PUBLIC SECONDARY SCHOOLS IN DROUGHT STRICKEN SIAKAGO DIVISION MBEERE DISTRICT EMBU COUNTY, KENYA

Njeri Emma Kienyu

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## DECLARATION

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

## Njeri Emma Kienyu

E55/62653/2011

This research project has been submitted for examination with our approval as a university supervisor.

Dr. Loise Gichuhi
Lecturer
Department of Education Administration and Planning, University of Nairobi
$\qquad$
Dr. Rosemary Imonje
Lecturer

Department of Education Administration and Planning, University of Nairobi

## DEDICATION

This project is dedicated to my husband Emilio Nyagah and my children Diana, Juliet, Jeff and Derrick.

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## ABBREVIATIONS AND ACRONYMS

| ASALs | A rid and semi arid lands |
| :--- | :--- |
| CRC | Convention on the Rights of the Child |
| DEO | District Education Officer |
| EAS | Education Access Scheme |
| EFA | Education for All |
| GOK | Government of Kenya |
| IFCR | International Federation of the Red Cross and Red Crescent Societies |
| ILO | International Labour Organization |
| MDGs | Millennium Developmental Goals |
| NCSTI | National Commission for Science Technology and Innovation |
| SPSS | Statistical Package for Social Sciences |
| UNCRC | United Nations Conventions of the Rights of the Child |
| UNESCO | United Nations Educational Scientific and Cultural Organization |
| WFP | World Food Programme |


#### Abstract

The purpose of the study was to investigate home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya. The study was guided by four research objectives, to establish the extent to which parental level of education affects access to education in public secondary schools in drought stricken, to establish the influence of household size on student access to education in public secondary schools in drought stricken, to assess the extent to which food security factors affects students access to education in drought stricken and to assess the extent to which students' involvement in household economic activities affects their access to education in drought stricken Siakago Division, Mbeere District, Embu County. The study adopted descriptive survey design. The target population comprised of all the 24 public secondary schools in Siakago division. The schools had a total number of 281 teachers and 700 form three students. From the 8 schools all the 8 headteachers, 90 teachers and 238 students were selected for the study. Findings on the effects of parental level of education to access to education revealed that parents level of education was a factor that affected low access to education in the school as indicated by majority $6(85.7 \%$ ) of principals and majority $47(55.3 \%)$ of teachers. Findings also revealed that household size was a factor affecting students' access to education in their school. Findings also showed that inadequate food during drought contributed to inability of students to access to education. It was also revealed that students' involvement in household economic activities affected their access to education as was revealed by majority $5(71.4 \%$ ) of principals. Based on the study findings, the study concluded that parental level of education was a factor that affected students' access to education in drought stricken Siakago Division, Mbeere District. The study also concluded that access to education was affected by the household size. Families with large number of children were not able to support them educationally hence some children missed out education opportunities. The study concluded that lack or inadequate food during drought was a factor that affected access to education among students in drought stricken Siakago Division, Mbeere District. Students were therefore not able to access education due to hunger. It was further concluded that students in drought stricken Siakago. The study recommended that there is need of all the stakeholders in education, to sensitize the community and the parents on the importance of education so that they can encourage their children to attend school. There is need to empower the local community economically so that they are able to support all children in the family to access education. The county government, the local NGOs should provide food to the community during drought so that students do not miss out school due to lack of food. The national and the county governments to establish possible measures that could be adopted in an effort to increase access to education in drought stricken areas. The study suggested that since the study was carried out in one administrative County, there is need to have a similar study in a larger area and compare the results.


## CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

Education forms the basis upon which economic, social and political development of any nation is founded. Investment in education can help to foster economic growth, enhance productivity, contribute to national and social development, and reduce social inequality (World Bank, 2008). UNESCO (2005) argues that the level of a country's education is one of the key indicators of its level of development. Globally, education is recognized as a basic human right. The Human Rights Charter treats education as one of the human rights. Bishop (1989) indicates that in 1948 the Universal Declaration of Human Rights laid down Article 26, that everyone had the right to education and that education would be free, at least in the elementary and fundamental stages. According to Boit, Njoki and Chang'ach (2012), the purpose of education is to equip the citizenry to reshape their society and eliminate inequality. In particular, secondary education is an important sector in national and individual development. It plays a vital role in creating a country's human resource base at a level higher than primary education (Achoka, Odebero, Maiyo \& Mualuko, 2007).

Education is interrupted and a lot of school time lost in areas affected by emergencies such as conflict, floods and drought. 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.

Arid and semi-arid lands (ASALs) cover $80 \%$ of the territory with an annual rainfall varying from 200 to 500 mm , periodical drought are part of climatic system (Kandji, 2006). It's an 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). Vulnerability is not a new concept, but interest and concern have been growing in recent years. Drought vulnerability refers to the degree to which households are susceptible to the adverse effects of drought. Vulnerability depends on a combination of factors such as income, occupation, family structure, gender, social class, caste, cultural factors and health. Various asset based approaches have been suggested to identify vulnerable households (Alwang, Siegel \& Jorgensen 2001, Kamanou and Morduch 2002, Brooks, Adger \& Kelly 2005, Christiaensen \& Subbarao 2005, World Bank 2005).

The humanitarian emergencies from drought have been increasing in severity since 2001 when Kenya had the 'first' worst drought in 60 years. In the last decade alone, four major food crises were declared in Kenya all caused by drought. Kandji (2006) noted that drought is one of the hurdles that may prevent Kenya from achieving the millennium development goals (MDGs) especially those related to poverty eradication, attainment of
food security and promotion of environmental sustainability. The reoccurring nature of drought in Kenya and the increasing humanitarian suffering loss of lives, conflict, food insecurity and child mal-nourishment in its wake demonstrate the need for a sustainable strategy to end drought triggered humanitarian crisis in Kenya. Livestock production account for about 90 percent of employment and family incomes for the arid and semiarid areas of the north and the northeast in Kenya. Many in these communities have been hardest hit by drought and are 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.

According to Anderson (1967) the parental level of education, occupation and income levels play a significant role in access to and retention of students in education Juma (1994) also noted that education experience and outlook of parents is transmitted to their offspring, they are able to provide necessities and pay school levies their children hence encouraging the access and retention of students in schools because they understand the value of education also noted on the same vein by Tyler (1997). According to Taiwa (1993) parents are second teachers to their children, guides and counselors.

Many countries over the world are affected by drought mostly are ASALs. In Africa in (1999) 29 countries were affected by drought and children affected severely than the adults. They included Senegal, Upper Volta, and Chad in the South and Morocco,

Algeria, Libya and Egypt in the North. The zone extends South East through Somalia and Northern Kenya. In South of equator the zone covers Lesotho parts of Cape, Northern Transvaal and Free State province of South Africa, Botswana, Namibia and parts of Zimbabwe. These regions observed reduced participation of children in (UNESCO, 2009). Since independence, access to secondary education has expanded in absolute numbers with substantial increase in number of secondary schools both public and private. The number of schools increased from a mere 151 in 1963 to 4197 in 2004 (Government of Kenya, 2006). Although secondary enrolment increased over time from 30,000 to 928,149 during the same period, the expansion does not correspond with the population increase for the children aged $14-17$ years. The 1999 population census projections show that in 2000 there were 3.1 million children aged $14-17$ years and the number is projected to increase to about 3.6 million children of the same cohort by 2010 (GOK, 1998). The implication of this is that close to 80.6 percent of secondary school age children are not involved in secondary school.

The family social economic background reduce each sibling wealth by $1 / 5$ (one fifth) a year hence reducing schooling (Featherman, \& Hauser, 1978) large families have impact on house food, security (www.pakinsight.com/pds-file/54-AJA. Non market avenues in house hold welfare that is also measured in form of expenditure Ellis (2000.P.10). Having many children is a difficult decision that has been made by uprooted families to increase their chances of survival as only form of social welfare; (Ellis, 2000).

Food insecurity and the responsibilities in the home can hinder education access. For example family conflicts. Educational Access Scheme EAS (2000) rich home facilitates access to education and ensure all children have access to the general education
curriculum (www.reading.rockets, 2013) culture would also affect access as expressed through their attitudes rituals, beliefs values and pedagogical systems. Bunday, Don (1996) on children development paper perceived that lack of food hygiene and other related diseases like typhoid, dysentery, diarrhea eye and skin infection are characterized by places in dry and dusty environment. A study by Van Der Westhuizen \& Du Toit (1994) on poor performance revealed that many children failed to access to education due to fact that schools are concentrated in urban areas that in rural areas, thus hindering children from poor families from accessing to better schools in South Africa. Similar characteristic can be noted in Siakago Division, Mbeere District.

United Nation Child Rights Convention (UNCRC) Article 32 sub article land $2 \mathrm{a}, \mathrm{b}$ and c of CRC states that parties recognize the rights of the child be protected from economic exploitation and from performing work that is likely to hazardous children education, health, moral or social development. In Kenya out of 1.2 children are out of school, 195,000 are reported to be in child labour and $7 \%$ of children aged $5-17$ had never set their foot in school (International Labour Organization (ILO) article 89 (2) proclamation number 377/2003 prohibits by employment by persons under 14 years of age. According to Ahmed (2004), access to education during drought is in most cases low unless there are other incentives such as school meals. Ahmed further found that during drought, students drop out is high as a result of students involvement in income generating activities for the family in a bid to increase the household income. While girls are involved in search of water, boys miss out school to take care of animals which have to be driven long distances in search of water and pasture (Bwonda, \& Njeru, 2005).

