Table 4.17 Responses on whether parents are not able to pay school due to high cost of food during drought season.....	41
Table 4.18 Responses on whether household’s loss of livelihood has effect on pupils’ retention levels in public primary schools in drought emergency zones.....	42
Table 4.19 Responses on whether during drought livestock decline.....	43
Table 4.20 Responses on whether livestock prices decline during drought.....	44
Table 4.21 Responses on whether during drought, household lose their sources on income.....	45
Table 4.22 Responses on whether parents are not able to provide for their families during drought.....	45
Table 4.23 Responses on whether household loss of income due to emergency had a negative effect of children access to education.....	46
Table 4.24 Responses on whether households affected by drought are not able to provide for their children education.....	48
Table 4.25 Responses on whether pupils involvement in household economic activities effect on pupils’ retention levels in public primary schools in drought emergency zones.....	49
Table 4.26 Responses on whether during drought; families involve children in activities to increase family income.....	50
Table 4.27 Responses on whether children were forced to look after their animals instead of enrolling in schools.....	52
Table 4.28 Responses on whether working child provides funds for his/ her fees.....	53

Table 4.29 Headteachers responses on whether was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes.....	54
Table 4.30 Headteachers responses on whether children were engaged in household work to enable adults to work outside the home.....	54
Table 4.31 Responses on whether conflict over pastures affects on pupils’ retention levels in public primary schools in drought emergency zones.....	56
Table 4.32 Responses on whether conflict over pastures in the community led to loss of human lives.....	57
Table 4.33 Responses on whether conflict in the community lead to displacement of families which leads to pupils dropping out of school.....	58
Table 4.34 Responses on whether displaced children are deprived of education.....	59
Table 4.35 Responses on whether pupils in the school travel great distances to escape conflicts.....	60
Table 4.36 Headteachers responses on whether conflict led to displacement of pupils’ families.....	61
Table 4.37 Headteachers responses on whether children were afraid to go to school due to threats of attack.....	61
Table 4.38 Headteachers responses on whether schools were sometimes closed to prevent attacks.....	62

LIST OF FIGURES

Figure	Page
Figure 2.1 Interrelationship between variables in the factors affecting pupils' retention levels in drought emergency zones of North – Horr District, Marsabit County	20

LIST OF ABBREVIATIONS AND ACRONYMS

ALRMP	Arid Lands Resource Management Programme
Arid	Lands Resource Management
ASAL	Arid and Semi Arid Lands
EFA	All for Education
FPE	Free Primary Education
IANS	Indo-Asian News Service
IDP	Internally Displaced People
IFCR	Red Cross and Red Crescent Societies
KNBS	Kenya National Bureau of Statistics
MoE	Ministry of Education
NER	National Enrolment Rates
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Childrens' Fund
WDR	World Disasters Report
WEFEA	World Education Forum; Education for All
WFP	World Food Programme

ABSTRACT

The purpose of the study was to examine factors influencing retention of pupils in public primary schools in drought prone zones of North – Horr District, Marsabit County. The study was guided by four objectives. Objective one sought to determine how households availability of food influence retention of public primary schools pupils in drought prone zones, objective two sought to establish how sources of livelihood influence retention of pupils in public primary schools in drought prone zone, objective three sought to assess the extent to which involvement of pupils in household economic activities influence their retention in public primary schools in drought prone zone while objective four sought to assess how community conflict over pastures influence pupils’ retention in public primary schools in drought prone zone of North-Horr District, Marsabit County. The study employed descriptive survey design. The sample for the study comprised of eight (8) headteachers, 44 teachers and 96 class 8 pupils. Data was collected by use of using questionnaires, focus group discussions and interview. Presentation of data was done using tables. Statistical Package for Social Sciences (SPSS) Software was used to aid in the analysis of data. Findings on the effect of availability of food on pupils’ retention levels in public primary schools in drought emergency zones revealed that availability of food has effect on pupils’ retention levels in public primary schools in drought emergency zones as indicated by all the 7 headteachers and 43 of teachers. It was also indicated that during hunger season, pupils lack enough energy to attend classes especially when they walk long distance to school and it also affects their attention towards the entire learning process. Findings on the effect of household’s loss of livelihood on pupils’ retention levels in public primary schools in drought emergency zones revealed that household’s loss of live hood has effect on pupils’ retention levels in public primary schools in drought emergency zones as revealed by majority 5 out of 7 headteachers and majority 42 out of 44 teachers. Findings in the extent to which pupils’ involvement in household economic activities affects their retention levels in public primary schools revealed that that pupils involvement in household economic activities effect on pupils’ retention levels in public primary schools in drought emergency zones as indicated by majority 7 out of 8 headteachers and majority 42 out of 44 teachers. It was concluded that lack of food was a threat to participation in education. Lack of food led to early marriage; pregnancies and prostitution. The study concluded that household’s loss of live hood affected on pupils’ retention levels in public primary schools in drought emergency zones. The study concluded that pupils’ involvement in household economic activities effected on pupils’ retention levels in public primary schools in drought emergency zones. It was concluded that conflict also affected pupils’ education because it brought enmity between the pupils from different background. This research takes exception to the fact that the study was conducted in Marsabit County yet retention of pupils in public primary schools in drought prone zones is national wide; the researcher suggested that the study be conducted in a larger area to compare the results.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education is a fundamental right of every person, a key to other human rights, the heart of all developments, the pre-requisite for equity, diversity and lasting peace (World Education Forum; Education for All [WEFEA]; All for Education [EFA] ; A Framework for Action, Dakar, April 2000). Education occupies a central place in human rights and is essential and indispensable for the exercise of all other human rights and for development. Education has been recognized as a central element in social and economic development. According to weeks (1963), education is a form of investment in human capital which yields economic benefits by increasing the productivity of its people.

Education has been regarded as an important avenue towards economic opportunities and social mobility and raises an individual's social status. Indeed primary schooling is important for the achievement of national development and access to primary school has been formally accepted as a basic human right for over half a century (United Nations Childrens' Fund [UNICEF], 2009) and in fact after the government of Kenya adopted the policy of Free Primary Education (FPE) in 2003, the primary school enrollment rate increased to 104 percent however still 1.8 million children are out of school. This is more pronounced in Arid and Semi Arid Lands (ASAL) of Kenya (Friedrich, 2009).

Education is interrupted and a lot of school time lost in areas affected by emergencies such as conflict, floods and drought in Kenya. These disasters put many children at risk, exposing them to dangerous and rapidly changing situations. The quality of Education is

affected and disrupted as a result of these disasters, leaving children vulnerable to psychosocial trauma. Providing education in emergencies also mitigates the negative impact of emergencies on development; protracted crises reverse progress towards achieving education development goals such as *Education For All* and *Vision 2030*. Emergencies also deny children the right to free and compulsory basic education as enshrined in the Kenya Constitution 2010.

Drought in Kenya has been increasing in the last 50 years especially in arid and semi arid areas where the rainfall receive falls below 150-300 mm per year (Marsabit Metrological Report 2000). The re-occurring nature of the drought resulting to humanitarian loss of live, conflict over pasture and water, food insecurity are the main challenges facing people living in these areas. Donor aid and assistance from religious organizations is what they depend on from time to time. Livestock production account for about 90 percent of employment and family incomes for the arid and semi-arid areas of the north and the northeast in Kenya. Poor livestock market also accelerate poverty in the region where people are uncertain of their future and mainly dependent on food aid.

Drought is a recurring climatic event and a global phenomenon, but its features vary from region to region. It is a chronic problem in arid and semi-arid regions. Conceptually, drought is considered to describe a situation of limited rainfall substantially below what has been established as a 'normal' value for the area concerned, leading to adverse consequences for human welfare. Although drought is a climatically induced phenomenon, its impact depends on social and economic contexts as well. Drought leads to vulnerability. 'Vulnerability' refers to the capacity of a population to anticipate, cope with, prevent major decline in well-being, and recover from the adverse impact of shocks

(Blaikie et al. 1994, World Bank 2001, Tesliuc and Lindert 2004, Brooks, Adger and Kelly 2005).

Drought has always been a major threat among natural hazards to people's livelihoods and socio-economic development (Rathore 2008). It tends to occur less frequently than other hazards. However, when it does occur, it generally affects a broad region for seasons or years at a time. This results in a larger proportion of the population being affected by drought than by other disasters. Many countries world over are affected by drought mostly associated with arid and semi-arid conditions. Much of the current knowledge of drought is based on arid and semi-arid regions (Jodha 2008; Campbell 2009; Shivakumar and Kerbart 2009; Rathore 2008). However, despite reasonably high rainfall, drought occurs frequently in the sub-humid regions.

ASALs and other marginalized regions have some of the lowest rates in each of the education indicators (access, enrolment, quality, completion and transition) and experience the least rate of growth of education infrastructure. An analysis conducted to map schooling levels of all persons aged six and above indicates that only 32.3 % in ASAL District have ever enrolled in school against a national average of 76.8%. In central province for example, 92 percent of the population has attended school. Worse still, only three (3) percent (and only 0.5% of women) in North Eastern Province (NEP) have attended secondary schools, against a national average of 8.7 percent. Notably low is the population that has attended any post-secondary institutions, at only 0.6 percent (Kenya National Bureau of Statistics [KNBS], 2008).

Four years after the introduction of FPE in 2003 and related friendly policies, primary school National Enrolment Rates (NER) for Northern arid districts average 51.1 (2007), against a

national average of 91.6. Drought affects households in a number of ways. The long dry spell has a damaging impact on food sources and income, particularly amongst the marginal agro-pastoralists and pastoralists who are predominantly reliant on livestock and small agriculture. Drought cause crop failure and an increased death to animals and creates significant losses in valuable assets so households who thereafter face an uncertain future as there is no assurance of recovery. These households are amongst the most food insecure. The prolonged dry spell is cause severe damage to food sources and the income of communities who are predominantly reliant on livestock and small agriculture in drought prone areas. When shortage of food is prevalent, a common practice is to reduce meal intake by household members especially amongst children, thus increasing their risk of health problems.

Statistical analysis points to marginalization of NEP in all aspects of enrolment, retention, participation, completion and even achievement, more so for girls. An analysis of Net Enrolment Ratio for primary schools indicates great disparities though the analysis, indicate that impressive improvement relative to national enrolment performance but however, dismal performance was recorded in four arid districts (Wajir, Ijara, Garissa and Mandera).

Pastoralists are some of the most marginalized people in Kenya, often having virtually no say over the changes that are impacting on their lives. Pastoralists derive their livelihoods mainly from natural resources - pasture, water, natural vegetation and livestock. However, reduced access to these resources, in particular, land and water, has increasingly put pastoralists under intense pressure (Walker, Dekha, & Shuria, 2003).

Despite all the effort by the government, religious organization and donor agencies to expand educational access through increased enrollment and low retention. The retention level in Marsabit County remains high.

According to Marsabit County Director of Education Office (2014) the following are the primary school enrollment for the four counties for the year 2013, 2014 as shown in the table below.

Table 1.1 Primary school enrollment for Marsabit County in the 2013 and 2014

Sub county	2013	2014
Moyale	17,245	14,977
Saku	12,245	12,290
Laisamis	10,305	10,159
North - Horr	7,730	7,705
Total	47,525	45,131

There are 148 boys and 82 girls who are registered for KCPE in this year in North - Horr District (DEO's Office, 2014). Therefore there is need for long term measure to overcome the problem of high retention and low enrollment. This is as a result of frequent drought that influences pupils' retention in school. Drought also accelerates conflict over water and pasture and is another main challenge to high enrollment and low retention in public primary schools.

Weapons entering Kenya from neighboring war-torn countries affects pupils learning. For example the 2014 January to March conflict in Moyale has made many schools remain closed and it is expected that when conflict ceases, pupils will resume schooling. Conflict over pasture and water is also experience in the border of Kenya and Ethiopia in North-Horr District

mainly in Dukana Division where Garrwolle, Saru Elhad Primary schools remain closed for sometimes during the conflict in 2006 - 2007 and January - February 2014 conflict. Conflict of a pasture is also common in Gas location on the border of North-Horr and Loyaigalani District (2008-2010) of Marsabit County where schools on the border of the two districts were closed due to conflict between the Gabra of North- Horr and Turkana, Samburu of Loyaigalani District. Therefore drought affect pupils participation in education as conflict is common among neighbouring communities during the dry season.

1.2 Statement of the problem

Kenya upholds education as a fundamental human right and recognizes it as pivotal for the attainment of self-fulfillment and national development (GoK 2007). Ministry of Education (MoE) 2006; Children Act Cap 586 2001). Since Kenya's independence in 1963, districts situated in arid Kenya such as Marsabit, Turkana, Wajir, Mandera and Garissa have continued to exhibit extensively lower access, participation, and completion and achievement rates (Sifuna, 2005). The limitations facing education of girls and boys in arid Kenya has over time attracted various actions National interventions have however been critiqued as being both inappropriate for the socio-economic and geographic realities of this region; and inadequate to mitigate the historical deprivation the region has experienced. Consistent efforts have been made to address issues of access, equity, quality' retention and relevance of education. In Kenya, drought is the single most important natural hazard in terms of shattered livelihoods, hunger, deaths and nutrition-related diseases. The ASALs, are usually the worst affected. The ASALs in Kenya occupy 80% of Kenya's land mass and support approximately 30% of the total population. Public-private partnerships in education have been encouraged leading to increased individual and community participation in the education sector. The ministry of education

continues to receive the highest allotment of the recurrent expenditure (GoK 2007; GoK/ALRMP 2004; MoE 2006). The frequent drought has resulted to low enrollment and high retention in the district. In this regard this study found it necessary to investigate factors influencing retention of pupils and public primary schools in drought prone zones of North-Horr District, Marsabit County.

1.3 Purpose of the study

The purpose of this study was to investigate factors influencing retention of pupils in public primary schools in drought prone zones of North – Horr District, Marsabit County.