The drought that often hits various region of the country creates serious food shortages, putting more than one million Kenyans at risk of hunger. Siakago Division in Mbeere District in Embu County is one of the areas that often experiences serious food shortage during droughts and has a population of 125,940 according to Kenya 2009 census data. It occupies an area of $2,093 \mathrm{Km}^{2}$. The area is dry and the main source of livelihood is rain fed marginal farming and people keeping livestock such as sheep, indigenous cattle and goats. During drought households are affected and hence access to education is disrupted. Schools register low attendance where students are involved in household income generating activities. Loss of income for the parents implies inability for parents to provide for school levies. In Siakago division of Mbere District, the perennial drought coupled with hunger threat has had an effect of access to secondary school education. Parents are continuously torn between sacrificing to fight hunger and meeting school costs for their children (UNESCO, 2011).

### 1.2 Statement of the problem

In Kenya, drought is the single most critical natural hazard in terms of shattered livelihoods, hunger, deaths and nutrition-related diseases. The arid areas and semi arid districts, commonly referred to as the arid and semi arid lands (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. They stretch out over at least 40 districts or part of those districts of which Mbeere district is one of the districts. Most schools in Mbeere district are in rural areas which experience semi-arid climate which leads to low crop yields in most seasons in most cases. The area is characterized by a hot and dry climate with low and erratic rainfall. Drought affects access to education. The data from
the DEOs office in the district shows that the transition rates have been oscillating between $30 \%$ to $40 \%$. Secondary school in Sikago division registers low school attendance during drought periods. Principals complain of low participation of students in school and this is an indication that there are factors that hinder children from accessing secondary education. This study therefore sought to establish home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya

### 1.3 Purpose of the study

The purpose of this study was to establish home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya.

### 1.4 Objective of the study

This study was guided by the following objectives
i. To determine the extent to which parental level of education affects access to education in public secondary schools in drought stricken Siakago Division, Mbeere District, Embu County.
ii. To establish the influence of household size on student access to education in public secondary schools in drought stricken Siakago Division, Mbeere District, Embu County.
iii. To assess the extent to which food security factors affects students access to education in drought stricken Siakago Division, Mbeere District, Embu County.
iv. To assess the extent to which students' involvement in household economic activities affects their access to education in drought stricken Siakago Division, Mbeere District, Embu County.

### 1.5 Research questions

i. To what extent does parental level of education affects access to education in public secondary schools in drought stricken Siakago Division, Mbeere District, Embu County?
ii. How does household size influence access to education in public secondary schools in drought stricken Siakago Division, Mbeere District, Embu County?
iii. How does a food security factor affect students’ access to education in drought stricken Siakago Division, Mbeere District, Embu County?
iv. In what ways does students involvement in household economic activities affects their access to education in drought stricken Siakago Division, Mbeere District, Embu County?

### 1.6 Significance of the study

This study would provide relevant information on home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya. This information would be important to the Ministry of Education in its efforts to deal with pupils' participation and access in secondary schools in drought prone areas. The findings may be beneficial to the government and education stakeholders by suggesting how they can put on intervention measures during emergency situations such as drought periods. The school headteachers also would benefit from the
study and come up with strategies which will help to increase and access participation in secondary education through the involvement of the county government. The local community particularly those that are most vulnerable may be made aware of the effective strategies that can be used in mitigating drought effects on access to education. 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. The study also suggests some of the possible measures that could be adopted in an effort to increase access to education in drought stricken areas. Finally the results obtained were useful to scholars in the field of educational access by enriching the existing literature.

### 1.7 Limitations of the study

The main limitation of the study is that the researcher did not access to parents themselves so as to give first hand information on the home based factors affecting access to education. The absence of parents' involvement in the study was due to difficulties in accessing them. However the researcher used the responses from the students. Another limitation 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 are 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 conducted in Siakago Division in Mbeere District; Embu County only which is practically rural set up, the findings may be generalized to other rural areas with
caution. The study investigated the home based factors affecting access to secondary education in the division the study involved the headteachers, teachers and students'. Though there were other factors that affect students' access to education, the researcher restricted herself to variables such as parental level of education, household size, food security factors and students involvement in family economic activities.

### 1.9 Basic assumptions

The study was conducted with the following assumptions in mind:
i. That the respondent provided truthful and honest responses to the items in the questionnaire.
ii. The sampled schools in the division do experience low access to education due to household factors
iii. There is equality in access and participation in secondary education by all secondary school going students

### 1.10 Definition of significant terms

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

Attendance refers to state of being present in school for learning purposes.
Drought refers to a long period of time during which no rains falls.
Dropout rate refers to the rate of students withdrawing from secondary school education level before sitting for national examinations.

Food security refers to the availability of food and one's access to it. A household is considered food secure when its occupants do not live in hunger or fear of starvation, also for a household means access by all members at all times to enough food for an active, healthy life.

Home based factor refers to the characteristics of the family factors such as gender roles, home environment and cultural practices involvement of family members in accessing education.

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. House hold size refers to the total number of people living in the home.

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

Retention refer to act of pupil spending or remaining in the same grade for one or more years before progressing or getting promoted to the next grade.

Secondary school refers to the second level of the education in Kenya.

### 1.11 Organisation of the study

The study was organized into five chapters; chapter one highlights the backgrounds and statement of the problem, purpose, objectives, significance, limitations, delimitations, assumptions and definitions of significant terms of the study. Chapter two dwells on literature review organized under the following subheadings: Introduction, home based factors influencing students' access to education, parental level of education household size, food security factors and students involvement in household economic activities. A theoretical and conceptual framework will be provided. Chapter three describes the
research methodology to be used which will include the following: sample and sampling techniques, research instrument, instrument validity and reliability, data collection procedures and data analysis techniques. Chapter four is data analysis and presentation of the findings. Chapter five comprises of the summary of the findings, conclusions and recommendation.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.0 Introduction

This chapter reviews pertinent literature in the area of access and retention in public secondary schools. In particular it focuses on introduction, home based factors influencing pupils' participation in school, parental level of education household size, home environment factors and students involvement in household economic activities. A theoretical and conceptual framework is also presented.

### 2.1 Drought in relation to access to education

The frequency and severity of extreme weather events and natural disasters has increased in the past decades worldwide (Diffenbaugh, 2005, Solomon, 2007). Although some anticipated impacts of climate change are positive in certain areas, developing countries such as Kenya are most likely to suffer from its negative impacts. The climate change models in the sub-Saharan Africa projected that the region would experience prominent increases in the intensity and/or frequency of extreme events such as tropical cyclones, droughts, floods, as well as a rising sea level. Apart from fatalities and casualties, these extreme climate events disrupt livelihoods and income generating economic activities. With crops and livestock being destroyed, incomes and consumption decline and savings deplete. This can have long term implications for well-being, future human capital accumulation, and economic development (Solomon, 2007).

The impacts of natural disasters, both in terms of human and financial losses, are distributed disproportionately across social groups as are coping abilities. Social factors, such as, education, are crucial determinants of vulnerability (Brooks, Adger \& Kelly, 2005) because they are related to resource distribution (Blaikie, Cannon, Davis, \& Wisner, 2004). Social differentiation, in the availability of and access to resources, makes certain groups more exposed to risk and less capable of adapting (Adger, 2004). Consequently, households and communities respond to multiple stressors, including climate stress, depending on available resources. For instance, although households above the poverty line respond to disaster shocks through consumption smoothing, e.g., sell assets, poorer households are more likely to smooth their assets, e.g., decrease consumption, a strategy that can result in human capital depletion (Hoddinott, 2006).

Whereas households with female heads, for example, experience consumption reduction because of idiosyncratic income shocks (Brooks, Adger \& Kelly, 2005), households with higher education have lower vulnerability to income shocks (Skoufias 2007, Silbert 2011). Human assets, such as education and skills, can thus be an important element in promoting adaptive capacity. The plausible, positive effect of education on risk reduction is noteworthy and can have important policy implications.

Education is a human capital asset that can increase adaptive capacity, that is "the preconditions necessary to enable adaptation, including social and physical elements, and the ability to mobilize these elements" (Solomon, 2007). Education is one important way individuals acquired knowledge, skills, and competences that could directly or indirectly influence coping capacities in times of crisis. More educated individuals may have improved access to information and a better ability to interpret and evaluate that
information (Jerit, 2006), including climate risks and self-protection. Education endows individuals with real skills that are useful for work and for life, such as decision making abilities (Solomon, 2007) and problem solving skills that can be useful in hard times.

Likewise, education also indirectly affects adaptive capacity through income. The relationships between education and labor market outcomes, such as earnings and employment, are well established (Oreopoulos 2006). Education provides individuals with greater access to fulltime, high status, and well-paid work. The improved economic conditions can reduce vulnerability to climate change through enhancing livelihood options and access to external support. Thus, education can provide individuals with additional resources, i.e., skills, information, and relevant knowledge, which may compensate for the assets lost and damages caused by climatic shocks.

### 2.2 Home based factors and students' access to education

Drought is a recurrent natural disaster whose humanitarian impact is no less devastating than other, more sudden disasters like floods or earthquakes. Drought is more of a process than an event with a subtle beginning and a severity that builds gradually over time it is often overlooked as a disaster. According to the International Federation of the Red Cross and Red Crescent Societies (IFCR) annual World Disasters Report, drought causes more deaths than any other natural disaster (Tesliuc \& Lindert (2004).

Students' access to education or learning is the willingly and lively taking part in learning activities to acquire education. It includes; the attendance, enrollment, high retention or reduced dropout, high performance and the lively class learning activities. To achieve a satisfactory pupils' access, the learner must be healthy and free from any disturbances.

Climate-related natural disasters such as drought, flooding, storms and tropical cyclones are the principal sources of risk and uncertainty in children education. However, many children in the world experience adverse conditions which deter them from participating effectively in learning (World Food Programme [WFP], 2001).

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.