1.4 Objective of the study

This study was guided by the following objectives

- i. To determine how households availability of food influence retention of public primary schools pupils in drought prone zones of North – Horr District, Marsabit County.
- ii. To establish how sources of livelihood influence retention of pupils in public primary schools in drought prone zone of North-Horr District, Marsabit County.
- iii. To assess the extent to which involvement of pupils in household economic activities influence their retention in public primary schools in drought prone zone of North-Horr District, Marsabit County.
- iv. To assess how community conflict over pastures influence pupils’ retention in public primary schools in drought prone zone of North-Horr District, Marsabit County.

1.5 Research questions

- i. How does household availability of food at home influence pupils' retention in public primary schools in drought prone zones of North – Horr District, Marsabit County?
- ii. In what ways does a household source of livelihood influence pupil's retention in public primary schools?
- iii. To what extent does pupils involvement in household economic activities influence their retention in public primary schools?
- iv. How does community conflict over pastures influence pupils' retention in public primary schools?

1.6 Significance of the Study

The findings of this study would be significant in a number of ways. First, the study may be significant to parents and pupils as it will enhance their understanding of problems affecting enrolment and retention of pupils in schools and take appropriate measures to improve some of the factors while lobbying the relevant authorities to address the factors that are beyond their control. The study may be of importance to the teachers as they can use the study findings to address those factors that negatively impact on enrolment and retention of pupils hence facilitate increased enrolment and retention of pupils.

The study may also help the Government of Kenya to pursue education policies and regulation that enhances pupil enrolment and retention in the ASAL areas, hence granting them equal education opportunities for all and especially equal access and control of education resources. The community may be sensitized on awareness of drought hazards and the

related mitigation strategies to which they are exposed and hence be able to take specific actions to minimize its threat to the education of their children. Finally the results obtained will be useful to scholars in the field of educational access by enriching the existing literature. The study findings therefore may be used as a point of reference for other researchers who may take an interest in the same area.

1.7 Limitations of the Study

According to Best and Kahn (1998) limitations are conditions beyond the control of, the researcher that may place restrictions on the conclusions of the study and their application to other situations. Limitation of the study is that some of the respondents gave socially acceptable responses to please the researcher and not to expose the negative side of the government's role in drought mitigation. However efforts were made in explaining to the respondents on the importance of the study and requesting the respondents to be sincere and honest.

1.8 Delimitations of the study

The study was carried out in North Horr-District (Marsabit County). Although there are other districts that experience the same conditions, they will not be included in the study. The study was conducted in 8 public primary schools in North Horr-District. Private schools were not included in the study since they may not be facing the same challenges as public schools. Though there were other factors that affect pupils' retention levels in education, the researcher restricted himself to only selected variables. The data for the study was collected from head teachers since they are best placed to provide information concerning the retention rates in the schools. The findings of the study were generalized to the rest of the country with caution.

1.9 Assumptions of the study

The following assumptions were made:

- i. The headteachers in the schools were well versed with emergency situations that affect pupils retention levels
- ii. The district experiences low retention levels as a result of the emergency situations.

1.10 Definition of significant terms

Access refers to the availability of opportunity for primary school and other educational institutions to admit school age children and the willingness of these children to take up the opportunity and get enrolled.

Dropout rate refers to the rate of students withdrawing from primary school education level before sitting for National examinations.

Drought refers to extended period of lack of rain leading to diminishing pastures

Home environment refers to factors related to learners home that have an impact on learning such as the location of residence, education background and income of parents.

Public primary school refers to primary schools that are taught by Government employed teachers and are run by school management committee.

Pupils' participation refers to the chance an individual has to enroll and fully get involved in learning activities within a primary school with an emphasis on the completion of the eight year cycle.

Repetition refers to a situation where a learner remains in the same grade he/she was the previous year.

Retention refers to number of pupil available in one grade the previous year compared to the number available in the same grade in the present year.

1.11 Organization of the study

The study is organized into five chapters. Chapter one consists of general introduction of study which includes the background of the study, the statement of the problem, purpose of the study, the objectives of the study, research questions, significance of the study, limitations of the study, delimitation of the study, definition of terms and the organization of the study. Chapter two focus on literature review which will be guided by the research themes. Chapter three described the research methodology to be used in the study. This includes research design, target population, sample and sampling procedures, research instruments, validity of the instrument, reliability of the instrument, data collection procedure and data analysis technique. Chapter four outlines data presentation, analysis and discussion of research findings. Chapter five is the summary of research findings, discussion, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on factors influencing retention of pupils in public primary schools in drought prone zones. The chapter focuses on general overview, the effect of shortage of household food, loss of livelihood, how involvement of pupils' in household economic activity influence retention in primary schools in drought zones. The chapter also presents the theoretical and conceptual framework of the study. A theoretical and conceptual framework is also presented.

2.2 Overview on influence of drought on education

Over 80% of Kenya land mass fall under arid and semi arid lands (ASAL), which are prone to frequent droughts. According to Bundy, Burbano, Grush, Geli, Jackes, and Drakes (2009) a combination of factors such as shortage of food, loss of income, pupils' involvement in household activities affect pupils' access in school. The researchers further indicated that in Namibia, during drought in 2010, school attendance dropped by 28 percent boys and 22 percent girls. Reasons associated with the drop in school access to education included lack of food, children involvement in family economic activities. While girls accompanied their mothers in search of water, boys accompanied their fathers in search for pasture for cattle.

During drought in North-Horr District, pupils do not attend school as they have to get involved in search of water and pasture for the animals. Boys accompany their adult

males in search of pastures while girls accompany their mothers in search for food and water for the family. This has an effect on their education.

2.3 Availability and adequacy of food supplies and pupils' retention levels in schools

Drought conditions lead to shortage of food hence affecting peoples' lives. Shortage of food results in the adoption of negative coping strategies including diverting of food to young children making the older siblings especially vulnerable. The lives of millions of children in many countries are blighted by recurrent, emergencies such as drought. Food scarcity and malnutrition during drought jeopardise the survival and health of the children. The effects of these crises permeate all aspects of children's lives. That includes their education where many children are forced to drop out of school in at the onset emergencies, either to migrate, or to support their families by doing household work or income-generating activities. During drought emergencies families suffer from lack or inadequate food. Children are the first victims of such emergencies. When hungry these children are not able to school.

A research carried out by save the children, some fee-paying boarding schools in Turkana were closed in 2010 as the cost of food is higher than the budgeted costs. Parents are not able to pay school levies for the children as any form of income is taken up by food. Salee (2013) did a study to establish the influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County. Findings of the study revealed that school feeding programme had an influence on pupils' enrollment.

Huho (2010) conducted a study on Drought severity and their effects on rural livelihoods in Laikipia District, Kenya. One of the variables was to establish how drought affected pupils' participation in schools. The study revealed that availability and adequacy of food supplies affected pupils participation in schools. Huho however did not establish how availability of food affected pupils' retention in schools hence the need for this study. Shibru (2001) did a study to establish the effects of food supplies on Nomadic Pastoralists livelihood. A Case Study of the Borana of Southern Ethiopia. The study findings revealed that food school attendance was low during drought hence pupils accompanied their parents in searching for food. The study was conducted in Ethiopia while the current study will be conducted in Kenya.

2.4 Household loss of livelihood and pupils retention levels in schools

During drought, livestock numbers start to fall, through sales and deaths among the most vulnerable animals. Furthermore, (Toulmin, 1995) points out that these relative price movements provide an increasingly tight squeeze on herders' ability to raise cash to buy the food needed by their families. Drought has an impact on household income. During drought, earnings from farm labour also dropped substantially, due to the reduced labour demand.

In a study carried out by Blum (2005) revealed that in southern China and north-eastern Thailand, households income levels were affected by drought. Apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools. In a study carried out by Huho and Mugalavai (2010) on the Effects of Droughts on Food Security in Kenya revealed that schools in Wajir County experienced low participation during drought. Parents were not able to pay school levies

hence making it difficult for children to learn. Glewwev and Nanaan (2004) studied the effect of drought on children education in Ghana revealed that household loss of income due to emergency had a negative effect of children access to education. Households that were affected by such emergencies were not able to provide for their children education.

Rathore (2008) in his study on drought and household coping strategies: a case of Rajasthan revealed that loss of livelihood as a result of drought had an effect on pupils participation in schools. The study did not however establish how loss of livelihood affected pupils' retention in schools hence the need for the current study.

2.5 Pupils involvement in household economic activities and their participation levels in schools

During drought, families involve children in activities to increase family income. This is a critical coping mechanism of pulling out of school going children to participate in small jobs in order to supplement stretched family incomes. There are circumstances where the microeconomic environments of some households lead to demand for children participation in economic activity of the family. In this situation children engage in work because the social economic status of those households dictates so. Children also suffer from the effects of labour as a result of internal division of work within the households (Tungesvik, 2000). During drought and other emergencies, some children are engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home. Likewise, Tungesvik (2000) also notes that sending children to work can be a survival strategy employed by either parents or guardians in the course of trying to reduce risk of interruption of the income stream within the households. This is very common when

households that are normally relatively prosperous, are exposed to diseases, natural disaster and outbreak of wars.

A study by Amma (2000) clearly indicates that in Chunya District in Tanzania especially among the pastoralists' communities, the nature of households' economy is an explanation for why some children need to work. The study revealed that during drought search for food is the most important activity. Since pupils cannot attend school while hungry, they are involved in the search for food. This affects their participation in schools where some pupils are forced to drop out of school all together.

2.6 Effects of Conflict over Pastures on Pupils Participation Levels in Education

Traditionally, various pastoral communities use raiding as a cultural practice for restocking of herds, especially after periods of drought or outbreaks of diseases. The major causes of conflicts between different pastoralists are competition over resources. The border conflict of Kenya and Ethiopia in North Horr district between 2006-2007 and the recent 2014 resulted to displacement of many families, pupils and teachers thus many pupils dropping out of school while others migrate with their parents. The same problem was also experienced in Gas primary school in 2008 during the resource conflict between Gabbra of North Horr district and Turkana, Samburu of Loyangalani district. Conflict which occurs hundreds of kilometers away from school environment affect learning among the pastoral communities as school children are withdrawn from school to replace their relatives who died in raid as livestock is given the first priority where education is considered as secondary needs.

Raiding leads to distrust between communities which is a prerequisite of conflict (Mwangi 2006). Traditionally, livestock raiding often involved small-scale manageable

violence and theft of the best livestock or replacement of animals lost during periods of droughts or diseases. The Turkana and Pokot pastoralist communities have used raiding and violence to restock herds, expand grazing lands, gain access to water and pasture resources and increase social status for more than 9,000 years (Eaton 2008; Moru 2010).

However, in recent years, due to the proliferation of modern small arms, commercialization of livestock raiding, dispute over land tenure rights, banditry and predation, the cultural practice has become a widespread, sophisticated, more violent, and destructive activity among pastoral communities in northern Kenya (Mkutu 2008; Kumssa et al. 2009; Leff 2009; Mahmoud 2011; Njiru 2012; Omolo 2010). The proliferation of modern automatic weapons is well documented as having had a negative effect on the scale and impact of armed violence in pastoral communities (Mirzeler and Young 2000; Mkutu 2006). In addition, commercialized livestock raiding in which wealthy businessmen, politicians, traders and local people pursue economic objectives has interfered with pastoral livelihoods and contributed to conflicts among pastoral communities (Kaimba et al. 2011; Eaton 2010; Mkutu 2010).

Adano, Dietz, Witsenburg, Zaal (2012) in their study on climate change, violent conflict and local institutions in Kenya's drylands revealed that drought has an effect on pupils' participation in schools. The study established that during conflict, families move in search of safe areas hence drop out of school all together. Bollig, (2008) in his study on ethnic conflicts in North West Kenya: Pokot-Turkana raiding 1969–1984 revealed that conflict was one of the factors that affected pupils' participation in schools. Bollig, (1993) in another study on intra-and interethnic conflict in Northwest Kenya: a multicausal analysis of conflict behavior revealed that conflict over pastures was a major

factor affecting pupils' school attendance. Such conflicts made families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

2.7 Summary of literature review

The literature review has focused on factors influencing retention of public primary schools pupils in drought prone zones. Different studies have establish how drought affects pupils' retention in schools. UNICEF (2010) indicate that Ethiopia Southern Region which neighbour North-Horr has high drop out during the drought as learners a forced to move with livestock in search of pasture and water. The two are linked as pupils' in both area of the study drop out of school due to drought. However the study by UNICEF did not reveal how conflict over pasture during the drought result to movement of people. Therefore the current study aim at establishing conflict over pasture as another cause of migration which results to pupils' drop out.

Salee (2013) revealed that school feeding programme had an influence on pupils' enrollment during the drought. Huho (2010) revealed that availability and adequacy of food supplies affected pupils participation in schools. Huho (2010) however did not establish how availability of food affected pupils' retention in schools hence need for current study to establish how availability of food, loss of resources during the drought affect retention of primary schools pupils'. Shibr'u's (2001) findings revealed that food school attendance was low during drought hence pupils accompanied their parents in searching for food. The study was conducted in Ethiopia while the current study was conducted in Kenya. Rathore, (2008) revealed that loss of livelihood as a result of drought had an effect on pupils participation in schools. The study did not however establish how loss of livelihood affected pupils retention in schools hence the need for the

current study while Amma, (2000) established that during drought search for food is the most important activity. Adano, Dietz, Witsenburg, Zaal (2012) revealed that drought has an effect on pupils' participation in schools. Bollig, (2008 & 1993) revealed conflicts over pasture and water which make families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

2.8 Theoretical framework

The study was guided by Hierarchy of Needs Theory by Abraham Maslow (1943). According to this theory there minimum requirements that are essential to a descent standard of living. These are known as physiological needs. These include food, shelter and health care. They are primary needs and have to be catered for before other needs such as security, love, affection and self actualization. The theory fits in the study in that for pupils to access education they need to have achieved the basic needs such as food shelter and security. If the needs are not met, then pupils are not able to access education.

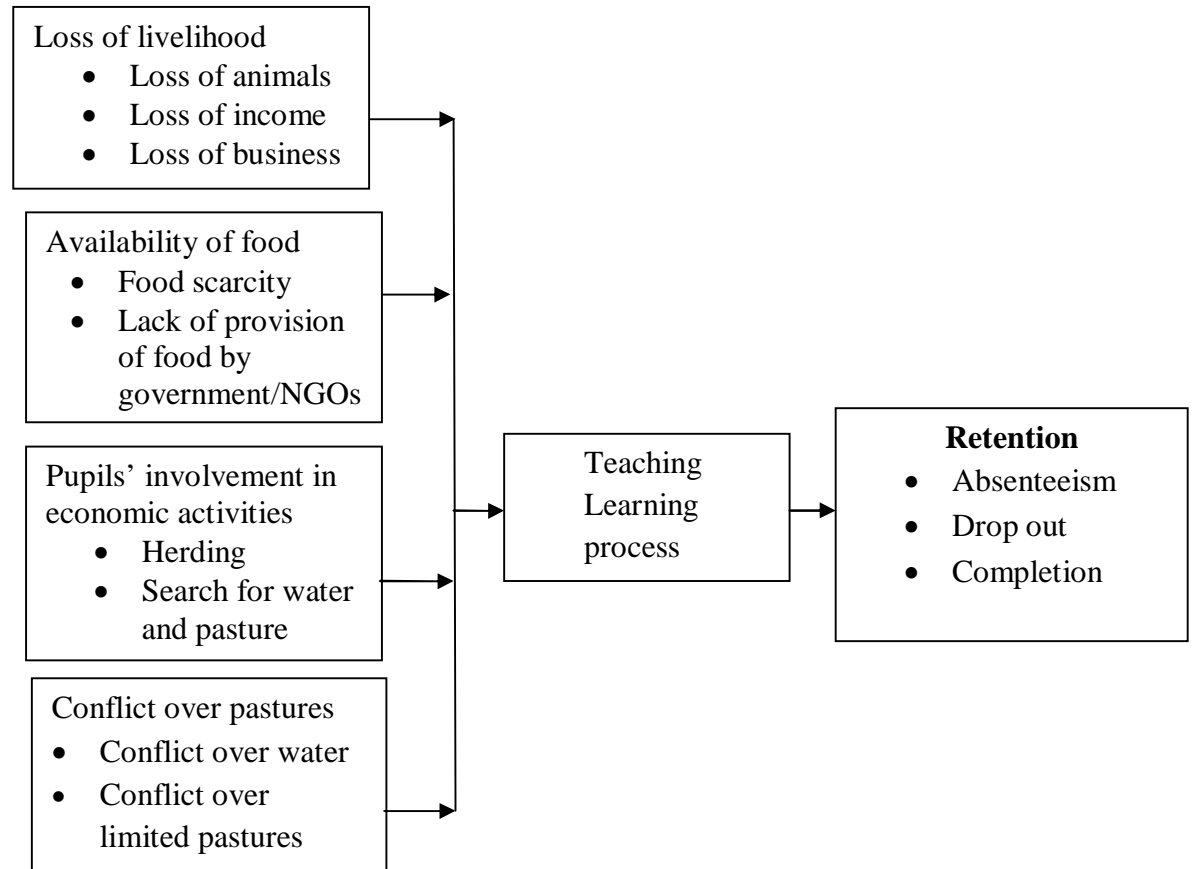
In North-Horr District drought and conflict over pasture and water are the two main factors which influence retention of pupils in public primary schools. Children are not able to make to school when there basic needs such as food and security are not provided.

Children and their parents adopt other coping mechanisms such as working for others, working at home for their parents to work for others or migrating where their security is assured. The problem will be solved if the government properly implements policies such as school feeding programme, establishment of boarding schools, establishment of mobile schools and improvement of security will enhance retention of pupils in public primary school as their learning process will not be affected.

2.9 Conceptual framework

The conceptual framework for the study is presented in figure 2.1

Figure 2.1 Interrelationship between variables in the factors affecting pupils' retention levels in drought prone zones of North – Horr District, Marsabit County.



The conceptual framework for the study shows that interrelationship between variables in the factors affecting pupils' retention levels in drought prone zones of North-Horr District, Marsabit County. The framework shows the effect of drought on pupils' retention levels in education. In the framework, factors such as loss of livelihood, shortage of food supplies, pupils' retention levels in education. These are the independent variables. The dependent variable is retention levels which is characterized by low enrollment, absenteeism and completion.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in this study. It is organized in seven sub topic namely: research design, population and target population, sample and sampling technique, instrument validity, instrument reliability, data collection procedures and data analysis techniques.

3.2 Research design

Research design is the conceptual structure within which research is conducted. It constitutes blueprint for the collection, measurement and analysis of Data (CR Kathori 2004).The study used the descriptive survey design. The design concern with describing characteristics of individual, item or group. The study investigated current information with regard to factors that influence retention of pupils in public primary schools in drought prone zone of North-Horr district. The design provided information about population variables on challenges and problems faced.

3.3 Target population

According to Mbwesa (2006) population is the entire group of people, events or things of interest that researcher wishes to investigate. According the Marsabit County Director of Education office (2014) there are 11 public primary schools in North Horr District comprising of 77 teachers and 230 pupils. The target population in this research was eleven (11) headteachers, 77 teachers and 230 class 8 pupils.

3.4 Sample size and sampling procedures

Sample size a set of population which is selected for the study that represents total characteristics of whole population. Sampling is a procedure for selecting sample for study.

The vastness of the district (about 25,000²km) where schools are situated far away from one another may not allow the researcher to reach all schools in the expected time. Therefore all schools were not included in the study. Mugenda and Mugenda (2003) and Hilton (1995) suggest that sample of 10% population is said to be minimum and 20% population is required for smaller population. Considering the total population in the research, the researcher worked with higher percentage since 20% is small to make research reliable. The study used random sampling to select headteacher and teachers. The researcher wrote their names on a piece of paper, put them on different boxes, later the researcher picked them one by one without looking until the required number were picked. The researcher used stratified random sampling to select pupils from each of the two divisions, strata was made for each division to select four schools from each division. Later pupil was selected by random sampling while key informants were selected through purposive sampling because of their positions. (School Committee, Youths, Women, Leaders and Sponsors).

Table 3.1 Sampling frame of std 8 and teachers

Category	Population	Sample	Percentage
Headteachers	11	8	72.7%
Teachers	77	48	63.3%
Pupils	230	96	39.5%
Total	318	152	47.8%

3.5 Research Instruments

Data was collected by use of questionnaires, focus group discussions and interview. All the instruments generated information on how different variables in the study affect retention of pupils in the study area. There were two sets of questionnaires one for headteachers and another for teachers. The pupils were involved in focus group discussions while the interview was used for the key informants.

The questionnaires had 5 sections. Section A had demographic data while section B had items to determine how availability of food affect pupils' retention levels in public primary schools, section C had items on how household's loss of livelihood affect pupils' retention levels in public primary schools, section D had items assessing the extent to which pupils involvement in household economic activities affect their retention levels in public primary schools while section E had items assessing how conflict over pastures affect pupils' retention levels in public primary schools. Anderson (1990) suggest that focus group should be from 6-12 participant in order to achieve effectiveness and facilitate group dynamics, therefore 96 pupils formed 17 groups for study.

Interview schedule was conducted for key informants by the researcher, in which the researcher used open ended question on the factors influencing retention, the interview enabled the researcher to acquire valuable information on factors influencing retention of pupils in public primary schools.

3.5.1 Validity of the instruments

Validity indicates the degree to which an instrument measures what it is suppose to measure (Borg & Gall 2003). For validity the research used content validity which is

extent to which a measuring instrument provides adequate coverage of the topic under study. If the instrument used adequately represent the content then the validity is good. In order to obtain good validity the researchers ensure that questionnaires are subject to the scrutiny of the experts to assess the relevance of the content used. The researcher did a test- retest to the questionnaire in pilot study and this enabled him to improve validity and reliability of instrument, it also helped the researcher to detect the irrelevant and weak question, where they were corrected before the final data collection Orodho (2008).

3.5.2 Reliability of the instrument

Mugenda and Mugenda (2003) defines reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated tests when administered a number of times. Test-retest method was used to assess the reliability of instruments. Questionnaire was administered to the same teachers and headteachers in a pilot study. A time lapse of one week or two week between the first and the second test was allowed. Scores are co-related using Pearson Product moment co-efficient formula, this was considered as estimate of reliability.

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[N\sum(x)^2 - (\sum x)^2][N\sum(y)^2 - (\sum y)^2]}}$$

where;

N= number of pair of scores

$\sum xy$ = sum of the products of paired scores

$\sum x$ = sum of x scores

$\sum y$ = sum of y scores

$\sum x^2$ = sum of squared x scores

$\sum y^2$ = sum of squared y scores

According to Mugenda and Mugenda (1999) a coefficient of 0.80 or more will simply show that there is high reliability of data. The correlation coefficient for the instruments in the study was 0.74 hence the instruments were deemed reliable.

3.6 Data collection procedures

The researcher obtained a permit from the National Commission for Science, Technology and Innovation (NACOSTI) Council of Science and Technology. The researcher then proceeded to report to the County Director of education (CDE) Commissioner and District Education Officer, Marsabit County. The researcher then made advance visit to select schools, presented the authorization document and with the permission of respective principals, set date for data collection. The researcher administered questionnaires personally and collect them once filled up. The respondents were assured that strict confidentiality was maintained in dealing with their identities. The completed questionnaires were collected in the same day.

3.7 Data analysis techniques

According to Mugenda and Mugenda (2003) data analysis is the process of bringing order and meaning to raw data collected. The data was collected and cross examine to ensure accuracy completeness and identify items wrongly responded to, spelling mistakes and blank spaces. The data was coded to translate questions into different categories, the

descriptive statistics such as frequency distribution and percentages was used to analyse the data. Qualitative data was analysed using content analysis where all responses were categorized according to their thematic and content. Presentation was done using table, figures and charts. Statistical package for Social Sciences (SPSS) Software was used to aid in the analysis of data.

3.8 Ethical considerations

Ethics as discussed in this chapter refers to doing what is morally and legally right in the conducting of research. This requires the researcher to be knowledgeable about what is being done; to use reasoning when making decisions; to be both intellectual and truthful in approach and reporting; and to consider the consequences, in particular, to be sure that the outcome of the research outweighs any negatives that might occur.

Before the commencement of the study, the researcher will seek permission from the relevant authorities. A letter of introduction will be sought from the university and there after a research permit will be obtained from the National Council for Science, Technology and Innovation (NACOSTI). The researcher will explain to the respondents the purpose of the study before involving them. He also explained how the results of the study would be important to them. The researcher also assured the respondents that the information they provide was for the purpose of the study and their identity would be treated confidentially.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This study investigated factors influencing retention of pupils in public primary schools in drought prone zones of North – Horr District, Marsabit County. The study specifically investigated how households availability of food influence retention of public primary schools pupils in drought prone zones , how sources of livelihood influence retention of pupils in public primary schools in drought prone zone, the extent to which involvement of pupils in household economic activities influence their retention in public primary schools in drought prone zone and assessed how community conflict over pastures influence pupils’ retention in public primary schools in drought prone zone of North-Horr District, Marsabit County. This chapter presents the data analysis and interpretation of the findings.

4.2 Questionnaire return rate

Questionnaire return is the proportion of the questionnaires returned after they have been issued to the respondents. Of the 8 headteachers and 48 teachers sampled, 7(87.5%) of headteachers and 44(91.1%) of teachers responded and returned the questionnaire. The questionnaire return rate is presented in Table 4.1.

Table 4.1 Questionnaire return rate

Category of respondents	Number of questionnaires issued	Number returned	Percentage return rate
Headteachers	8	7	87.5
Teachers	48	44	91.6
Total	56	51	91.1

4.3 Demographic information of respondents

4.3.1 Demographic information of headteachers

Demographic information of headteachers was based on gender, age, duration they had served as headteachers, duration in the current school and the level of education. Findings are presented in the following section:

Findings indicated that 7(87.5%) of headteachers were male. Table 4.2 tabulates age of headteachers.

Table 4.2 Distribution of headteachers according to age

Age	F	%
36 – 40	3	42.86
41 – 45 years	2	28.57
Above 46	2	28.57
Total	7	100.0

Data shows that 3 (42.86%) of headteachers were aged between 36 and 40 years, 2 (28.57%) of headteachers were in the age bracket of between 41 and 45 years while the

same number of headteachers were aged above 46 years. This implies that the headteachers were relatively old and hence could provide information on the factors influencing retention of pupils in public primary schools in drought prone zones.

Asked to indicate the duration they has served as headteacher, they responded as table 4.3

Table 4.3 Distribution of headteachers according to duration as headteacher

Years	F	%
1 – 5 year	3	42.86
6 – 10 years	2	28.57
11 – 15 years	2	28.57
Total	7	100.0

Data shows that 3 (42.86%) of headteachers had served as headteachers for between 1 and 5 years, 2 (28.57%) of headteachers for between 6 and 10 years while the same number of headteachers indicated that they had served as headteachers for between 11 and 15 years.

Table 4.4 presents duration of the headteachers in the current school

Table 4.4 Duration of the headteachers in the current school

Years	F	%
1 – 5 year	4	57.1
6 – 10 years	2	28.6
11 – 15 years	1	14.3
Total	7	100.0

Table 4.4 shows that majority 4 (57.1%) of headteachers had been in the current school for between 1 and 5 years, 2 (28.6%) of headteachers for between 6 and 10 years while 1 (14.3%) of headteachers had been in the current school for between 11 and 15 years.