### 2.3 Parental level of education and students' access to education

The parental level of education plays a significant role to enhancement of participation in education; Kibera and Kimokoti (2007). The parental education and social background of the family can positively and negatively influence a child's access to school. Esewo (1983) writing about the roles of a family in education argued that family's role may be supportive or antagonistic to school education. Educated parents tend to support education while uneducated discourage schooling of their children which contribute to the discriminating of students in educational programmes.

Educated parents with high incomes are able to provide their children with a conducive home environment provide all necessary requirements of school and pay extra tuition; or Omaraka (2001). This positively affects participation. Burrow (1984) found out that there is a strong relationship between parents' level of education and their children access to
school. Children of uneducated parents are less likely to have a good start to their education, do well in class or continue beyond the minimum schooling (Rena, 2006). Carneiro and Heckman (2002) succinctly summarize the argument, noting that children whose parents have higher education have better access to quality schools, and these same parents shape the tastes and expectations of their children.

Cai, Jinfa, Moyer \& Wang (2009) states how important it is for parents to be actively involved in their child's education. Some of the findings of major research into parental involvement indicate that when parents are educated, they are more involved in their children's education. The family makes critical contributions to student achievement from preschool through high school. A home environment that encourages learning is more important to student achievement (Cai, Jinfa, Moyer \& Wang 2009 in Ssegawa, 2009).

Omondi (2004) in his study on causes of drop out in school in Ralieda found that lack of parental level of education was a factor contributing to drop out. It was revealed that children of less educated parents were likely to drop out than those whose parents were highly educated. This study was conducted in Nyanza which has different social economic background hence a need to conduct a study in secondary schools in drought stricken areas. Wachira (2003) found that parents who were not education were not likely to come to schools when invited by the school administration. Further, these parents were not concerned when their children stayed away from school. As cited by Mutwol (2009) in his survey on factors influencing access to education in Nyeri district found out that children of well educated parents were likely to complete schools than those from less
educated parents. This study was carried out in a rich agricultural areas hence the need to conduct a study in a drought stricken area such as Siakago.

### 2.4 Household size and students' access to education

Family size in Africa is about the highest in the world thus confirming the extreme increase in Africa population survey. The decision to have children, the number and the timing is a critical issue which may involve a trade off of the family scarce resources against a large family size. Due to the high level of care feeding, housing and clothing children, parents most especially the educated ones perceive costs to be high because they have to arrange for better education for their children. In order to achieve this, their income level must be put into consideration which will affect their decision on number of children.

The household size is influenced by the number of children it has. Parents with a high number of school-age children find it difficult to see them through school (Graham, 2004). Education in Kenya today is an expensive commodity. At secondary level, parents are expected to pay school fees as well as provide other inputs like textbooks, uniforms and contribute towards putting up the physical structures in school. The family income has to be split among several competing ends. Education is just one of them and not necessarily the most important (UNESCO, 2006). Castle, 2006 pauses the question "how can parents provide for education if they cannot afford a meal?" Studies from El Salvation indicate that the cost of education affects the family economy especially if parents have five or more children at school. This makes parents to take their children out of school before completing the cycle (Graham, 2011). The household size has a
strong negative relationship with level of education of the parents (World Bank, 1988:7). This means parents with low levels of education and therefore low income earnings have more children. With increasing poverty levels in Kenya, children from large families have had to drop out of school due to lack of money.

Family background, parental education, occupation and income have been found as factors that could affect family size. A lot of researches had been carried out on education and most studies revealed that women with higher education had fewer children than those with less schooling. Cochrane (1979), observed that pursuit of education could affect family size through a number of inter-related factors including women's social and economic status within the house hold, age at marriage, family size desires, access to family planning information services and use of contraception.

Studies of the relationship have often found effects that were not statistically significant, but when effects were significant, children in large families usually had lower educational participation and attainment. Results suggest that this relationship is weak in comparison with the relationship between amount of education and other factors household poverty, for instance that independently affect children's schooling (Kariuki, 2007). The relationship between family size and investment in children has been found to vary according to level of development, phase of the demographic transition, level of government social expenditures and cultural factors. In some countries, unwanted births have been found to reduce educational attainment and to be a major reason that girls drop out of school (Murai, 2008).

A study by Schiefelbein and Wolff (1992), in America and Europe found that large families are prevalent among low-socio-economic groups, whereas small families occur in high socio-economic groups. They reported that the family size was correlated to test score performance among school leavers. A study by Murai (2008), in Gatundu district revealed that parental non involvement in learners, learning is a factor which may be determined by family size, parent-child relationship and parent-teacher relationship. And that parental co-operation has a lot to account for academic outcome. Education opportunities for girls have tended to be lower than boys at every level of education. Many parents believe that it pays to educate boys than girls. Gender disparities in education are associated with the parents' discrimination and cultural factors on opportunity cost of educating a daughter as compared to a son. GoK (2005) shows gender parity index of 0.97 , with a female transition rate of $48.6 \%$. This shows that most household prefer to take the male child for further education compared to the female child given household budget constraints. Njoroge (2004) argued that one's position in the family determines his or her chance of completing school in respect to financial constraints. In most cases depending on the size of the family, the first born stands a higher chance of completing school. This is because family burden increases with increase in family members. The first-borns use all family resources hence making it difficult for other siblings to complete the education cycle enrolled.

### 2.5 Food security factors and students access to education

Food has become a valuable commodity, and its distribution can create security risks as well as the potential threat to participation in education. Access to good quality education is not only every child's right; it is vital to bringing an end to generational
cycles of poverty, and to encouraging economic growth and stability. Drought conditions lead to shortage of food at home hence affecting household lives. The lives of millions of children in many countries are blighted by recurrent, emergencies such as drought. Food scarcity and malnutrition during drought jeopardize 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 go to school.

Food insecurity during drought also exposes vulnerable populations such as children, women and the elderly to negative coping mechanisms. Drought and other weather conditions that interfere with food production affect poor families more than those with greater financial resources because food prices are inflated and food becomes unaffordable. Food shortage or famine is most often described as a macro-event summarized with aggregate statistics on extent of drought or other precipitating event, crop failure, and population morbidity and mortality. The investigation of the effects of a temporary food shortage is informative in two major ways. First, the study of behavior before, during, and after a food shortage provides a powerful design for understanding. Shortage of food during in the households has severe impact on access to education. 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.

When droughts occur, they cause a decline in food production; they change migratory patterns of pastoralists; exacerbate resource-based conflicts; result in large losses of livestock assets and trigger acute food insecurity among vulnerable households, putting a heavy strain on both the local and the national economy. In the last drought of 2004-6, the government of Kenya estimated that nearly 10 million people were food insecure with a large proportion of these being those living in the Arid and Semi Arid Lands (ASALs), mainly pastoralists, agro-pastoralists, small farmers and owners of small businesses (ALRMP phase II midterm review, 2007).

Households suffer high losses and are forced to depend on the government and donor agencies for relief food. Such losses mean that parents are not able to support their children education in the payment of levies. Also, 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

### 2.6 Students' involvement in household economic activities and students access to education

Domestic child labour has been identified as the most common physical violence, traditionally domestic labour was part of societal activities and children were deprived access to school, play and social interaction and so today in most ASALs. Burrow (1984) observes that emotional and psychological problems found in fatherless homes are complicated by the loss of his economic support and this has many implications for children's schooling. Studies by Chimombo (2005), in Malawi, on basic education in developing countries reveals that the necessity for children to engage in tasks that support household survival limits school participation. For instance girls are more likely than boys to be pulled out of school to go and fetch water or firewood or even take care of their siblings where the mother figure is not available either through death or divorce. This is especially in rural and urban squatter groups. Further, even where schools are accessible and affordable, households have to realize a net benefit to them. And that apart from the domestic activities, school age children at times engage in economic activities thus breaking the education cycle.

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 such as tendering cattle sheep, and goats, fetching water and firewood, because the social economic status of those households dictates so. Today Siakago Division Mbeere District
children are engaged in Miraa (Khat) activities. For example the 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 pastoralists involve their children in looking after their animals instead of enrolling them in schools. And for those children who do happen to get enrolled most have to drop out of primary schooling so as to accompany their parents in search of pastures for their animals.

A study on violence against children in Kenya 2007 shows that children in Kenya are known to work in places where they are exposed to all sorts of health hazards such as inhaling chemicals or handling dangerous machines. Students 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.

### 2.7 Theoretical framework

The study adopted its theoretical framework from the classical liberal theory of equal opportunities advanced by Horace Mann as cited in Cremin (1959). Mann felt that a
common school would be the "great equalizer". He found "social harmony" to be his primary goal of the school he advocates a school that would be available and equal for all to be part of the birth-right of every American child to be for rich and poor alike.

Classical liberal theory of equal opportunity asserts that each person is born with a given amount of capacity which to a larger extent is inherited and cannot be substantially changed. The theory sought for further going through the education system whose participation was determined on the basis of individual merits and not socio-economic background, gender, geographical barriers and policies. This theory is found relevant for this study because by removing negative home based factors that constrain the enhancement of participation in public secondary schools, ideal conditions can be created to implement the vision of equal opportunity where everybody has access to the kind and amount of education that was suitable for his/her inherited capacity. This in return reduced the incidents of poor performance, dropouts and absenteeism which impacts negatively on education.

### 2.8 Conceptual framework

Figure 2.1 Interrelationship between home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya.

## Parental level of education

- Roles model
- Attitudes towards education


## Household size

- Education of siblings
- Health of siblings
- Rate of dependency
- Crime rate


## Food security

- Food insecurity
- Health and hygiene



## Students' involvement in household economic activities

- Gender roles
- Lack of basic needs

As shown in Figure 2.1, during emergency such as drought, several home based factors that affect students' access to education. In the figure, these factors which are parental level of education, household size, food security, students’ involvement in household economic activities are the independent variables which are affect students access to
education which is the dependent variable. The interplay between the independent and the dependent variable is the drought emergency.

## CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter presents the research methodology that will be used in the study. The chapter comprises of seven main areas: research design, target population, study sample, sampling procedure, research instruments, validity and variability, data collection and data analysis plan.

### 3.2 Research design

This study adopted descriptive survey design. The descriptive survey design is used in preliminary and exploratory studies (Luke \& Ruben 1992) to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. Orodho (2002), descriptive survey research is intended to produce statistical information about aspects of education Mugenda and Mugenda (2003). Survey is a systematic description of the factors and characteristics of a given population or phenomena accurately and objectively. The design has been chosen because the researcher would not control the independent variables which are home based factors that affect students' access to education in drought prone areas.

### 3.3 Target population

Borg and Gall (1996) define the target population as all the members of a real or hypothetical set of people events and objects to which a researcher wishes to generalize the results of study. The target population comprised of all the 24 public secondary
schools in Siakago division. The schools had a total number of 281 teachers and 700 form three students. The researcher targeted form three students since they have been in the schools for a relatively longer time and hence are able to provide reliable information than other student. The teachers and principals because they were the administrators and had significant information about the home based factors that affect pupils' access to education in drought prone areas.

### 3.4 Sample size and sampling procedures

A sample is a subset of the population to which research intends to generalize the results (Wiersma, 1986). The researcher sampled 8 schools. Mugenda and Mugenda (2003) states that a sample should at least $30 \%$ percent of a population is adequate for educational research. Using Mugenda and Mugenda (2003) 30 percent, out of 24 public secondary in the division 8 students were sampled from every school. From the 8 schools all the 8 headteachers, 90 teachers and 238 students were selected for the study. The selection of individual subjects was done by use of simple random sampling.

### 3.5 Data Collection instruments

Data in the study was collected using questionnaires. A questionnaire is a research instrument that gathers data over a large sample (Kombo and Tromp, 2006). The advantages of using questionnaires are: the person administering the instrument has an opportunity to establish rapport, explain the purpose of the study and explain the meaning of items that may not be clear. Orodho (2005) asserts that questionnaires give respondents freedom to express their views or opinions and also to make suggestions. They are also anonymous which helps to produce more detailed answers than it is
possible in an interview. The questionnaires for principals and that of teachers contained two major sections. Part A had the demographic information, Part B had items on parental level of education and access to education, Part C had items on the influence of household size and access to education, part D had items on the influence of home environment factors on access to education while part E had items on the influence students' involvement in household economic activities on access to education.

### 3.6 Instruments validity

According to Kombo and Tromp (2009), validity of a test is a measure of how well a test measures what it is supposed to measure. A pilot study was conducted in a neighboring district and involved 3 principals, 3 teachers. The pilot study helped to improve face validity and content of the instruments. The researcher used content validity to check whether the items in the questionnaire answer the research objectives. The aim of pretesting was to gauge the clarity and relevance of the instrument items so that those items found to be inadequate for measuring variables were either discarded or modified to improve the quality of the research instruments. The supervisors who were experts in the area of study validated the instruments through expert judgment (Kirk \& Miller, 1986).

### 3.7 Instruments reliability

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. To enhance the reliability of the instrument, a pre test was conducted in schools in other schools in Siakago division which were not included in the main study. The aim of pre-testing was to gauge the clarity and relevance of the
instrument items so that those items found to be inadequate for measuring variables were either discarded or modified to improve the quality of the research instruments. The procedure for extracting an estimate of reliability was obtained from the administration of test-retest reliability method which involved administering the same instrument twice to the same group of subject with a 2 weeks time lapse between the first and second test. Pearson's product moment correlation coefficient formula was used so as to establish the Pearson's product moment correlation coefficient.

$$
r=\frac{N \Sigma x y-(\Sigma x)(\Sigma y)}{\sqrt{\left[N \Sigma(x)^{2}-\left(\Sigma x^{2}\right)\right]\left[N \Sigma(y)^{2}-(\Sigma y)^{2}\right.}}
$$

According to Mugenda and Mugenda (2003) a coefficient of 0.7 or more, shows that there is high reliability of data. Reliability coefficient of for the instruments was 0.721 and hence the instruments were deemed reliable.

### 3.8 Data collection procedures

The researcher sought a research permit from the National Commission for Science Technology and Innovation (NACOSTI). The researcher then proceeded to report to the District Commissioner and District Education Officer, Mbeere district and thereafter wrote letters to the headteachers to be allowed to do the study in their respective schools. The researcher visited the selected schools, create rapport with the respondents and explain the purpose of the study before administering the questionnaire to the respondents. The respondents were assured that strict confidentiality was maintained in dealing with their identities. The completed questionnaires were collected once filled out.

### 3.9 Data analysis techniques

After the data was collected cross-examination was done to ascertain their accuracy, completeness and identify those items wrongly responded to, spelling mistakes and blank spaces. Quantitative data was then entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS) version 15.0. According to Kombo and Tromp (2006), statistical data analysis divides the methods of analyzing data in to exploratory methods and confirmatory methods. Exploratory methods are used to discover what the data seems to be saying by using simple arithmetic and easy to draw pictures to summarize the data. Data was presented by use of frequency distribution tables. Quantitative data was analysed by use of frequencies and percentages while qualitative data was organized according to the themes in the research objectives and analysed according to those themes.

## CHAPTER FOUR

## DATA ANALYSIS, PRESENTATION AND INTERPRETATION

### 4.1 Introduction

This chapter present analysis of data, it also present interpretation and discussion of the finding of the study. The chapter is discussed and the following sub-sections, the questionnaire return rate demographic information of the respondents' responses to the research question and the summary of the study findings.

### 4.2 Questionnaire return rate

Questionnaire return is the proportion of the questionnaires returned after they have been issued to the respondents. The questionnaire return rate is summarized in table 4.1.

Table 4.1 Questionnaire return rate

| Category of respondent | Number | Number | \% age return rate |
| :--- | :--- | :--- | :--- |
|  | issued | returned |  |
| School principals | 8 | 7 | 87.55 |
| Teachers | 90 | 85 | 94.4 |
| Students | 238 | 210 | 88.2 |

In this study 8 principals, 90 teachers and 238 students were selected. Out of the 8 principals, 7 returned the questionnaires, which was 87.5 percent. Out of the 90 teachers, 85 returned the questionnaires, which was 94.4 percent. Out of 238 Form three students
sampled, 210 returned the questionnaires, which was an equivalent of 88.2 percent. These return rates were above $80 \%$ hence were deemed adequate for data analysis.

### 4.3 Demographic information of respodents

Demographic information was collected from principals, teachers and students. The results of the analysis are presented in the following subsections:

### 4.3.1 Demographic information of principals

The demographic information of principals was based on gender, age, profession level and the duration they had served as principals in the current school

## Gender of principals

To establish the gender of the principals, they were asked to indicate their gender. Table 4.2 presents data on the gender of principals.

Table 4.2 Distribution of principals according to gender

| Gender | F | \% |
| :--- | :---: | :---: |
| Male | 4 | 57.1 |
| Female | 3 | 42.9 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that majority $4(57.1 \%)$ of principals were male while $3(42.9 \%)$ of principals were female. This shows that there were more male principals than female in the public secondary schools. These principals were from the community and were part of the community hence were able to explain the issues home based factors influencing access to education in public secondary schools in drought stricken Siakago Division.

## Age of principals

The school principals were also asked to indicate their age, they responded as Table 4.3.
Table 4.3 Distribution of principals according to age

| Age | F | \% |
| :--- | :---: | :---: |
| $36-40$ Years | 1 | 14.3 |
| Above 41 years | 6 | 85.7 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Majority $6(85.7 \%)$ of principals were aged above 41 years while 1 (14.3\%) of principals were aged between 36 and 40 years. This implies that the principals were old and hence could understand and explain home based factors influencing access to education in public secondary schools in drought stricken Siakago Division.

## Professional level of education of the principals

The principals were further asked to indicate the professional level of education.
Table 4.4 tabulates profession level of the principals.

Table 4.4 Distribution of principals according to profession level

| Profession | F | $\%$ |
| :--- | :---: | :---: |
| Masters | 2 | 28.6 |
| B.Ed | 4 | 57.1 |
| BA/BSC with PGDE | 1 | 14.3 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Data revealed that majority $4(57.1 \%$ ) of principals had bachelors in education, $2(28.6 \%)$ of principals had masters education while $1(14.3 \%)$ of principals had BA/BSC with PGDE profession level. This shows that the principals had required level of education and hence were able to explain the home based factors influencing access to education in public secondary schools in drought stricken Siakago Division.

## Duration of the principals in the current school

The principals were further asked to indicate the duration they had served in the current school. Table 4.5 presents the data.

Table 4.5 Duration of the principals in the current school.

| Years | F | \% |
| :--- | :---: | :---: |
| Below 5 years | 2 | 28.6 |
| $6-10$ years | 3 | 42.9 |
| $11-15$ years | 2 | 28.6 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that $2(28.6 \%$ ) of principals had been in the current school for less than 5 years, the same number of principals for between 11 nad 15 years while $3(42.9 \%)$ of principals for between 6 and 10 year. This shows that the principals had been in secondary school for considerable number of years and hence could understand home based factors influencing access to education in public secondary schools in drought stricken areas of the division.

### 4.3.2 Demographic information of teachers

The demographic information of teachers was based on gender, age, profession level and the duration they had served as principals in the current school

## Gender of teachers

The study sought to establish the gender of teachers. Table 4.6 shows gender of teachers.
Table 4.6 Distribution of teachers according to gender

| Gender | $\mathbf{F}$ | $\boldsymbol{\%}$ |
| :--- | :---: | :---: |
| Male | 42 | 49.4 |
| Female | 43 | 50.6 |
| Total | $\mathbf{8 5}$ | $\mathbf{1 0 0 . 0}$ |

Majority $43(50.6 \%)$ of teachers were female while $42(49.4 \%)$ of teachers were male. This shows that there were more female teachers than male teachers. These teachers were from the community and understand the community very well and also the issues that affect students participation in education during drought.