Drought and security are the two factors that affect retention in North-Horr District. When the drought is long and the place is insecure enrollment is low and retention is high. This condition changes from time to time. This shows that the headteachers had been in their current schools for considerable number of years and hence were in a position to provide information on the factors influencing retention of pupils in public primary schools in drought prone zones.

Table 4.5 tabulates headteachers' level of education.

Headteachers who were in the current schools were in a better position to show the occurrences of drought and how it had impacted on pupils' education.

Table 4.5 Distribution of headteachers according to level of education

Level of education	F	%
PI	1	14.3
Degree	5	71.4
Masters	1	14.3
Total	7	100.0

Majority 5 (71.4%) of headteachers had degree level of education, 1 (14.3%) of headteachers had PI level of education while the same number of headteachers had Masters Level of education. This implies that the headteachers had attained education

level hence were in a position to provide information on how drought had affected education of children in the area.

4.3.2 Demographic information of teachers

Demographic information of teachers was based on gender, age, duration they had served as teachers, duration in the current school and the level of education. Findings are presented in the following section. Table 4.6 presents the age of headteachers.

Table 4.6 Distribution of teachers according to gender

Gender	F	%
Male	30	68.2
Female	14	31.8
Total	44	100.0

Majority 30 (68.2%) of teachers were male while 14 (31.8%) of teachers were female. This shows that there were more male teachers than female teachers. Asked to indicate their age, they responded as Table 4.7.

Table 4.7 Distribution of teachers according to age

Age	F	%
36 – 40	8	18.2
Below 25 years	5	11.4
26 – 30 years	12	27.3
31 – 35 years	10	22.7
41 – 45 years	5	11.4
Above 46	4	9.1
Total	44	100.0

Table 4.7 shows that 8 (18.2%) of teachers were aged between 36 and 4- years, 5 (11.4%) of teachers were below 25 years old, 12 (27.3%) of teachers were aged between 26 and 30 years. Data further shows that 10 (22.7%) of teachers were aged between 31 and 35 years, 5 (11.4%) of teachers were aged between 41 and 45 years while 4 (9.1%) of teachers were above 46 years old. This implies that the teachers were relatively old and hence could provide information on the factors influencing retention of pupils in public primary schools in drought prone zones.

Teachers who had served in the schools for a long time were in a better position to explain how drought in the area had affected pupils' education as drought tend to occur frequently but affects a broad region for season or years at a time. This results to a larger proportion of population being affected by drought than other disasters. Therefore teachers who are in one station for a long period of time and position to tell the frequency of drought and its effects on pupils' education.

Asked to indicate the duration they has served as teacher, they responded as table 4.8.

Table 4.8 Duration teachers has had been teaching

Years	F	%
Below 1 year	2	4.5
1 – 5 year	19	43.2
6 – 10 years	8	18.2
11 – 15 years	12	27.3
16 – 20 years	1	2.3
Above 21 years	2	4.5
Total	44	100.0

Table 4.8 shows that 2 (4.5%) of teachers had been teaching for below 1 year, the same number of teachers for more than 21 years, 19 (43.2%) of teachers for between 1 and 5 years, 8 (18.2%) of teaches for between 6 and 10 years. The data further shows that 12 (27.3%) of teachers had been teaching for between 11 and 15 years while 1 (2.3%) of teachers for between 16 and 20 years. The duration teacher had serve in teaching enables a teacher to provide information on retention in different school he or she had served. Therefore a long serving teacher in a particular district or region is in position to provide reliable information on retention level of different district or schools they have served e.g. how availability of food, conflict of a pasture, child involvement in household economic activity etc affect influence retention of pupil in public primary school.

Asked to indicate the duration they had been in current school, they responded as table 4.9.

Table 4.9 Duration of teachers in the current school

Years	F	%
Below 1 year	9	20.5
1 – 5 year	25	56.8
6 – 10 years	6	13.6
11 – 15 years	4	9.1
Total	44	100.0

Majority 25 (56.8%) of teachers had been in the current school for between 1 and 5 years, 9 (20.5%) of teachers for less than 1 years, 6 (13.6%) of teachers for between 6 and 10 years while 4 (9.1%) of teachers had been in current school for between 11 and 15 years. This shows that the teachers had been in their current schools for considerable number of

years and hence were in a position to create awareness in the community through seminars workshops to encourage them to sell large numbers of livestock when price are high, advising the government to come up with education system that suit peoples way of life e.g. mobile schools and awareness on important of security. Therefore teachers are in position to influence retention of pupils in public primary schools in drought prone zones.

Table 4.10 tabulates teachers' level of education.

Table 4.10 Distribution of teachers according to level of education

Level of education	F	%
PI	26	59.1
Diploma	11	25.0
Degree	6	13.6
Masters	1	2.3
Total	44	100.0

Majority 26 (59.1%) of teachers had PI level of education, 11 (25.0%) of teachers had diploma education level, 6 (13.6%) of teachers had degree education level while 1 (2.3%) of teachers had Masters level of education. This implies that the headteachers had attained education level hence were in a position to provide information on the factors influencing retention of pupils in public primary schools in drought prone zones.

4.4 Effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones

The study sought to examine the factors influencing retention of pupils in public primary schools in drought prone zones. The study specifically sought to establish the effect of

availability of food on pupils' retention levels in public primary schools in drought emergency zones.

Table 4.11 presents response in whether availability of food has effect on pupils' retention levels in public primary schools in drought emergency zones.

Table 4.11 Response in whether availability of food effected pupils' retention levels

Response	Headteachers		Teachers	
	F	%	F	%
Yes	7	100.0	0	0.0
No	43	97.7	1	2.3

All 7 (100.0%) of headteachers and 43 (97.7%) of teachers indicated that availability of food has effect on pupils' retention levels in public primary schools in drought emergency zones while a significant number 1 (2.3%) of teachers indicated that availability of food does not has an effect on pupils' retention levels in public primary schools in drought emergency zones. According to Bundy, Burbano, Grush, Geli, Jackes, and Drakes (2009) a combination of factors such as shortage of food, loss of income, pupils' involvement in household activities affect pupils' access in school. They further indicated that in Namibia, during drought in 2010, school attendance dropped by 28 percent boys and 22 percent girls. Reasons associated with the drop in school access to education included lack of food, children involvement in family economic activities.

Findings from key informants revealed that lack of food in the community led to migration of families in search of food and water hence children had to leave schools which affected retention levels of public in the primary schools. It also led to school dropout; malnutrition, truancy. It was also indicated that during hunger season, pupils

lack enough energy to attend classes especially when they walk long distance to school and it also affects their attention towards the entire learning process. The key informants further indicated that pupils looked for employment to get basic needs as the food and water was expensive due to high prices during drought.

The study further sought to establish whether drought cause a decline in food production.

Table 4.12 tabulates the findings

Table 4.12 Responses on whether drought cause a decline in food production

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	7	100.0	40	90.9
Agree	0	0.0	4	9.1

Table 4.12 shows that all 7 (100.0%) of headteachers and 40 (90.9%) of teachers strongly agreed that drought cause a decline in food production while 4 (9.1%) of teachers agreed that drought cause a decline in food production.

When pupils were asked to indicate how family lack food due to drought affected pupils' education , they revealed that pupils don't attend school due to hunger, starvation as they are not energetic to study. Some students were absenteeism from schools as human beings cannot survive without food and pupils will not go to school without food and this resulted to poor performance in national examination. This implies that drought conditions lead to shortage of food hence affecting pupils' lives. Shortage of food results in the adoption of negative coping strategies including diverting of food to young children making the older siblings especially drought zones.

Asked whether lack of food was a threat to participation in education, headteachers and teachers responded as Table 4.13.

Table 4.13 Responses on whether lack of food is threat to participation in education

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	4	57.1	26	59.1
Agree	3	42.9	17	38.6
Disagree	0	0.0	1	2.3

Data shows that majority 4(57.1%) of headteachers and majority 26(59.1%) of teachers strongly agreed that lack of food was a threat to participation in education while 3(42.9%) of headteachers and 17(38.6%) of teachers agreed with the statement.

It is in line with (Tungesvik, 2000). During drought and other emergencies, some children are engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home.

Findings from key informants indicated that lack of food affected retention levels of public primary schools pupils because lack of food at home was mainly due to poverty, pupils requires food energy to learn . When the pupils were not sure of where the next meal will be coming from, learning was not very important to them hence leading to retention. Lack of food led to early marriage; pregnancies and prostitution. It also resulted to lack of concentration, lack of learning material and Child labour as children were working for other to get school fees. It was also found out that lack of food at home

resulted to high immorality level of pupils as they can easily become gullible to be involved in commercial sex to earn income to sustain their livelihood. Parents were busy looking for casual jobs and hence pupils have to be left to look for young ones at the expense of attending school which led to poor performance.

The study further sought to examine whether pupils were forced to drop out of school during drought. Table 4.14 presents the findings.

Table 4.14 Responses on whether pupils were forced to drop out of school during drought

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	4	57.1	14	31.8
Agree	2	28.6	19	43.2
Undecided	0	0.0	2	4.5
Disagree	0	0.0	7	15.9
Strongly Disagree	1	14.3	2	4.5

Findings shows that majority 4 (57.1%) of headteachers strongly agreed that pupils were forced to drop out of school during drought, 14 (31.8%) of teachers strongly agreed with the statement. Data further shows that 19 (43.2%) of teachers agreed that pupils were forced to drop out of school during drought while 1 (14.3%) of headteachers and 2 (4.5%) of teachers strongly disagreed with the statement.

When pupils were asked to indicate how lack of water and food in school affected their learning, they revealed that lack of water and food resulted to pupils drop out. Pupils may die of hunger and without water no one can survive as water was a source of life. Some pupils went to school late and other was absent. Pupils further indicated there were cases

of transfer to other boarding school that has got boarding facilities as without water and food pupils lacked energy, and concentration in studies Tungesvik (2000) noted that sending children to work can be survival strategy employed by parents or guardian in course of trying to reduce risk of interruption of income stream within the household. Amma (2000) reveals that during the drought search for food is important activity among the pastoralist. Pupils cannot attend school while they are hungry and involved in the search for food and this affect their participation in education.

Asked to indicate whether during drought pupils were forced to support their families by doing household work, headteachers and teachers responded as table 4.15.

Table 4.15 Responses on whether during drought pupils were forced to support their families by doing household work

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	1	14.3	13	29.5
Agree	5	71.4	20	45.5
Undecided	0	0.0	3	6.8
Disagree	1	14.3	3	6.8
Strongly Disagree	0	0.0	5	11.4

Majority 5 (71.4%) of headteachers and 20 (45.5%) of teachers agreed that during drought pupils were forced to support their families by doing household work, 1 (14.3%) of headteachers and 13 (29.5%) of teachers strongly agreed with the statement while 5 (11.4%) of teachers strongly disagreed that during drought pupils were forced to support their families by doing household work. This agrees with Shibru (2001) who revealed that food school attendance is low during drought hence pupils accompanied their parents in searching for food.

To establish whether hungry children are not able to school, respondents were posed with the same item. Data is tabulated in table 4.16.

Table 4.16 Responses on whether hungry children are not able to school

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	7	100.0	32	72.7
Agree	0	0.0	8	18.2
Undecided	0	0.0	1	2.3
Disagree	0	0.0	3	6.8
Strongly Disagree	0	0.0	0	0.0

All 7 (100.0%) of headteachers and majority 32 (72.7%) of teachers strongly agreed that hungry children were not able to school, 8 (18.2%) of teachers agreed with the statement while 3 (6.8%) of teachers disagreed that hungry children were not able to school. Pupils further revealed that there were children who had dropped out of school due to lack of food and due to migration to other places e.g. for security searching for food and water.

The key informants indicated that parents in the community was unable to pay school fees during drought season because drought have great impact on school fees payment, due to a continued decline in livestock and reduction in produce as the farmers which led to lack of fund. Livestock which was the main source of income in the community die during drought seasons and hence the community was unable to pay school fees during drought season. This agrees with Salee (2013) who indicated that parents were not able to pay school levies for the children as any form of income is taken up by food. Asked to indicate whether parents were not able to pay school due to high cost of food during drought season, headteachers and teachers responded as table 4.17.

Table 4.17 Responses on whether parents are not able to pay school due to high cost of food during drought season

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	6	85.7	25	56.8
Agree	1	14.3	15	34.1
Undecided	0	0.0	2	4.5
Disagree	0	0.0	1	2.3
Strongly Disagree	0	0.0	1	2.3

Majority 6 (85.7%) of headteachers and majority 25 (56.8%) of teachers strongly agreed that parents were not able to pay school due to high cost of food during drought season, 15 (34.1%) of teachers agreed with the statement while 1 (2.3%) of teachers strongly disagreed that parents were not able to pay school due to high cost of food during drought season. This implies that parents were not able to pay school due to high cost of food which may result too many children being forced to drop out of school in at the onset emergencies, either to migrate, or to support their families by doing household work or income-generating activities.

The above findings are in line with Huho (2010) who revealed that availability and adequacy of food supplies affected pupils' participation in schools. They also concur with Shibru (2001) whose findings revealed that food school attendance was low during drought hence pupils accompanied their parents in searching for food.

4.5 Effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones

To establish the effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones, the respondents were posed with items that sought the same. Table 4.18 tabulates headteachers and teachers responses on whether household's loss of livelihood had effect on pupils' retention levels in public primary schools in drought emergency zones

Table 4.18 Responses on whether household's loss of livelihood has effect on pupils' retention levels in public primary schools in drought emergency zones

Response	Headteachers		Teachers	
	F	%	F	%
Yes	5	71.4	42	95.5
No	2	28.6	2	4.5

Table 4.18 shows that majority 5 (71.4%) of headteachers and majority 42 (95.5%) of teachers strongly agreed that household's loss of live hood has effect on pupils' retention levels in public primary schools in drought emergency zones while 2 (28.6%) of headteachers and 2 (4.5%) of teachers indicated that household's loss of live hood has no effect on pupils' retention levels in public primary schools in drought emergency zones. This agrees with Rathore, (2008) who indicated that loss of livelihood as a result of drought had an effect on pupils' participation in schools.