## Age of teachers

The study sought to establish the age of teachers in the study. Table 4.7 presents age of the teachers.

## Table 4.7 Distribution of teachers according to age

| Age | F | \% |
| :--- | :---: | :---: |
| Below 25 years | 28 | 32.9 |
| $26-30$ years | 1 | 1.2 |
| $31-35$ years | 21 | 24.7 |
| $36-40$ Years | 11 | 12.9 |
| Above 41 years | 24 | 28.2 |
| Total | $\mathbf{8 5}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that $28(32.9 \%)$ of teachers were aged below 25 years, $1(1.2 \%)$ of teachers were aged between 26 and 30 years, 21(24.7\%) of teachers were aged between 31 and 35 years. Data further shows that $11(12.9 \%)$ of teachers were aged between 36 and 40 years while $24(28.2 \%)$ of teachers were aged above 41 years. The fact that most of the teachers were relatively young explains that they were some of the BOM teachers who are from the community. This shows that being from the community, they are well versed with issues that affect access to education.

## Profession level of teachers

The teachers were also asked to indicate their professional level. The data is presented in table 4.8.

Table 4.8 Distribution of teachers according to profession level

| Profession level | F | $\%$ |
| :--- | :---: | :---: |
| Untrained | 3 | 3.5 |
| PI | 6 | 7.1 |
| SI/SII | 11 | 12.9 |
| Graduate | 65 | 76.5 |
| Total | $\mathbf{8 5}$ | $\mathbf{1 0 0 . 0}$ |

Majority $65(76.5 \%)$ of teachers were graduates, 11(12.9\%) of teachers had SI/SII, 6(7.1\%) of teachers had PI education while 3(3.5\%) of teachers were untrained. This indicates that teachers had required level of education and hence were in a position to indicate home based factors influencing access to education in public secondary schools in drought stricken areas. Asked to indicate the number of years they had been in school, teachers responded as table 4.9.

Table 4.9 Duration of the teachers in the current school.

| Years | F | $\%$ |
| :--- | :---: | :---: |
| Below 5 years | 47 | 55.3 |
| 6 -10 years | 20 | 23.5 |
| $11-15$ years | 14 | 16.5 |
| More than 15 years | 4 | 4.7 |
| Total | $\mathbf{8 5}$ | $\mathbf{1 0 0 . 0}$ |

Table 4.9 shows that majority $47(55.3 \%)$ of teachers indicated that they had been in the current school for less than 5 years, 20(23.5\%) of teachers for duration of between 6 and 10 years. Data further shows that $14(16.5 \%)$ of teachers had been in school for between 11 and 15 years while $4(4.7 \%)$ of teachers for more than 15 years. This shows that the teachers had been in secondary school for considerable number of years and hence could understand home based factors influencing access to education in public secondary schools in drought stricken areas.

### 4.3.3 Demographic information of students

The demographic information of students was based on gender, age, and the education level of their parents.

## Gender of students

The study sought to establish the gender of students. Table 4.10 shows gender of students

Table 4.10 Distribution of students according to gender

| Gender | F | \% |
| :--- | :---: | :---: |
| Male | 41 | 19.6 |
| Female | 169 | 80.5 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Majority $169(80.5 \%)$ of students were female while $41(19.6 \%)$ of students were male. This shows that there were more female students than male students in schools. The data
shows that there is disparity in the access to education among the students which may be attributed to the factors that affect access to education. Boys are very often regarded as strong in the family and hence could be involved more in the economic activities of the family especially during drought.

## Age of students

Asked to indicate their age, they responded as table 4.11

Table 4.11 Distribution of students according to age

| Age | F | \% |
| :--- | :---: | :---: |
| Below 15 years | 2 | 1.0 |
| $16-20$ years | 208 | 99.0 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Majority 208(99.0\%) of students were aged between 16 and 20 years while 2(1.0\%) of students were aged below 15 years. The data implies that majority were relatively old and hence are able to understand and explain home based factors that affected students access to education.

## Education level of students fathers

The students were asked to indicate the educational level of their fathers. Table 4.12 presents the data.

Table 4.12 Education level of students' fathers

| Education level | F | $\%$ |
| :--- | :---: | :---: |
| University /college | 83 | 39.5 |
| Secondary | 67 | 31.9 |
| Primary | 34 | 16.2 |
| Never been to school | 2 | 1.0 |
| N/A | 24 | 11.4 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that $83(39.5 \%)$ of students fathers has university/ college education level, $67(31.9 \%)$ of fathers had secondary education, $34(16.2 \%)$ of fathers had primary education while $2(1.0 \%)$ of students fathers had never been in school. The data shows that majority of the fathers had acquired secondary education. Secondary education may affect a persons understanding of the importance of education. This implies that the fathers may not have an influence in encouraging their children education.

## Education level of students Guardian

The study also sought to establish the education level of students' guardian. Table 4.13 Tabulates education level of students Guardian.

Table 4.13 Education level of students' guardian

| Education level | F | $\%$ |
| :--- | :---: | :---: |
| University /college | 16 | 7.6 |
| Secondary | 5 | 2.4 |
| Primary | 12 | 5.7 |
| Never been to school | 1 | 0.5 |
| N/A | 176 | 83.8 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that $16(7.6 \%)$ of students guardian has university/ college education level, $5(2.4 \%)$ of guardian had secondary education, $12(5.7 \%)$ of guardian had primary education while $1(0.5 \%)$ of students guardian had never been in school. The data shows that majority of the guardians had acquired secondary education. Secondary education may affect someone's understanding of the importance of education. This implies that the guardians may not have an influence in encouraging their children education.

## Education level of students' mother

The students were also asked to indicate the education level of the mothers. Table 4.14 tabulates the data.

Table 4.14 Education level of students’ Mother

| Mother | F | \% |
| :--- | :---: | :---: |
| University /college | 65 | 31.0 |
| Secondary | 68 | 32.4 |
| Primary | 62 | 29.5 |
| Never been to school | 2 | 1.0 |
| N/A | 13 | 6.2 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Table 4.13 shows that $65(31.0 \%)$ of students mothers has university/ college education level, $68(32.4 \%)$ of mothers had secondary education, $62(29.5 \%)$ of mothers had primary education while $2(1.0 \%)$ of students mothers had never been in school. The data shows that majority of the mothers had acquired secondary education. Secondary education may affect someone's understanding of the importance of education. This implies that the mothers may not have an influence in encouraging their children education.

### 4.4 Parental level of education and access to education

The purpose of this study was to establish the home based factors that affect pupils' access to education in drought prone areas. The study specifically sought to establish how parental level of education affects pupils' access to education. Finding is presented in the following section:

The principals were asked to indicate that s rate on the education of students in the school. Table 4.15 shows principals and teachers rate on the education of students in the school.

Table 4.15 Principals and teachers rate on the education of students in the school

| Respondents | High |  |  | Moderate |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Low |  |  |  |  |  |  |
|  | F | $\%$ | F | $\%$ | F | $\%$ |
| Principals | 1 | 14.3 | 6 | 85.7 |  |  |
| Teachers | 24 | 28.2 | 45 | 52.9 | 16 | 18.8 |

Data shows that majority $6(85.7 \%)$ of principals and majority $45(52.9 \%)$ of teachers indicated that students education was moderate. The data shows that education in the division was hampered by several factors which the study sought to establish. The researcher further sought to establish whether parents' level of education was a factor to low access to education in the school. The parental level of education plays a significant role to enhancement of participation in education. This is in line with Kibera and Kimokoti (2007) who found that the parental education and social background of the family can positively and negatively influence a child's access to school.

Table 4.16 shows principals and teachers responses on whether they consider parents

Table 4.16 Principals and teachers responses on whether they consider parents level of education as a factor to low access to education in the school

| Respondents | Yes |  |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | $\%$ | F | $\%$ |  |
|  |  | 6 | 85.7 | 1 | 14.3 |
| Principals | 47 | 55.3 | 38 | 44.7 |  |
| Teachers |  |  |  |  |  |

Majority $6(85.7 \%)$ if principals and majority $47(55.3 \%)$ of teachers indicated that they consider parents level of education as a factor to low access to education in the school. This agreed with Esewo (1983) who indicated that the parental education can positively and negatively influence a child's access to school.

The students were asked whether their parents' level of education was low. Table 4.17 shows students responses on whether their parents level of education was low

Table 4.17 Students responses on whether their parents' level of education was low

| Response | F | $\%$ |
| :--- | :--- | :--- |
| Strongly agree | 33 | 15.7 |
| Agree | 60 | 28.6 |
| Undecided | 20 | 9.5 |
| Disagree | 33 | 15.7 |
| Strongly disagree | 64 | 30.5 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that $33(15.7 \%)$ of students strongly agreed that their parents' level of education was low, $60(28.6 \%)$ of students agreed, $20(9.5 \%)$ of students were undecided. Data further shows that $33(15.7 \%)$ of students disagreed that their parents' level of education was low while $64(30.5 \%)$ of students strongly disagreed with the statement.

The principals and teachers were asked to indicate whether drought was a factor to low access to education in the area. Table 4.18 shows principals and teachers responses on whether drought was a factor to low access to education in the area.

Table 4.18 Principals and teachers responses on whether drought was a factor to low access to education in the area

| Respondents | Yes |  |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | $\%$ | F | $\%$ |  |
| Principals | 4 | 57.1 | 3 | 42.9 |  |
| Teachers | 59 | 69.4 | 26 | 30.6 |  |

Majority 4 ( $57.1 \%$ ) of principals and majority 59 (69.4\%) of teachers indicated that drought was a factor to low access to education in the area. This shows that social background of the family affected a child's access to school hence low enrollments.

The study also sought to establish how parental level of education affects pupils' access to education. Table 4.19 shows principals' responses on the how parental level of education affects pupils' access to education.

Table 4.19 Principals responses on the how parental level of education affects pupils' access to education

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly <br> Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | \% | F | \% | F | \% |
| Access to education is highly affected by the level of education of parents | 2 | 28.6 | 4 | 57.1 | 1 | 14.3 | 0 | 0.0 |
| Low educated parents do not encourage their children to school | 3 | 42.9 | 3 | 42.9 | 1 | 14.3 | 0 | 0.0 |
| Parental level of education is a factor in students access to education | 2 | 28.6 | 4 | 57.1 | 1 | 14.3 | 0 | 0.0 |
| Parental level of education coupled with drought affect students access to education | 6 | 85.7 | 0 | 0.0 | 1 | 14.3 | 0 | 0.0 |
| Students from well educated parents are likely to complete educational cycle | 6 | 85.7 | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 |

Table 4.19 shows that majority $4(57.1 \%)$ of principals agreed that access to education was highly affected by the level of education of parents and that parental level of education was a factor in students access to education, $3(42.9 \%)$ of principals agreed that low educated parents do not encourage their children to school. Majority $6(85.7 \%)$ of principals strongly agreed that parents level of education coupled with drought affect students access to education and that students from well educated parents were likely to complete educational cycle. This implies that was a strong relationship between parents' level of education and their children access to school.

Teachers were also asked to indicate ways how parental level of education affects pupils’ access to education. They responses as table 4.20.

Table 4.20 Teachers responses on the how parental level of education affects pupils’ access to education

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | \% | F | \% | F | \% |
| Access to education is highly affected <br> by the level of education of parents | 16 | 18.8 | 42 | 49.4 | 8 | 9.4 | 19 | 22.3 |
| Low educated parents do not encourage their children to school | 11 | 12.9 | 37 | 43.5 | 9 | 10.6 | 28 | 32.9 |
| Parental level of education is a factor in students access to education | 12 | 14.1 | 42 | 49.4 | 9 | 10.6 | 22 | 25.9 |
| Parental level of education coupled with drought affect students access to education | 16 | 18.8 | 38 | 44.7 | 6 | 7.1 | 25 | 29.4 |
| Students from well educated parents are likely to complete educational cycle | 49 | 57.6 | 25 | 29.4 | 3 | 3.5 | 5 | 9.4 |

Findings indicates that 42(49.4\%) of teachers agreed that access to education was highly affected by the level of education of parents and that parental level of education was a factor in students access to education, $37(43.5 \%)$ of teachers agreed that low educated parents do not encourage their children to school. Data further shows that 38(44.7\%) of teachers agreed that parental level of education coupled with drought affect students access to education while majority $49(57.6 \%)$ of teachers strongly agreed that students from well educated parents were likely to complete educational cycle. This indicates that children of uneducated parents were less likely to have a good start to their education, do
well in class or continue beyond the minimum schooling. These findings concur with Omondi (2004) in his study on causes of drop out in school in Ralieda who sound that lack of parental level of education was a factor contributing to drop out. It was revealed that children of less educated parents were likely to drop out than those whose parents were highly educated.

The students were also asked whether lack of education of their parents makes them not bother on their education. Table 4.21 shows students responses on whether lack of education of their parents makes them not bother on their education.

Table 4.21 Students responses on whether lack of education of their parents makes them not bother on their education

| Response | F | $\%$ |
| :--- | :---: | :---: |
| Strongly agree | 9 | 4.3 |
| Agree | 25 | 11.9 |
| Undecided | 7 | 3.3 |
| Disagree | 31 | 14.8 |
| Strongly disagree | 138 | 65.7 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Majority 138(65.7\%) of students strongly disagreed that lack of education of their parents makes them not bother on their education, 31(14.8\%) of students disagreed. Data further shows that $25(11.9 \%)$ of students agreed that lack of education of their parents makes them not bother on their education while $9(4.3 \%)$ of students strongly agreed with the
statement. The findings are in line with Mutwol (2009) who found out that children of well educated parents were likely to complete schools than those from less educated parents.

Asked to indicate whether parental level of education and students' access to education, the students responded as presented in Table 4.22.

Table 4.22 Students responses on the parental level of education and students' access to education

| Statement | Yes |  | No |  | Sometimes |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | $\%$ | F | $\%$ | F | $\%$ |  |
| Do your parents encourage you to attend | 190 | 90.5 | 8 | 3.8 | 12 | 5.7 |  |
| school |  |  |  |  |  |  |  |
| Do your parents encourage you to reach | 147 | 70.0 | 44 | 21.0 | 19 | 9.0 |  |
| their level of education <br> Are your parents willing to provide for <br> your school needs | 180 | 85.7 | 8 | 3.8 | 22 | 10.5 |  |

Majority $190(90.5 \%)$ of students indicated that their parents encouraged them to attend school, majority $147(70.0 \%)$ of students indicated that their parents encouraged them to reach their level of education while $180(85.7 \%$ ) of students indicated that their parents were willing to provide for their school needs. The data shows that even though the parents had low levels of education, they encouraged their children to access education. These findings agree with Kibera and Kimokoti (2007), Omaraka (2001), Ssegawa
(2009), and Omondi (2004) who established that parental levels of education has an influence on their childrens' education.

The students were also asked to indicate the whether parental level of education is a factor in their access to education. The responses are pretend in table 4.23.

Table 4.23 Students responses on whether parental level of education is a factor in their access to education

| Response | F | \% |
| :--- | :---: | :---: |
| Strongly agree | 56 | 26.7 |
| Agree | 37 | 17.6 |
| Undecided | 13 | 6.2 |
| Disagree | 23 | 11.0 |
| Strongly disagree | 81 | 38.6 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Data shows that 56(26.7\%) of students strongly agreed that parental level of education was a factor in their access to education, 37(17.6\%) of students agreed, 23(11.0\%) of students disagreed with the statement while $81(38.6 \%)$ of students strongly disagreed that parental level of education was a factor in their access to education. This shows that children whose parents had higher education had better access to quality schools, and these same parents shaped the tastes and expectations of their children.

The above findings agree with Burrow (1984) who found out that there is a strong relationship between parents' level of education and their children access to school. Children of uneducated parents are less likely to have a good start to their education, do well in class or continue beyond the minimum schooling (Rena, 2006). They also concur
with Carneiro and Heckman (2002) who argued that children whose parents have higher education have better access to quality schools, and these same parents shape the tastes and expectations of their children.

### 4.5 Household size and access to education

To establish whether the household size influenced the access to education, principals and teachers were asked whether they considered household size as a factor affecting students' access to education in their school. Table 4.24 tabulates the findings.

Table 4.24 Principals' and teachers responses on whether they considered household size as a factor affecting students' access to education in their school

| Respondents | Yes |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | $\%$ |
| Principals | 5 | 71.4 | 2 | 28.6 |
| Teachers | 43 | 50.6 | 42 | 49.4 |

Majority 5(71.4\%) of principals and majority 43(50.6\%) of teachers indicated that they considered household size as a factor affecting students' access to education in their school. The data confirms that household size was a factor that affected students' education. The findings are in line with Murai (2008) who found children education is a factor which may be determined by family size, parent-child relationship and parentteacher relationship.

The principals were also asked to indicate whether household size affects access to education. Their responses are presented in Table 4.25.

Table 4.25 Principals responses on whether household size affects access to education

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly <br> Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | \% | F | \% | F | \% |
| Students from large households have low access to education | 4 | 57.1 | 3 | 42.9 | 0 | 0.0 | 0 | 0.0 |
| Majority of students who are not in school are those from large families | 1 | 14.3 | 5 | 71.4 | 1 | 14.3 | 0 | 0.0 |
| Parents of large households are not able to provide for their children in school | 2 | 28.6 | 5 | 71.4 | 0 | 0.0 | 0 | 0.0 |
| Large families can be blamed for low access to education | 1 | 14.3 | 5 | 71.4 | 1 | 14.3 | 0 | 0.0 |
| Large households lead to inequalities to educational access | 3 | 42.9 | 3 | 42.9 | 1 | 14.3 | 0 | 0.0 |

Majority $4(57.1 \%)$ of principals strongly agreed that students from large households had low access to education, majority $5(71.4 \%$ ) of principals agreed that majority of students who were not in school are those from large families, parents of large households were not able to provide for their children in school and that large families can be blamed for low access to education. Data further shows that $3(42.9 \%)$ of principals agreed that large households lead to inequalities to educational access. This agrees with Graham, (2004) who indicated that parents with a high number of school-age children find it difficult to see them through school.

The findings are in line with Njoroge (2004) who argued that one's position in the family determines his or her chance of completing school in respect to financial constraints. In
most cases depending on the size of the family, the first born stands a higher chance of completing school. This is because family burden increases with increase in family members. The first-borns use all family resources hence making it difficult for other siblings to complete the education cycle enrolled.

When teachers were asked to respond to the same items, they responded as table 4.26.