The researcher further sought to establish whether during drought livestock declined.

When headteachers and teachers were asked to indicate the same, they responded as

Table 4.19.

Table 4.19 Responses on whether during drought livestock decline

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	7	100.0	38	86.4
Agree	0	0.0	6	13.6

All 7 (100.0%) and 38 (86.4%) of teachers strongly agreed that during drought livestock decline while 6 (13.6%) of teachers agreed with the statement. This implies that during drought, livestock numbers start to fall, through sales and deaths among the most vulnerable animals. Toulmin, (1995) points out that these relative price movements provide an increasingly tight squeeze on herders' ability to raise cash to buy the food needed by their families. Drought has an impact on household income. During drought, earnings from farm labour also dropped substantially, due to the reduced labour demand.

Data from key informants indicated that household loss of income affected retention levels of public primary schools pupils as lack of income at households level made pupils have less time and energy for studies as they were engaged in other activities to earn income loss of income led to lack of school uniform, depression which sometimes resulted to pupils committing suicide. It was also found out that loss of income led to migration of families to look for food. Households income entirely depend on livestock sales. When the livestock market was poor, the household income was reduced and therefore lack of school fees and food for the majority of families.

Asked whether livestock prices decline during drought, headteachers and teachers responded as Table 4.20.

Table 4.20 Responses on whether livestock prices decline during drought

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	5	71.4	26	59.1
Agree	2	28.6	12	27.3
Undecided	0	0.0	1	2.3
Disagree	0	0.0	3	6.8
Strongly Disagree	0	0.0	2	4.5

Table 4.20 shows that majority 5 (71.4%) of headteachers and majority 26 (59.1%) of teachers strongly agreed that livestock prices decline during drought, 2 (28.6%) of headteachers and 12 (27.3%) of teachers agreed with the statement, 3 (6.8%) of teachers disagreed with the statement while 2 (4.5%) of teachers strongly disagreed that livestock prices decline during drought. This agrees with (Toulmin, 1995) who points out that the relative price movements provide an increasingly tight squeeze on herders' ability to raise cash to buy the food needed by their families. Drought has an impact on household income. During drought, earnings from farm labour also drop substantially, due to the reduced labour demand.

Table 4.21 shows headteachers and teachers' responses on whether during drought, household lose their sources on income.

Table 4.21 Responses on whether during drought, household lose their sources on income

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	6	58.7	27	61.4
Agree	1	14.3	15	34.1
Disagree	0	0.0	2.	4.5

Majority 6 (58.7%) of headteachers and majority 27 (61.4%) of teachers strongly agreed that during drought, household lose their sources on income, 1 (14.3%) of headteachers and 15 (34.1%) of teachers agreed with the statement while 2 (4.5%) of teachers disagreed that during drought, household lose their sources on income.

The researcher further sought to establish whether parents were not able to provide for their families during drought. When headteachers and teachers were asked to indicate the same, they responded as Table 4.22

Table 4.22 Responses on whether parents are not able to provide for their families during drought

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	5	71.4	16	36.4
Agree	2	28.6	22	50.0
Undecided	0	0.0	2	4.5
Disagree	0	0.0	3	6.8
Strongly Disagree	0	0.0	1	2.3

Majority 5 (71.4%) of headteachers strongly agreed that parents were not able to provide for their families during drought, majority 22 (50.0%) of teachers agreed that parents were not able to provide for their families during drought, 16 (36.4%) of teachers strongly agreed with the statement, 2 (4.5%) of teachers were undecided on the statement while 1 (2.3%) of teachers strongly disagreed that parents were not able to provide for their families during drought.

Table 4.23 shows headteachers and teachers responses on whether household loss of income due to emergency had a negative effect of children access to education.

Table 4.23 Responses on whether household loss of income due to emergency had a negative effect of children access to education

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	5	71.4	19	43.2
Agree	2	28.6	24	54.5
Undecided	0	0.0	1	2.3

Majority 5 (71.4%) of headteachers strongly agreed that household loss of income due to emergency had a negative effect of children access to education, 24 (54.5%) of teachers agreed with the statement, while 1 (2.3%) of teachers were undecided on whether household loss of income due to emergency had a negative effect of children access to education.

Pupils indicated that household loss of income effect of their access to education as some pupils drop out of school to replace their relatives places of work. Purchase of basic needs becomes a problem due to loss of income hence there was no fees, food, shelter due to lack of market of their activities. In a study carried out by Huho and Mugalavai (2010) on the effect of drought on food security in Kenya revealed that school in Wajir experience low participation during the drought as parents were not able to pay school levies hence making difficult to learn. The study by Glewwev and Nanaan (2004) in Ghana on effect of drought on children education revealed household loss of income due to emergency had a negative effect of children access to education.

The researcher also found out that parents' loss of household income there was no concentration, of the pupils. It also led to truancy, poor performance due to pupils' negative attitude towards learning. Some people depend on their animals to pay their children school fees and during drought if all animal die the pupils' education was affected as some pupils were transferred to other places which could create tension and disrupt the normal learning condition.

Asked whether households affected by drought were not able to provide for their children education, headteachers and teachers responded as Table 4.24.

Table 4.24 Responses on whether households affected by drought are not able to provide for their children education.

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	7	100.0	24	54.5
Agree	0	0.0	18	40.9
Undecided	0	0.0	2	4.5

All 7 (100.0%) of headteachers and 24 (54.5%) of teachers strongly agreed that households affected by drought were not able to provide for their children education, 18 (40.9%) of teachers agreed with the statement while 2 (4.5%) of teachers were undecided on whether households affected by drought were not able to provide for their children education.

The above findings are in line with Blum (2005) who revealed that in southern China and north-eastern Thailand, households income levels were affected by drought. Apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools. Huho and Mugalavai (2010) findings are also supported by this study where they revealed that during drought parents were not able to pay school levies hence making it difficult for children to learn. The study findings also agree with Glewwev and Nanaan (2004) who revealed that household loss of income due to emergency had a negative effect of children access to education. Households that were affected by such emergencies were not able to provide for their children education.

4.6 Extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools

The study further sought to determine the extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools. The researcher posed items to headteachers, teachers and pupils. Findings are presented in the following section. Asked whether pupils' involvement in household economic activities effects pupils' retention levels in public primary schools in drought emergency zones, headteachers and teachers responded as Table 4.25.

Table 4.25 Responses on pupils' involvement in household economic activities

Response	Headteachers		Teachers	
	F	%	F	%
Yes	7	100.0	42	95.5
No	0	0.0	2	4.5

All 7 (100.0%) of headteachers and majority 42 (95.5%) of teachers indicated that pupils involvement in household economic activities effect on pupils' retention levels in public primary schools in drought emergency zones while 2 (4.5%) of teachers indicated that pupils involvement in household economic activities does not has an effect on pupils' retention levels in public primary schools in drought emergency zones. This implies that during drought, families involved children in activities to increase family income. This was a critical coping mechanism of pulling out of school going children to participate in small jobs in order to supplement stretched family incomes. During drought, families

involve children in activities to increase family income. This is a critical coping mechanism of pulling out of school going children to participate in small jobs in order to supplement stretched family incomes. There are circumstances where the microeconomic environments of some households lead to demand for children participation in economic activity of the family.

Asked whether during drought, families involve their children in activities to increase family income, headteachers and teachers responded as Table 4.26.

Table 4.26 Responses on whether during drought; families involve children in activities to increase family income

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	3	42.9	15	34.0
Agree	4	57.1	23	52.3
Undecided	0	0.0	1	2.3
Disagree	0	0.0	4	9.1
Strongly Disagree	0	0.0	1	2.3

Table 4.26 shows that majority 4 (57.1%) of headteachers and majority 23 (52.3%) of teachers agreed that during drought, families involve their children in activities to increase family income, 3 (42.9%) of headteachers and 15 (34.0%) of teachers strongly agreed with the statement while 4 (9.1%) of teachers disagreed that during drought, families involve their children in activities to increase family income. This implies that drought was one of the circumstances where the microeconomic environments of some households lead to demand for children participation in economic activity of the family.

In a study carried out by Huho and Mugalavai (2010) on the effect of drought on food

security in Kenya revealed that school in Wajir experience low participation during the drought as parents were not able to pay school levies hence making difficult to learn. The study by Glewwev and Nanaan (2004) in Ghana on effect of drought on children education revealed household loss of income due to emergency had a negative effect of children access to education. A research by save the children indicate that some fee paying boarding school in Turkana were closed in 2010 as the cost of food is higher than the budgeted costs. Parents were not able to pay fees for their children as any form of income is taken by up by food.

Data from pupils indicated that some children missed school to perform household activities. Pupils further indicated that lack of breadwinners of the orphans lead them to drop out of school and to perform food searching activities. Some pupils were given a lot of household chores hence were not able to attend classes. Some pupils leave school to go and look for pasture of the livestock and for generating income for the family members. Other pupils went to work to get money to sponsor the siblings. Other household activities that pupils were engaged in included; watering the animals and plants; mudding the house and cooking for the family. It was indicated by pupils that some parents did not value education and hence gave a lot of work to pupils which affects learning process.

Table 4.27 shows headteachers and teachers responses on whether children were forced to look after their animals instead of enrolling in schools.

Table 4.27 Responses on whether children were forced to look after their animals instead of enrolling in schools

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	5	71.4	26	59.1
Agree	2	28.6	15	34.1
Disagree	0	0.0	2	4.5
Strongly Disagree	0	0.0	1	2.3

Majority 5 (71.4%) of headteachers and 26 (59.1%) of teachers strongly agreed that children were forced to look after their animals instead of enrolling in schools, 2 (28.6%) of headteachers and 15 (34.1%) of teachers agreed with the statement, 2 (4.5%) of teachers disagreed with the statement while 1 (2.3%) of teachers strong disagreed that children were forced to look after their animals instead of enrolling in schools. Tunesvik (2000) found that during drought and other emergencies, some children are engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home. Likewise, Tunesvik (2000) also notes that sending children to work can be a survival strategy employed by either parents or guardians in the course of trying to reduce risk of interruption of the income stream within the households.

Asked whether working child provides funds for his/ her fees, they responded as Table 4.28.

Table 4.28 Responses on whether working child provides funds for his/ her fees

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	2	28.6	12	27.3
Agree	4	57.1	16	36.4
Undecided	1	14.3	2	4.5
Disagree	0	0.0	12	27.3
Strongly Disagree	0	0.0	2	4.5

Data shows that majority 4 (57.1%) of headteachers agreed that working child provides funds for his/ her fees, 2 (28.6%) of headteachers and 12 (27.3%) of teachers strongly agreed with the statement. Data further shows that 2 (4.5%) of teachers were undecided on the statement while the same number of headteachers strongly disagreed that working child provides funds for his/ her fees. This is in line with (Tungesvik, 2000) that revealed that during drought and other emergencies, some children were engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home.

The headteachers were further asked whether there was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes. Table 4.29 tabulates their findings

Table 4.29 Headteachers responses on whether was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes

Response	F	%
Strongly Agree	5	71.4
Agree	2	28.6
Total	7	100.0

Majority 5 (71.4%) of headteachers strongly agreed that there was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes while 2 (28.6%) of headteachers agreed with the statement.

This shows that during drought search for food is the most important activity. Since pupils cannot attend school while hungry, they were involved in the search for food. This affected their participation in schools where some pupils were forced to drop out of school all together.

Asked whether children were engaged in household work to enable adults to work outside the home, headteachers responded as Table 4.30.

Table 4.30 Headteachers responses on whether children were engaged in household work to enable adults to work outside the home

Response	F	%
Strongly Agree	3	42.86
Agree	3	42.86
Disagree	1	14.28
Total	7	100.0

Data shows that 3 (42.86%) of headteachers strongly agreed that children were engaged in household work to enable adults to work outside the home, the same number of headteachers agreed with the statement while 1 (14.28%) of headteachers disagree that children were engaged in household work to enable adults to work outside the home

This is in line with Blum (2005) who revealed that in southern China and north-eastern Thailand, households income levels were affected by drought. Apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools. The findings are also in line with Amma (2000) who revealed that since pupils cannot attend school while hungry, they are involved in the search for food. This affects their participation in schools where some pupils are forced to drop out of school all together.

4.7 Effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones

To examine the effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones, headteachers, teacher and pupils were posed with items that sought the same. Data is presented in following section. Table 4.31 shows headteachers and teachers' response son whether conflict over pastures affected on pupils' retention levels in public primary schools in drought emergency zones.

Table 4.31 Responses on whether conflict over pastures affects on pupils’ retention levels in public primary schools in drought emergency zones

Response	Headteachers		Teachers	
	F	%	F	%
Yes	7	100.0	41	93.2
No	0	0.0	3	6.8

All 7 (100.0%) of headteachers and 41 (93.2%) of teachers indicated that conflict over pastures affected on pupils’ retention levels in public primary schools in drought emergency zones. This implies that conflicts made families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

The key informants further revealed that community conflict over pasture affected the retention levels of public primary schools pupils as conflict over pasture affects the pupils indirectly where loss of livestock which is the main dependable source of income. There was missing of lessons, insecurity due to community conflict. It was indicated that some children were taken away from school to replace their family members who die in conflict. Community conflict over pasture was relevant to reduce level of pupils’ attendance in public primary school in North-Horr District of Marsabit County. The pupils as well as the parents were not at ease for the learning process to go on as usual. This therefore forced parents to be closer to their children forcing them to be away from school to accommodate their comfort. Community conflict also led pupils walking for long distance from home hence pupils become stressed and hence poor performance. This implies that the major causes of conflicts between different pastoralists was competition over resources.