Table 4.26 Teachers' responses on whether household size affects access to education

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly <br> Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | F | \% | F | \% | F | \% | F | \% |
| Lack of food in the family contribute to | 14 | 16.5 | 45 | 52.9 | 6 | 7.1 | 20 | 23.5 |
| low access to education |  |  |  |  |  |  |  |  |
| Students are not able to access school | 13 | 15.3 | 45 | 52.9 | 8 | 9.4 | 19 | 21.4 |
| due to lack of school needs |  |  |  |  |  |  |  |  |
| Parents of this area are generally poor | 19 | 22.4 | 47 | 55.3 | 3 | 3.5 | 16 | 18.8 |
| Poverty at home is a factor to low | 17 | 20.0 | 57 | 67.1 | 3 | 3.5 | 8 | 9.5 |
| education access |  |  |  |  |  |  |  |  |
| Students have dropped out of school | 25 | 29.4 | 47 | 55.3 | 3 | 3.5 | 10 | 11.8 |
| due to poverty |  |  |  |  |  |  |  |  |

Majority $45(52.9 \%$ ) of teachers agreed that lack of food in the family contribute to low access to education and that students were not able to access school due to lack of school needs. Majority $47(55.3 \%)$ of teachers agreed that parents of their areas were generally
poor and that students had dropped out of school due to poverty. Data further shows that majority $57(67.1 \%)$ of teachers agreed that poverty at home was a factor to low education access. This implies that the household size has a strong negative relationship with level of education of the parents. The findings are in line with Njoroge (2004) who found that one's position in the family determines his or her chance of completing school in respect to financial constraints. In most cases depending on the size of the family, the first born stands a higher chance of completing school. This is because family burden increases with increase in family members. The first-borns use all family resources hence making it difficult for other siblings to complete the education cycle enrolled.

The researcher sought to establish from the students how household size affects access to education. The data is presented in Table 4.27.

Table 4.27 Students responses on how household size affects access to education

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly <br> Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | \% | F | \% | F | \% |
| Poverty at home hinders my education | 19 | 9.0 | 33 | 15.7 | 9 | 4.3 | 149 | 71.0 |
| My large household is a hindrance to my education | 13 | 6.2 | 26 | 12.4 | 7 | 3.3 | 164 | 78.1 |
| Lack of food in my family affects my schooling | 14 | 6.7 | 14 | 6.7 | 7 | 3.3 | 175 | 83.4 |

Table 4.26 shows that majority $149(71.0 \%)$ of students strongly disagreed that poverty at home hinders their education, majority $164(78.1 \%$ ) of students strongly disagreed that their large household was a hindrance to my education while majority 175(83.4\%) of
students strongly disagreed that lack of food in their family affects their schooling. The data shows that poverty at home, large household and lack of food are some of the aspects that hindered access to education among students.

### 4.6 Home environment factors and students access to education

To establish the effects of home environment factors to students' access to education, the principals were asked whether there were students who had not accessed school due to food shortages in the family. Table 4.28 tabulates the findings

Table 4.28 Principals responses on whether there were students who had not accessed school due to food shortages in the family

| Responses | F | \% |
| :--- | :---: | :---: |
| Yes | 6 | 85.7 |
| No | 1 | 14.3 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Majority 6(85.7\%) of principals indicated that there were students who had not accessed school due to food shortages in the family. The data shows that lack of food affected students' access to education. When principals and teachers were asked to rate the food shortage in decreasing access to education, they responded as table 4.29.

Table 4.29 Teachers and principals rating on the food shortage in decreasing access to education

| Respondents | To a great | To a less extent | To no extent |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | extent |  |  | at all |  |  |
|  | F | $\%$ | F | $\%$ | F | $\%$ |
| Principals | 1 | 14.3 | 5 | 71.4 | 1 | 14.3 |
| Teachers | 29 | 34.1 | 48 | 56.5 | 8 | 9.4 |

Table 4.28 shows that majority $5(71.4 \%)$ of principals and majority $48(56.5 \%)$ of teachers indicated that food shortage decreased access to education to a less extent.

When the principals were asked whether they knew any pupils who had dropped out of school due to shortage of food in their homes, majority 4(57.1\%) of principals indicated that they were not aware of such pupils. The above findings concur with 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.

The students were also asked to indicate whether their home environment is not conducive for learning. Table 4.30 tabulates the data.

Table 4.30 Students responses on whether their home environment is not conducive for learning

| Response | F | \% |
| :--- | :---: | :---: |
| Strongly agree | 18 | 8.6 |
| Agree | 34 | 16.2 |
| Undecided | 15 | 7.1 |
| Disagree | 41 | 19.5 |
| Strongly disagree | 102 | 48.6 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0 . 0}$ |

Table 4.29 shows that $102(48.6 \%)$ of students strongly disagreed that their home environment is not conducive for learning, $41(19.5 \%)$ of students disagreed, $34(16.2 \%)$ of students agreed with the statement while $18(8.6 \%)$ of students strongly agreed that their home environment is not conducive for learning.

Table 4.31 shows principals' responses on whether there was drop in enrollment in cases where there were no family meals.

Table 4.31 Principals responses on whether there was drop in enrollment in cases where there were no family meals

| Response | F | \% |
| :--- | :---: | :---: |
| Yes | 6 | 85.7 |
| No | 1 | 14.3 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

As shown in the table, majority $6(85.7 \%)$ of principals indicated that there was drop in enrollment in cases where there was no family meals while a significant number $1(14.3 \%)$ of principals indicated that there was there was no drop in enrollment in cases where there are no family meals. The principals further indicated that students drop out of school or become chronic absentees due to lack of family meals and that drop out associated with food shortage were temporary and minimal. The findings are in line with Glewwev and Nanaan (2004) who 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.

The study further sought from the principals whether food shortage in decreasing access to education. The data is presented in Table 4.32.

Table 4.32 Principals rate on the food shortage in decreasing access to education

| Response | F | \% |
| :--- | :---: | :---: |
| To a great extent | 4 | 57.1 |
| To a less extent | 3 | 42.9 |
| Total | $\mathbf{7}$ | $\mathbf{1 0 0 . 0}$ |

Majority $4(57.1 \%)$ of principals indicated that food shortage was decreasing the access to education to a great extent while 3(42.9\%) of principals indicated to a less extent. Asked on the effects of home environment factors to students' access to education, the principals responded as presented in Table 4.33.

Table 4.33 Principals responses on the effects of home environment factors to students' access to education

| Statement | Strongly |  | Agree |  | Disagree | Strongly |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | agree |  |  |  |  | Disagree |  |  |
|  | F | $\%$ | F | $\%$ | F | $\%$ | F | $\%$ |
| Students are not able to access school | 4 | 57.1 | 2 | 28.6 | 1 | 14.3 | 0 | 0.0 |
| due to lack of school needs |  |  |  |  |  |  |  |  |
| Lack of food in the family contribute to | 5 | 71.4 | 1 | 14.3 | 1 | 14.3 | 0 | 0.0 |
| low access to education |  |  |  |  |  |  |  |  |
| Parents of this area are generally poor | 5 | 71.4 | 1 | 14.3 | 1 | 14.3 | 0 | 0.0 |
| Poverty at home is a factor to low <br> education access | 3 | 42.9 | 3 | 42.9 | 1 | 14.3 | 0 | 0.0 |
| Students have dropped out of school due <br> to poverty | 1 | 14.3 | 4 | 57.1 | 2 | 28.6 | 0 | 0.0 |

Table 4.33 shows that majority $4(57.1 \%)$ of principals strongly agreed that students were not able to access school due to lack of school needs, the same number of principals agreed that students had dropped out of school due to poverty. Data further shows that majority $5(71.4 \%)$ of principals strongly agreed that lack of food in the family contributed to low access to education and that parents of the area were generally poor.

These findings are in line 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. They are also in line with Huho and Mugalavai (2010) who 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.

### 4.7 Students' involvement in household economic activities and access to education

The researcher further sought to establish students' involvement in household economic activities and access to education. Data is presented in the following section. The students were asked to indicate whether involvement in household economic activities affected their access to education. The findings are presented in Table 4.34.

Table 4.34 Students responses on their involvement in household economic activities

| Statement | Strongly agree |  | Agree |  | Disagree |  | Strongly <br> Disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | F | \% | F | \% | F | \% | F | \% |
| I am forced to engage in economic | 10 | 4.8 | 12 | 5.7 | 35 | 16.7 | 153 | 72.9 |
| activities to provide for the family |  |  |  |  |  |  |  |  |
| Many students in this school have | 26 | 12.4 | 31 | 14.8 | 70 | 33.3 | 83 | 39.5 |
| dropped out of school to look for |  |  |  |  |  |  |  |  |
| jobs to sustain the family |  |  |  |  |  |  |  |  |

Majority $153(72.9 \%$ ) of students strongly disagreed that they were forced to engage in economic activities to provide for the family while $83(39.5 \%)$ of students strongly disagreed that many students in the school had dropped out of school to look for jobs to sustain the family. Table 4.35 tabulates principals and teachers responses on whether students in the school assist their parents in their economic activities.

Table 4.35 Principals and teachers responses on whether students in the school assist their parents in their economic activities

| Respondents | Yes |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | $\%$ | F | $\%$ |
| Principals | 6 | 85.7 | 1 | 14.3 |
| Teachers | 79 | 92.9 | 6 | 7.1 |

Majority $6(85.7 \%)$ of principals and majority $79(92.9 \%)$ of teachers indicated that students in the school assist their parents in their economic activities. This implies that education cycle was likely to be broken when students are engaged in economic activities. Asked to indicate whether there were cases where pupils were absent from school to assist their parents in their jobs, they responded as Table 4.36

Table 4.36 Principals and Teachers responses on whether there were cases where pupils were absent from school to assist their parents in their jobs

| Respondents | Yes |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | F | $\%$ | F | $\%$ |
| Principals | 5 | 71.4 | 2 | 28.6 |
| Teachers | 39 | 45.9 | 46 | 54.1 |

Majority 5(71.4\%) of principals indicated that here were where pupils were absent from school to assist their parents in their jobs while majority 46 (54.1\%) of teachers indicated that there no cases where pupils were absent from school to assist their parents in their jobs. Findings from principals and teachers further indicated that some parents engage their children in picking miraa and students were engaged in agriculture based family economic activities. It was also found out that pupils accompanied their parents to look for casual jobs to get money to cater for family needs and that some students took.

Table 4.37 tabulates principals and teachers responses on whether students were involved in child labour.