Adano, Dietz, Witsenburg, Zaal (2012) in their study on climate change, violent conflict and local institutions in Kenya's drylands revealed that drought has an effect on pupils' participation in schools. The study established that during conflict, families move in search of safe areas hence drop out of school all together. Bollig, (2008) in his study on ethnic conflicts in North West Kenya: Pokot-Turkana raiding 1969–1984 revealed that conflict was one of the factors that affected pupils' participation in schools. Bollig, (1993) in another study on intra-and interethnic conflict in Northwest Kenya: a multi causal analysis of conflict behavior revealed that conflict over pastures was a major factor affecting pupils' school attendance. Such conflicts made families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

Table 4.32 tabulates headteachers and teachers responses on whether conflict over pastures in the community led to loss of human lives.

Table 4.32 Responses on whether conflict over pastures in the community led to loss of human lives

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	7	100.0	41	93.2
Agree	0	0.0	3	6.8

All 7 (100.0%) of headteachers and 41 (93.2%) of teachers strongly agreed that conflict over pastures in the community led to loss of human lives while 3 (6.8%) of teachers agreed with the statement. Asked whether conflict in the community led to displacement

of families which leads to pupils dropping out of school, headteachers and teachers responded as Table 4.33

Table 4.33 Responses on whether conflict in the community lead to displacement of families which leads to pupils dropping out of school

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	6	85.7	34	77.27
Agree	1	14.3	9	20.46
Disagree	0	0.0	1	2.27

Majority 6 (85.7%) of headteachers and 34 (77.27%) of teachers strongly agreed that conflict in the community led to displacement of families which leads to pupils dropping out of school, 1 (14.3%) of headteachers and 9 (20.46%) of teachers agreed with the statement while 1 (2.27%) of teachers disagreed that conflict in the community led to displacement of families which leads to pupils dropping out of school.

Pupils revealed that conflict has affected pupils' participation in school as there were many different tribes learning together in the institution, if there was conflict between the tribes the pupils were affected psychologically and they got emotional problems. Conflict also affected pupils' education because it brought enmity between the pupils from different background. Pupils were physiologically affected because they lost their relatives. Conflict also was said to create tension and disrupt the normal learning conditions as some pupils run for safety hence dropping out of the school.

The researcher further sought to establish whether displaced children were deprived of education. When headteachers and teachers were asked to indicate the same, they responded as Table 4.34.

Table 4.34 Responses on whether displaced children are deprived of education

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	4	57.1	25	56.8
Agree	3	42.9	15	34.1
Undecided	0	0.0	2	4.5
Disagree	0	0.0	2	4.5

Findings shows that majority 4 (57.1%) of headteachers and majority 25 (56.8%) of teachers strongly agreed that displaced children were deprived of education, 3 (42.9%) of headteachers and 15 (34.1%) of teachers agreed with the statement while 2 (4.5%) of teachers disagreed that displaced children were deprived of education. This agrees with Bollig, (2008) who indicated that that during conflict, families move in search of safe areas hence drop out of school all together.

Asked whether pupils in the school travelled great distances to escape conflicts, headteachers and teachers responded as Table 4.35.

Table 4.35 Responses on whether pupils in the school travel great distances to escape conflicts

Response	Headteachers		Teachers	
	F	%	F	%
Strongly Agree	3	42.9	11	25.0
Agree	2	28.6	8	18.2
Undecided	0	0.0	4	9.1
Disagree	2	28.6	14	31.8
Strongly Disagree	0	0.0	7	15.9

Findings shows that 3 (42.9%) of headteachers and 11 (25.0%) of teachers strongly agreed that school travelled great distances to escape conflicts, 2 (28.6%) of headteachers and 8 (18.2%) of teachers agreed with the statement. Data further shows that 14 (31.8%) of teachers disagreed with the statement while 7 (15.9%) of teachers strongly disagree that school travelled great distances to escape conflicts.

Findings from key informants revealed that pupils in the community failed to attend school due to dry seasons as the community depends on livestock; mostly during the dry season, the income/ food security was low and the pupils were forced to be engaged in herding as they were looking for pasture and migrating far from the school, causing most of them to withdrawal from school due to malnutrition. During dry season education was not seen a child right but a privilege. During dry spell, there was more livestock death compared to rainy season. This in return affected the income and there were increased expenses due to related/ grazing far and other expenses which were related to diseases intervention and water payment. The reduced income therefore was not able to

accommodate all the expenses and majority affected school fees payment which affects the retention level in public primary school in North - Horr District of Marsabit County.

When the headteachers were asked whether conflict led to displacement of pupils' families, they responded as Table 4.36.

Table 4.36 Headteachers responses on whether conflict led to displacement of pupils' families

Response	F	%
Strongly Agree	6	85.7
Agree	1	14.3
Total	7	100.0

Majority 6 (85.7%) of headteachers strongly agreed that conflict led to displacement of pupils' families while 1 (14.3%) of headteachers agreed that conflict led to displacement of pupils' families. This shows that conflict was one of the factors that affected pupils' participation in schools.

Table 4.37 Headteachers responses on whether children were afraid to go to school due to threats of attack

Response	F	%
Strongly Agree	6	85.7
Disagree	1	14.3
Total	7	100.0

Majority 6 (85.7%) of headteachers strongly agreed that children were afraid to go to school due to threats of attacks while 1 (14.3%) of headteachers agreed that children were afraid to go to school due to threats of attacks. This implies that conflict behavior was a major factor affecting pupils' school attendance due to their fear of being attacked.

Table 4.38 Headteachers responses on whether schools were sometimes closed to prevent attacks

Response	F	%
Strongly Agree	5	71.4
Agree	2	28.6
Total	7	100.0

Majority 5 (71.4%) of headteachers strongly agreed that schools were sometimes closed to prevent attacks while 2 (28.6%) of headteachers agreed that schools were sometimes closed to prevent attacks.

Findings from key informants revealed that community conflict affected the retention levels of public primary schools pupils as the community conflicts affects well-being of pupils in such a way that frequent attacks creates perception of pronounced insecurity hence leading to temporary closing of school and re-opening the number of pupils attending reduce. Pupils run for security which resulted to school dropout due to insecurity which led to suspension of lessons. In public primary school in North - Horr District of Marsabit County, children enrollment was done from different tribes and location in the district. If different tribes were at war and probably in different location,

child safety was most important. At the same the school might be at a location that is at war at a particular time, this resulted to school closure or reduced level of attendance.

Traditionally, various pastoral communities use raiding as a cultural practice for restocking of herds, especially after periods of drought or outbreaks of diseases. The major causes of conflicts between different pastoralists are competition over resources. For example, the border conflict of Kenya and Ethiopia in North Horr district between 2006-2007 and the recent 2014 resulted to displacement of many families, pupils and teachers thus many pupils dropping out of school while others migrate with their parents.

The same problem was also experienced in Gas primary school in 2008 during the resource conflict between Gabbra of North Horr district and Turkana, Samburu of Loyangalani district. Conflict which occurs hundreds of kilometers away from school environment affect learning among the pastoral communities as school children are withdrawn from school to replace their relatives who died in raid as livestock is given the first priority where education is considered as secondary needs.

The findings are in line with Adano, Dietz, Witsenburg, Zaal (2012) who established that during conflict, families move in search of safe areas hence drop out of school all together. They are also in line with Bollig, (2008) who revealed that conflict was one of the factors that affected pupils' participation in schools. Bollig, (1993) findings are also supported by this study that conflict over pastures was a major factor affecting pupils' school attendance. Such conflicts made families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study, discusses the findings of the study and presents conclusions, recommendations and suggestions for further research.

5.2 Summary of findings

The purpose of the study was to examine factors influencing retention of pupils in public primary schools in drought prone zones of North – Horr District, Marsabit County. The study was guided by four research objectives. The research objective one sought to determine how households availability of food influence retention of public primary schools pupils in drought prone zones , research objective two sought to establish how sources of livelihood influence retention of pupils in public primary schools in drought prone zone , research objective three sought to assess the extent to which involvement of pupils in household economic activities influence their retention in public primary schools in drought prone zone while research objective four sought to assess how community conflict over pastures influence pupils’ retention in public primary schools in drought prone zone of North-Horr District, Marsabit County.

The study employed a descriptive survey design. The sample for the study comprised of eight (8) headteachers, 44 teachers and 96 class 8 pupils. Data was collected by use of using questionnaires, focus group discussions and interview. Presentation was done using table. Statistical package for Social Sciences (SPSS) Software was used to aid in the analysis of data.

Effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones

Findings on the effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones revealed that availability of food has effect on pupils' retention levels in public primary schools in drought emergency zones as indicated by majority 7(100.0%) of headteachers and 43(97.7%) of teachers. It was also found out that lack of food in the community affected retention levels of public primary schools pupils as when circulation of food stuff reduce in the market where a certain school is situated, there was retention of school attendance due to lack of food. It also led to school dropout; malnutrition, truancy. It was also indicated that during hunger season, pupils lack enough energy to attend classes especially when they walk long distance to school and it also affects their attention towards the entire learning process.

All 7 (100.0%) of headteachers and 40 (90.9%) of teachers strongly agreed that drought cause a decline in food production. It was also found out that pupils did not attend school due to hunger, starvation as they are not energetic to study. This implies that drought conditions lead to shortage of food hence affecting pupils' lives. Shortage of food results in the adoption of negative coping strategies including diverting of food to young children making the older siblings especially drought zones.

It was also found out that lack of food was a threat to participation in education as indicated by majority 4 (57.1%) of headteachers and majority 26 (59.1%) of teachers. Findings from key informants revealed that lack of food affected retention levels of public primary schools pupils because lack of food at home was mainly due to poverty, pupils requires food energy to learn . When the pupils were not sure of where the next

meal will be coming from, learning was not very important to them hence leading to retention. Lack of food led to early marriage; pregnancies and prostitution. It also resulted to lack of concentration, lack of learning material and Child labour as children were working for other to get school fees. The study further found out that there were cases of transfer to other boarding school that has got boarding facilities as without water and food pupils lacked energy, and concentration in their studies.

Majority 5 (71.4%) of headteachers and 20 (45.5%) of teachers agreed that during drought pupils were forced to support their families by doing household work. It was also found out that hungry children were not able to school as revealed by majority 7 (100.0%) of headteachers and majority 32 (72.7%) of teachers.

It was also found out that the community was unable to pay school fees during drought season because drought have great impact on school fees payment, due to a continued decline in livestock and reduction in produce as the farmers which led to lack of fund. Livestock which was the main source of income in the community die during drought seasons and hence the community was unable to pay school fees during drought season. This agrees with Salee (2013) who indicated that parents were not able to pay school levies for the children as any form of income is taken up by food.

Majority 6 (85.7%) of headteachers and majority 25 (56.8%) of teachers strongly agreed that parents were not able to pay school due to high cost of food during drought season.. This implies that parents were not able to pay school due to high cost of food which may result to many children being forced to drop out of school in at the onset emergencies,

either to migrate, or to support their families by doing household work or income-generating activities

Effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones

Findings on the effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones revealed that household's loss of livelihood has effect on pupils' retention levels in public primary schools in drought emergency zones as revealed by majority 5 (71.4%) of headteachers and majority 42 (95.5%) of teachers. This agrees with Rathore, (2008) who indicated that loss of livelihood as a result of drought had an effect on pupils' participation in schools.

All 7 (100.0%) and 38 (86.4%) of teachers strongly agreed that during drought livestock decline. This implies that during drought, livestock numbers start to fall, through sales and deaths among the most vulnerable animals. It was also found out that lack of income at households level made pupils have less time and energy for studies as they were engaged in other activities to earn income loss of income led to lack of school uniform, depression which sometimes resulted to pupils committing suicide. It was also found out that loss of income led to migration of families to look for food.

Majority 5 (71.4%) of headteachers and majority 26 (59.1%) of teachers strongly agreed that livestock prices decline during drought. This agrees with (Toulmin, 1995) who points out that the relative price movements provide an increasingly tight squeeze on herders' ability to raise cash to buy the food needed by their families. Drought has an impact on

household income. During drought, earnings from farm labour also drop substantially, due to the reduced labour demand.

Majority 6 (58.7%) of headteachers and majority 27 (61.4%) of teachers strongly agreed that during drought, household lose their sources on income. The study also found out that parents were not able to provide for their families during drought as indicated by majority 5 (71.4%) of headteachers.

Majority 5 (71.4%) of headteachers strongly agreed that household loss of income due to emergency had a negative effect of children access to education. Pupils revealed that household loss of income effect of their access to education as some pupils drop out of school to replace their relatives places of work. Purchase of basic needs becomes a problem due to loss of income hence there was no fees, food, shelter due to lack of market of their activities. It was also found out that due to household loss of income there was no concentration, of the pupils. The study also found out that households affected by drought were not able to provide for their children education as revealed by majority 7 (100.0%) of headteachers and 24 (54.5%) of teacher.

Extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools

Findings in the extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools revealed that that pupils involvement in household economic activities effect on pupils' retention levels in public primary schools in drought emergency zones as indicated by majority 7 (100.0%) of headteachers and majority 42 (95.5%) of teachers. This implies that during drought, families involved children in activities to increase family income. This was a critical

coping mechanism of pulling out of school going children to participate in small jobs in order to supplement stretched family incomes. Majority 4 (57.1%) of headteachers and majority 23 (52.3%) of teachers agreed that during drought, families involve their children in activities to increase family income.

It was also found out that some children missed school to perform household activities. Pupils further indicated that lack of breadwinners of the orphans lead them to drop out of school and to perform food searching activities. Some pupils were given a lot of household chores hence were not able to attend classes. Some pupils leave school to go and look for pasture of the livestock and for generating income for the family members. Majority 5 (71.4%) of headteachers and 26 (59.1%) of teachers strongly agreed that children were forced to look after their animals instead of enrolling in schools.