Table 4.37 Principals and teachers responses on whether students are involved in child labour

| Respondents | Strongly agree |  | Agree |  | Strongly disagree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | \% | F | \% | F | \% |
| Principals | 1 | 14.3 | 5 | 71.4 | 1 | 14.3 |
| Teachers | 9 | 10.6 | 52 | 61.2 | 24 | 28.2 |

Majority 5(71.4\%) of principals and majority 52(61.2\%) of teachers agreed that students were involved in child labour.

Asked to indicate whether students' involvement in household economic activities affected their studies, they responded as Table 4.38.

Table 4.38 Principals and teachers responses on whether students' involvement in household economic activities affects their studies

| Respondents | Strongly | Agree |  | Strongly |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | agree |  |  | disagree |  |  |
|  | F | $\%$ | F | $\%$ | F | $\%$ |
| Principals | 2 | 28.6 | 4 | 57.1 | 1 | 14.3 |
| Teachers | 17 | 20.0 | 49 | 57.6 | 19 | 22.4 |

Table 4.38 shows that majority $5(57.1 \%)$ of principals and majority $49(57.6 \%)$ of teachers agreed that students' involvement in household economic activities affected their studies. This implies that there was possibility of drop out as for those children who do
happen to get enrolled most had to drop out of primary schooling so as to accompany their parents in search of money.

The above findings agree with other authors that students' involvement in household economic activities affect their access to education. For example they are in line with Amma (2000) who found that communities, the nature of households' economy is an explanation for why some children need to work hence affecting their education. The findings are also in line with Tungesvik (2000) who found that 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. Chimombo (2005) also found that the necessity for children to engage in tasks that support household survival limits school participation. For instance girls are more likely than boys to be pulled out of school to go and fetch water or firewood or even take care of their siblings where the mother figure is not available.

## CHAPTER FIVE

## SUMMARY OF THE STUDY, 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

The purpose of the study was to investigate home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya. The study was guided by four research objectives. Objective one sought to establish the extent to which parental level of education affects access to education in public secondary schools in drought stricken, objective two sought to establish the influence of household size on student access to education in public secondary schools in drought stricken, objective three sought to assess the extent to which food security factors affects students access to education in drought stricken while research objective four sought to assess the extent to which students' involvement in household economic activities affects their access to education in drought stricken Siakago Division, Mbeere District, Embu County. The study adopted descriptive survey design. The target population comprised of all the 21 public secondary schools in Siakago division. The schools had a total number of 281 teachers and 1680 form three students.

Findings on the effects of parental level of education to access to education revealed that parents level of education was a factor that affected low access to education in the school
as indicated by majority $6(85.7 \%)$ of principals and majority $47(55.3 \%)$ of teachers. This agreed with Esewo (1983) who indicated that the parental education can positively and negatively influence a child's access to school. Majority $4(57.1 \%)$ of principals and majority $59(69.4 \%$ ) of teachers indicated that drought was a factor to low access to education in the area. This shows that social background of the family influenced a child's access to school. Findings further shows that majority $4(57.1 \%)$ of principals agreed that access to education was highly affected by the level of education of parents and that parental level of education was a factor in students access to education. Majority $6(85.7 \%)$ of principals strongly agreed that parents level of education coupled with drought affect students access to education and that students from well educated parents were likely to complete educational cycle. This implies that was a strong relationship between parents' level of education and their children access to school. The study further revealed that students from well educated parents were likely to complete educational cycle as indicated by majority $49(57.6 \%)$ of teachers. Majority 138(65.7\%) of students strongly disagreed that lack of education of their parents made them not bother on their education. Majority 190(90.5\%) of students indicated that their parents encouraged them to attend school. It was further indicated that children whose parents had higher education had better access to quality schools, and the same parents shaped the tastes and expectations of their children.

Findings on the influence of household size and access to education, the study found out that household size was a factor affecting students' access to education in their school as indicated by majority $5(71.4 \%)$ of principals and majority $43(50.6 \%)$ of teachers. Majority 5(71.4\%) of principals agreed that majority of students who were not in school
were those from large families and that parents of large households were not able to provide for their children in school and that large families can be blamed for low access to education. Majority $45(52.9 \%$ ) of teachers agreed that lack of food in the family contributed to low access to education and that students were not able to access school due to lack of school needs. This implies that the household size had a strong relationship with level of education of the parents.

Findings on the influence of food security factors and students access to education, the study found out that there were students who had not accessed school due to food shortages in the family as indicated by majority $6(85.7 \%)$ of principals. Majority $5(71.4 \%)$ of principals and majority $48(56.5 \%)$ of teachers indicated that food shortage decreased access to education to a less extent. Majority $6(85.7 \%)$ of principals indicated that there was drop in enrollment in cases where there was no family meals. Majority $4(57.1 \%)$ of principals indicated that food shortage was decreasing the access to education to a great extent. Findings further shows that lack of food in the family contributed to low access to education and that parents of the area were generally poor as indicated by majority $5(71.4 \%)$ of principals.

Findings on the influence of students' involvement in household economic activities on access to education, findings revealed that students in the school assisted their parents in their economic activities as indicated by majority $6(85.7 \%$ ) of principals and majority $79(92.9 \%)$ of teachers which implies that education cycle was likely to be broken when students were engaged in economic activities. Majority 5(71.4\%) of principals indicated that there were cases where pupils were absent from school to assist their parents in their jobs. It was also found out that pupils accompanied their parents to look for casual jobs to
get money to cater for family needs and that some students took. Majority $5(71.4 \%)$ of principals and majority $52(61.2 \%)$ of teachers agreed that students were involved in child labour. Data further shows that there was possibility of drop out as for those children who do happen to get enrolled most had to drop out of primary schooling so as to accompany their parents in search of money.

### 5.3 Conclusions

Based on the study findings, the study concluded parents level of education was a factor to low access to education. Drought was a factor to low access to education in the area. This shows that social background of the family influenced a child's access to school. It was further concluded that access to education was highly affected by the level of education of parents and that parental level of education was a factor in students' access to education. The study further concluded that parents' level of education coupled with drought affect students' access to education and that students from well educated parents were likely to complete educational cycle. Study concluded that students from well educated parents were likely to complete educational cycle. It was further concluded that children whose parents had higher education had better access to quality schools, and these same parents shaped the tastes and expectations of their children.

The study concluded that household size was a factor affecting students' access to education in their school students who were not in school are those from large families, parents of large households were not able to provide for their children in school and that large families can be blamed for low access to education. Lack of food in the family
contributed to low access to education and that students were not able to access school due to lack of school needs.

On the influence of food security factors and students access to education, the study concluded that there were students who had not accessed school due to food shortages in the family. Food shortage decreased access to education to a less extent. The study further concluded that lack of food in the family contributed to low access to education and that parents of the area were generally poor. On the influence of students' involvement in household economic activities on access to education, the study concluded that students in the school assisted their parents in their economic activities hence the education cycle was likely to be broken when students are engaged in economic activities. It was also concluded out that pupils accompanied their parents to look for casual jobs to get money to cater for family needs and that some students took.

### 5.4 Recommendations

Based on the findings and conclusion made above, the study makes the following recommendations:
i. There is need of all the stakeholders in education, to sensitize the community and the parents on the importance of education so that they can encourage their children to attend school.
ii. There is need to empower the local community economically so that they are able to support all children in the family to access education.
iii. The county government, the local NGOs should provide food to the community during drought so that students do not miss out school due to lack of food.
iv. The national and the county governments to establish possible measures that could be adopted in an effort to increase access to education in drought stricken areas.

### 5.5 Suggestions for further studies

The following areas were suggested for further study
i. Since the study was carried out in one administrative County, there is need to have a similar study in a larger area and compare the results.
ii. A study on other factors that affect students access to education should be carried out.
iii. A study on the influence of school feeding programme and its influence on access to education of students in drought stricken area should be carried out.

## REFERENCES

Adger, W. N.,(2004). New indicators of vulnerability and adaptive capacity. Tyndall Centre for Climate Change Research, Norwich, UK.

Ahmed, A.V. (2004). Impact of Feeding Children in School. Evidence from Bangladesh. International Food Policy Research Institute. Washington D.C. USA.

Alwang, J., P.B. Siegel and L. Jorgensen (2001) Vulnerability: a view from different disciplines. Social Protection Discussion Paper SP0115. Washington, D.C.: World Bank.

Amma, H, Baghdellah, J, Kiondo, E, Madhi, M, Mwandayi, E; and Soko, P (2000), The Nature and Extent of Child Labour in Tanzania: A Baseline Study, ILO-IPEC, March Baker, R (with Hinton, R and Crawford, S) (2001) The Sexual Exploitation of Working Children: Guidelines for Action to Eliminate the Worst Forms of Child Labour. London: DFID Social Development

Blaikie, P., T. Cannon, I. Davis and B. Wishner (1994) At risk: natural hazards, people's vulnerability and disasters. London: Routledge Publishers.

Blaikie, P., Cannon T., I. Davis, \& Wisner. B.. (2004). At risk: natural hazards, people's vulnerability, and disasters. Routledge, London, UK.

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.

Borg, W.R. \& Gall, M.D. (1989). Educational Research: An introduction. $5^{\text {th }}$ Edition, New York: Longman

Brooks, N., W.N. Adger and P.M. Kelly (2005) The determinants of vulnerability and adaptive capacity at th 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.

Campbell, D.J. (2009) 'Response to Drought among Farmers and Herders in Southern Kajiado District, Kenya: A Comparison of 1972-1976 and 1994-1996'. Human Ecology. 27(3). pp. 377-416.

Christiaensen, L.J., and K. Subbarao (2005) Towards an understanding of household vulnerability in rural Kenya. Journal of African Economies 14 (2005): 520-58.

Diffenbaugh, N. S., J. S. Pal, R. J. Trapp, and F. Giorgi. 2005. Fine