The study also found out that child provides funds for his/ her fees as indicated by majority 4 (57.1%) of headteachers. This is in line with (Tungesvik, 2000). That revealed that during drought and other emergencies, some children were engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home.

Majority 5 (71.4%) of headteachers strongly agreed that there was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes. This shows that during drought search for food is the most important activity. Since pupils cannot attend school while hungry, they were involved in the search for food. This affected their participation in schools where some pupils were forced to drop out of school all together. This is in line with Blum (2005) who revealed that in southern China and north-eastern

Thailand, household's income levels were affected by drought. Apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools.

Effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones

Findings on the effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones revealed that conflict over pastures affected on pupils' retention levels in public primary schools in drought emergency zones. as indicated by majority 7 (100.0%) of headteachers and 41 (93.2%) of teacher. This implies that conflicts made families leave the conflict affected areas and seek for pasture hence pupils dropped out of school all together.

The key informants further revealed that community conflict over pasture affected the retention levels of public primary schools pupils as conflict over pasture affects the pupils indirectly where loss of livestock which is the main dependable source of income. There was missing of lessons, insecurity due to community conflict. It was indicated that some children were taken away from school to replace their family members who die in conflict. Community conflict over pasture was relevant to reduce level of pupils' attendance in public primary school in North-Horr District of Marsabit County. This implies that the major causes of conflicts between different pastoralists were competition over resources. Majority 7 (100.0%) of headteachers and 41 (93.2%) of teachers strongly agreed that conflict over pastures in the community led to loss of human lives.

It was also found out that conflict in the community led to displacement of families which leads to pupils dropping out of school as indicated by majority 6 (85.7%) of headteachers and 34 (77.3%) of teachers.

Pupils revealed that conflict has affected pupils' participation in school as there were many different tribes learning together in the institution, if there was conflict between the tribes the pupils were affected psychologically and they got emotional problems. Conflict also affected pupils education because it brought enmity between the pupils from different background. Pupils were physiologically affected because they lost their relatives. The study also found out that displaced children were deprived of education as shown by majority 4(57.1%) of headteachers and majority 25(56.8%) of teachers.

Findings from key informants revealed that pupils in the community failed to attend school due to dry seasons as the community depends on livestock; mostly during the dry season, the income/ food security was low and the pupils were forced to be engaged in herding as they were looking for pasture and migrating far from the school, causing most of them to withdrawal from school due to malnutrition. The reduced income therefore was not able to accommodate all the expenses and majority affected school fees payment which affects the retention level in public primary school in North-Horr District of Marsabit County.

Majority 6 (85.7%) of headteachers strongly agreed that conflict led to displacement of pupils' families. This shows that conflict was one of the factors that affected pupils' participation in schools. Majority 6 (85.7%) of headteachers strongly agreed that children were afraid to go to school due to threats of attacks. This implies that conflict behavior was a major factor affecting pupils' school attendance due to their fear of being attacked.

It was also found out that schools were sometimes closed to prevent attacks. Findings from key informants revealed that community conflict affected the retention levels of public primary schools pupils as the community conflicts affects well-being of pupils in such a way that frequent attacks creates perception of pronounced insecurity hence leading to temporary closing of school and re-opening the number of pupils attending reduce.

5.3 Conclusions

Based on the study findings, the study concluded that availability of food has effect on pupils' retention levels in public primary schools in drought emergency zones. The study also concluded that lack of food in the community affected retention levels of public primary schools pupils as when circulation of food stuff reduce in the market where a certain school is situated, there was retention in school attendance due to lack of food. It also led to school dropout; malnutrition, truancy. It was also concluded that during hunger season, pupils lack enough energy to attend classes especially when they walk long distance to school and it also affects their attention towards the entire learning process.

The study concluded that drought cause a decline in food production. It was also concluded that pupils did not attend school due to hunger, starvation as they are not energetic to study. This implies that drought conditions lead to shortage of food hence affecting pupils' lives.

It was also concluded that lack of food was a threat to participation in education. Lack of food led to early marriage; pregnancies and prostitution. It also resulted to lack of

concentration, lack of learning material and Child labour as children were working for other to get school fees. The study further concluded that there were cases of transfer to other boarding school that has got boarding facilities as without water and food pupils lacked energy, and concentration in their studies. The study concluded that during drought pupils were forced to support their families by doing household work. It was also concluded that the community was unable to pay school fees during drought season because drought have great impact on school fees payment, due to a continued decline in livestock and reduction in produce as the farmers which led to lack of fund. The study also concluded that parents were not able to pay school due to high cost of food during drought season.

On the effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones, the study concluded that household's loss of live hood has effect on pupils' retention levels in public primary schools in drought emergency zones.

It was also concluded that during drought livestock decline. This implies that during drought, livestock numbers start to fall, through sales and deaths among the most vulnerable animals. It was also concluded that lack of income at households' level made pupils have less time and energy for studies as they were engaged in other activities to earn income. Livestock prices declined during drought. It was also concluded that during drought, household lose their sources on income. Household loss of income due to emergency had a negative effect of children access to education. It was also concluded that purchase of basic needs becomes a problem due to loss of income hence there was no

fees, food, shelter due to lack of market of their activities. The study concluded that households loss affected by drought were not able to provide for their children education. On the extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools, the study concluded that pupil's involvement in household economic activities effect on pupils' retention levels in public primary schools in drought emergency zones.

The study also concluded that during drought, families involved children in activities to increase family income. This was a critical coping mechanism of pulling out of school going children to participate in small jobs in order to supplement stretched family incomes. It was concluded that families involved their children in activities to increase family income.

The study concluded that revealed that during drought and other emergencies, some children were engaged in work outside the home together with their parents, whereas others carry out duties within the households in order to enable adults or other siblings attend work outside the home. There was frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes. During drought search for food was the most important activity. The study further concluded that apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools.

On the effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones, the study concluded that conflict over pastures affected on pupils' retention levels in public primary schools in drought emergency

zones.. Community conflict over pasture was relevant to reduce level of pupils' attendance in public primary school in North-Horr District of Marsabit County. The study further concluded that the major causes of conflicts between different pastoralists was competition over resources. It was also concluded that conflict over pastures in the community led to loss of human lives.

It was concluded that conflict also affected pupils' education because it brought enmity between the pupils from different background. Pupils were physiologically affected because they lost their relatives.

The reduced income therefore was not able to accommodate all the expenses and majority affected school fees payment which affects the retention level in public primary school in North-Horr District of Marsabit County. The study also concluded that conflict led to displacement of pupils' families. Conflict was one of the factors that affected pupils' participation in schools. The study also concluded that conflict behavior was a major factor affecting pupils' school attendance due to their fear of being attacked. It was lastly concluded that community conflict affected the retention levels of public primary schools pupils as the community conflicts affects well- being of pupils in such a way that frequent attacks creates perception of pronounced insecurity hence leading to temporary closing of school and re- opening the number of pupils attending reduce.

5.4 Recommendations

Based on the findings and conclusion made above, the study makes the following recommendations. The study recommends that:

(i) School feeding program (SFP) and other boarding facilities such as beds, nets, and sanitary pads to be made available by government, religious organization, NGOs for example UNICEF and WFP in public primary schools in drought affected zones as food supplies and other basic needs affect pupils participation in schools such as retention, enrollment and completion.

(ii) The study also established conflict over pasture as a factor which also affected pupils' education because it brought enmity between pupils from different background. Therefore, long lasting strategies of overcoming conflict should be adapted through the following; a) peace education – religious organizations such as churches, NGOs, and provincial administrators should organize workshop, seminars and public rallies for leaders from conflicting communities so that they sensitize their communities on importance of peace. b) School to be forefront in maintaining peace by involving pupils from different communities learn together. Pupils should be involved in various groups such clubs, societies e.g environmental club, scouts, catholic action. School should organize trips for pupils from different conflicting communities to visit each other and form friends. Peace teachers can be used to teach in their conflicting neighbours school e.g as it was used by Children Peace Initiative (NGO) for a certain period of time, this was used in North-Horr, Loiyangalani and Kargi to facilitate interaction and sense of belonging among these communities.

- Songs, poem, plays, which preach peace can be performed by pupils during the parent's day, national holiday and public rallies. This will enhance peace among

the communities where learners from different background can learn together peacefully. c) In order to reduce conflict over a water points especially schools wells and other school water points during the drought the national and county government should increase the number of water points in drought prone zone areas.

(iii) The study also established that livestock prices decline during the drought resulting to low sources of income for people. Therefore government and other investors should establish livestock market in a strategic places in drought prone areas where leaders should sensitize their people on importance of selling large number of animals when prices are high to avoid losses and have enough money to pay fees for their children during the drought season.

(iv) Migration during the drought led to displacement of pupils' families and drop out. Government should ensure equal education access in education opportunity by pursuing educational policies and regulations, which enhances pupils' enrollment and retention in drought prone areas such as creation of mobile schools in satellite villages, ECD centres and strengthening adult education to improve adult literacy level in such areas.

5.5 Suggestions for Further Research

This research takes exception to the fact that the study was conducted in Marsabit County yet retention of pupils in public primary schools in drought prone zones is national wide; the researcher suggested that the study be conducted in a larger area to compare the results.

REFERENCES

- Adano, WR, T Dietz, K Witsenburg, & F Zaal. 2012. Climate change, violent conflict and local institutions in Kenya's drylands. *Journal of Peace Research* 49(1): 65–80.
- Best, J. W. & Kahn, J. V. (1998). *Research in Education*. Boston: Edward Arnold.
- Bevan, J. (2007). Between a rock and a hard place: armed violence in African pastoral communities. Nairobi: UNDP.
- Blaikie, P., T. Cannon, I. Davis and B. Wishner (1994) *At risk: natural hazards, people's vulnerability and disasters*. London: Routledge Publishers.
- Blum, A. (2005) Drought resistance, water-use efficiency and yield potential – are they compatible, dissonant or mutually exclusive? *Australian Journal of Agricultural Research* 56 (11): 1159-68.
- Bollig, M. (1993). Intra-and interethnic conflict in Northwest Kenya: a multicausal analysis of conflict behaviour. *Anthropos* 88(1): 176–184.
- Bollig, M. (2008). Ethnic conflicts in North West Kenya: Pokot-Turkana raiding 1969–1984. *Zeitschrift für Ethnologie* 115: 73–90.
- Borg, W.R. & Gall, M.D. (1989). *Educational Research: An introduction*. 5th Edition, New York: Longman
- Brooks, N., W.N. Adger and P.M. Kelly (2005) The determinants of vulnerability and adaptive capacity at the national level and the implications for adaptation. *Global Environmental Change* 15 (2): 151-63.
- Bundy, D. Burbano, C. Grosh, M. Gelli, A. Jakes, M. and Drake, L. (2009). Rethinking School Feeding. Social Safety Nets, Child Development and the Education Sector, World Food Program. World Bank. Washington DC.
- C.R Kothari. (2004), *Research Methodology Methods and Techniques*. New age international publishers, New Delhi (India).
- Dryden-Peterson, S. (2010a). *Barriers to Accessing Education in Conflict-Affected Fragile States: Afghanistan*. London:
- Eaton, D. (2010). The rise of the 'traider': the commercialization of raiding in Karamoja. *Nomadic Peoples* 14(2): 106–122.

- Glewwe, P. & Nanaan, J. (2004). *An economic Analysis of Delayed Primary School Enrolment and Childhood Nutrition in Ghana*. LSMS Work Paper Work Book; DC.
- GoK (2004). *The pastoralists communities and free primary education in Kenya*. Preliminary findings. Commissioned by Coalition of Pastoralist Child Education of Arid Lands Resource Management Project and Action Aid in Kenya.
- GoK (2005). *Ministerial Report on the Impact of 2004 Drought*. Ministry of Livestock Development. Nairobi. Kenya.
- GoK. (2007). National policy for the sustainable development of arid and semi arid lands. Nairobi: Government of Kenya.
- Huho J.M, & Mugalavai, E.M. (2010). The Effects of Droughts on Food Security in Kenya. *The International Journal of Climate Change: Impacts Resp.* 2(2):61-72.
- Huho, J.M, Ngaira, J.K.W., Drought severity and their effects on rural livelihoods in Laikipia District, Kenya. *J. Geo. Reg. Plann.* 3(3):035-043.
- Huho JM, Ngaira JKW, Ogindo HO (2010). Drought severity and their effects on rural livelihoods in Laikipia District, Kenya. *J. Geo. Reg. Plann.* 3(3):035-043.
- Jodha, N.S. (2008) Effectiveness of farmers' adjustment to risk. *Economic and Political Weekly* 13 (25): A38-A48.
- Kaimba, G, B Njehia, and A Guliye. (2011). Effects of cattle rustling and household characteristics on migration decisions and herd size amongst pastoralists in Baringo District, Kenya. *Pastoralism: Research, Policy and Practice* 1(1): 1–18.
- Kombo D & D Tromp (2006): Proposal and thesis writing an introduction. Nairobi Paulines Publications Africa.
- Kumssa, A, JF Jones, and JH Williams. (2009). Conflict and human security in the North Rift and North Eastern Kenya. *International Journal of Social Economics* 36(10): 1008–1020.
- Leff, J. (2009). Pastoralists at war: violence and security in the Kenya-Sudan-Uganda border region. *International Journal of Conflict and Violence* 3(9): 188–203.
- Mahmoud, HA. (2011). Conflict and constraints to peace among pastoralists in Northern Kenya. In *Understanding obstacles to peace - actors, interests, and strategies in Africa's Great Lakes region*, ed. M Baregu, 146–168. Kampala: Fountain.
- Mburugu, E. K. & Hussein, M. (2002), *Enhancing Better Natural Resource Use to Prevent Conflict Among Pastoralist Communities in Kenya*. A consultancy report done for Oxfam GB, Nairobi, Kenya

- Mbwesa, J. K. (2006). *Introduction to Management Research. A student Handbook: Nairobi*. Basi Management Consultants.
- Mirzeler, M, and C Young. (2000). Pastoral politics in the northeast periphery in Uganda: AK-47 as change agent. *Journal of Modern African Studies* 38(3): 407–429.
- Mkutu, KA. (2008). *Guns and governance in the Rift Valley - pastoralist conflict and small arms*. Bloomington: Indiana University Press.
- MoE (2005). *ASALs Gender policy Guidelines*. Nairobi, Kenya.
- Moru, ERJ. (2010). *Adaptation to climate variability among the dry land population in Kenya: a case study of the Turkana pastoralists*. Wageningen: Wageningen University.
- Mugenda, O. M. & Mugenda, A. G. (2003). *Research Methods: quantitative & qualitative approaches*. Nairobi: ACTS press
- Mulkeen, A (2007); 'Recruiting, retraining and retaining secondary school teachers in sub-saharan africa' World Bank Working Paper no; 99
- Mwangi, OG. (2006). Kenya: conflict in the 'Badlands': the Turbi Massacre in Marsabit District. *Review of African Political Economy* 33(107): 81–91.
- Njiru, BN. (2012). Climate change, resource competition, and conflict amongst pastoral communities in Kenya. In *Climate change, human security and violent conflict: challenges for societal stability*, ed. J Scheffran, M Brzoska, HG Brauch, PM Link, and J Schilling, 513–527. Berlin: Springer.
- Nsubuga E.H.K. (2000). *Fundamentals of Educational Research*. MK Publishers Kampala Uganda.
- Omolo, NA.(2010). Gender and climate change-induced conflict in pastoral communities: case study of Turkana in northwestern Kenya. *African Journal on Conflict Resolution* 10(2): 81–102.
- Orodho, J. (2003). *Techniques of writing research proposals and reports in Education and social sciences* 2nd edition Nairobi. Kanezja HP Enterprises 2005.
- Rathore, J.S. (2008) Drought and household coping strategies: a case of Rajasthan. *Indian Journal of Agricultural Economics* 59 (4): 689-708.
- Salee M. D. (2013). *Influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County*. Inpublished M.Ed project, University of Nairobi.

- Shibru, M (2001). Effects of food supplies on Nomadic Pastoralists livelihood. A Case Study of the Borana of Southern Ethiopia. Unpublished Master's Thesis, Egerton University, Njoro, Kenya.
- Shibru, M (2001). Pastoralism and Cattle Marketing: A Case Study of the Borana of Southern Ethiopia. Unpublished Master's Thesis, Egerton University, Njoro, Kenya.
- Shivakumar, S., and E. Kerbart (2009) Drought, sustenance and livelihoods: 'Akal' survey in Rajasthan. *Economic and Political Weekly* 39 (3): 285-94.
- Sifuna, D.N (2005). Increasing access and participation of pastoralist communities in Primary Education in Kenya, In *international Review of Education* (2005) 51:499-516
- Tesliuc, E.D., and K. Lindert (2004) Risk and vulnerability in Guatemala: a quantitative and qualitative assessment. Social Protection Discussion Paper SP0404, Human Development Network. Washington, D.C.: World Bank.
- Toulmin, C (1995) "Herders and Farmers or Farmer-Herders and Herder-Farmers" ODI Pastoral Development Network Paper 15d, ODI, London
- Tungesvik, R (2000) *Education Child Labour-an initial mapping of the field*, LINS: Oslo College/Hogskolen i Oslo
- UNHCR (1994) UNHCR's Operational Experience With Internally Displaced Persons, September 1994
- UNICEF (2009). *The State of the World's Children: Special Edition, Celebrating 20 Years of the Convention on the Rights of the Child*. New York: UNICEF.
- Walker, R., Dekha, I. A. & Shuria, H. O. A (2003), *Oxfam GB Funded Peace building Initiatives in Arid Districts of Kenya: Lessons and Challenges*. Unpublished report, Nairobi, Kenya
- World Bank (2001) *World Development report 2000/2001: Attacking poverty*. Washington, D.C.
- World Food Program (2001 a). *Global School Feeding Campaign into School, out of Hunger*. WFP Public Affairs. Rome, Italy.

APPENDIX I

INTRODUCTORY LETTER TO RESPONDENTS

Bonaya Godana Galgallo
Department of Educational Admin &
Planning
University of Nairobi
P.O BOX 92,
Kikuyu

Dear Sir / Madam,

RE: REQUEST TO CARRY OUT RESEARCH IN YOUR SCHOOL

I am Bonaya Godana Galgallo a Master students at Nairobi university. I am conducting a research to determine “**factors influencing retention of pupils in public primary schools in drought prone zones of North – Horr District, Marsabit County**”. I therefore kindly request you to allow me conduct research in your school. The information obtained will be used for this research and the identity of the respondents will be treated as strictly confidential.

Thank you for your cooperation and assistance.

Yours Sincerely,

Bonaya Godana Galgallo

APPENDIX II

QUESTIONNAIRE FOR THE HEADTEACHERS

This questionnaire is designed to help the researcher find out the factors that affect retention of public primary schools pupils in drought emergency zones of North – Horr District, Marsabit County. You are requested to participate in the study by filling in this questionnaire. The information you give will be used for the purpose of the study only.

Section A: Demographic data

1. What is your gender Male [] Female []

What is your age?

2. Below 25 years [] 26 – 30 years []

31 – 35 years [] 36 – 40 []

41 – 45 years [] Above 46 []

3. How long have you served as headteacher?

Below 1 year [] 1 – 5 year []

6 – 10 years [] 11 – 15 years []

16 – 20 years [] Above 21 years []

4. How long have you served as headteacher in this school?

Below 1 year [] 1 – 5 year []

6 – 10 years [] 11 – 15 years []

16 – 20 years [] Above 21 years []

5. What is your level of education?

PI [] Diploma []

Degree [] Masters []

PhD []

Section B: Effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones

6. Does availability of food have effect on pupils' retention levels in public primary schools in drought emergency zones Yes [] No []

7. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided

D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	Drought cause a decline in food production					
ii.	Lack of food is threat to participation in education					
iii.	Pupils are forced to drop out of school during drought					
iv.	During drought pupils are forced to support their families by doing household work					
v.	Hungry children are not able to school					
vi.	Parents are not able to pay school due to high cost of food during drought season					

Section C: Effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones

8. Does household's loss of livehood have effect on pupils' retention levels in public primary schools in drought emergency zones Yes [] No []
9. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided
D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	During drought livestock decline					
ii.	Livestock prices decline during drought					
iii.	During drought, household lose their sources on income					
iv.	Parents are not able to provide for their families during drought					
v.	Household loss of income due to emergency had a negative effect of children access to education					
vi.	Households affected by drought are not able to provide for their children education.					

Section D: Extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools

10. Does pupils involvement in household economic activities effect on pupils' retention levels in public primary schools in drought emergency zones
Yes [] No []
11. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided
D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	During drought, families involve children in activities to increase family income					
ii.	Children are forced to look after their animals instead of enrolling in schools					
iii.	Working child provides funds for his/ her fees					
iv.	There is frequently absenteeism during dry seasons as pupils are too tired to participate fully in classes					
v.	Children are engaged in household work to enable adults to work outside the home.					

Section E: Effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones

12. Does conflict over pastures effect on pupils' retention levels in public primary schools in drought emergency zones Yes [] No []

13. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided
D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	Conflict over pastures in the community leads to loss of human lives					
ii.	Conflict in the community lead to displacement of families which leads to pupils dropping out of school					
iii.	Displaced children are deprived of education					
iv.	Pupils in my school travel great distances to escape conflicts					
v.	Conflict lead to displacement of pupils' families					
vi.	Children are afraid to go to school due to threats of attack					
vii.	Schools are sometimes closed to prevent attacks					

APPENDIX III

QUESTIONNAIRE FOR THE TEACHERS

This questionnaire is designed to help the researcher find out the factors that affect retention of public primary schools pupils in drought emergency zones of North – Horr District, Marsabit County. You are requested to participate in the study by filling in this questionnaire. The information you give will be used for the purpose of the study only.

Section A: Demographic data

14. What is your gender Male [] Female []

What is your age?

15. Below 25 years [] 26 – 30 years []

31 – 35 years [] 36 – 40 []

41 – 45 years [] Above 46 []

16. How long have you served as teacher?

Below 1 year [] 1 – 5 year []

6 – 10 years [] 11 – 15 years []

16 – 20 years [] Above 21 years []

17. How long have you served as teacher in this school?

Below 1 year [] 1 – 5 year []

6 – 10 years [] 11 – 15 years []

16 – 20 years [] Above 21 years []

18. What is your level of education?

PI [] Diploma []

Degree [] Masters [] PhD []

Section B: Effect of availability of food on pupils' retention levels in public primary schools in drought emergency zones

19. Does availability of food have effect on pupils' retention levels in public primary schools in drought emergency zones Yes [] No []

20. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided
D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	Drought cause a decline in food production;					
ii.	Lack of food is threat to participation in education					
iii.	Pupils are forced to drop out of school during drought					
iv.	During drought pupils are forced to support their families by doing household work					
v.	Hungry children are not able to school					
vi.	Parents are not able to pay school due to high cost of food during drought season					

Section C: Effect of household's loss of livelihood on pupils' retention levels in public primary schools in drought emergency zones

21. Does household's loss of livehood have effect on pupils' retention levels in public primary schools in drought emergency zones Yes [] No []

22. Indicate the extent to which you agree or disagree with the following statements using the following key: SA = Strongly Agree A = Agree U = Undecided D = Disagree SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	During drought livestock decline					
ii.	Livestock prices decline during drought					
iii.	During drought, household lose their sources on income					
iv.	Parents are not able to provide for their families during drought					
v.	Household loss of income due to emergency had a negative effect of children access to education					
vi.	Households affected by drought are not able to provide for their children education.					

Section D: Extent to which pupils' involvement in household economic activities affects their retention levels in public primary schools

23. Does pupils involvement in household economic activities effect on pupils' retention levels in public primary schools in drought emergency zones

Yes [] No []

24. Indicate the extent to which you agree or disagree with the following statements using the following key:

SA = Strongly Agree A = Agree U = Undecided D = Disagree
SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	During drought, families involve children in activities to increase family income					
ii.	Children are forced to look after their animals instead of enrolling in schools					
iii.	Working child provides funds for his/ her fees					

Section E: Effect of conflict over pastures on pupils' retention levels in public primary schools in drought emergency zones

25. Does conflict over pastures effect on pupils' retention levels in public primary schools in drought emergency zones

Yes [] No []

26. Indicate the extent to which you agree or disagree with the following statements using the following key:

SA = Strongly Agree A = Agree U = Undecided D = Disagree

SD = Strongly Disagree

SN	Statement	SA	A	U	D	SD
i.	Conflict over pastures in the community leads to loss of human lives					
ii.	Conflict in the community lead to displacement of families which leads to pupils dropping out of school					
iii.	Displaced children are deprived of education					
iv.	Pupils in my school travel great distances to escape conflicts					

APPENDIX IV

FOCUS GROUP DISCUSSION FOR PUPILS

1. How has family lack food due to drought affected pupils' education? (probe of whether lack of food makes pupils not go to school).
2. How does lack of water and food in school affect your learning?
3. Has children missed school to perform household activities (probe on whether pupils miss out school to perform food searching activities)
4. Have children dropped out of school due to drought (probe on whether pupils have dropped out of school due to effects of drought)
5. How does household loss of income effect of your access to education? (probe on whether children have experienced household losses such as animals due to drought)
6. How many pupils in your class drop from school to replace their family members who died in the conflict?
7. How has conflict affected pupils participation in school (probe on the effects of conflict on pupils education).

APPENDIX V

INTERVIEW FOR KEY INFORMANT

1. How does lack of food in the community affect retention levels of public primary schools pupils
2. How does lack of food affect retention levels of public primary schools pupils?
3. Why are the parents in the community unable to pay school fees during drought season?
4. How does household loss of income affect retention levels of public primary schools pupils?
5. Why do pupils in the community fail to attend school due to dry seasons?
6. How does community conflict affect the retention levels of public primary schools pupils?

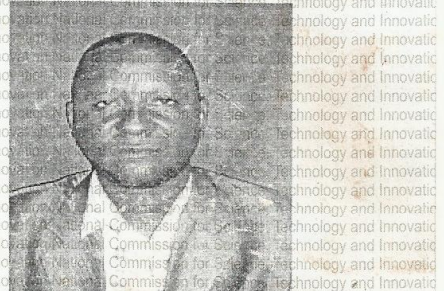
APPENDIX VI
RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. BONAYA GODANA GALGALLO
of UNIVERSITY OF NAIROBI, 3-6500
marsabit, has been permitted to conduct
research in Marsabit County

on the topic: FACTORS INFLUENCING
RETENTION OF PUPILS IN PUBLIC
PRIMARY SCHOOLS - IN DROUGHT PRONE
ZONES OF NORTH - HERR DISTRICT,
MARSABIT COUNTY, KENYA

for the period ending:
31st December, 2014

Permit No. : NACOSTI/P/14/8445/3376
Date Of Issue : 11th September, 2014
Fee Received :Ksh. 1000



Applicant's
Signature

AKHISEN FOL
Secretary
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 Officers 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

RESEARCH CLEARANCE
PERMIT

Serial No. A 3157

CONDITIONS: see back page

APPENDIX VII

AUTHORIZATION LETTER



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

11th September, 2014

NACOSTI/P/14/8445/3376

Bonaya Godana Galgallo
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Factors influencing retention of pupils in public primary schools in drought prone zones of North-Horr District, Marsabit County, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Marsabit County** for a period ending **31st December, 2014.**

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

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


SAID HUSSEIN
FOR: SECRETARY/CEO

Copy to:

The County Commissioner
The County Director of Education
Marsabit County.

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified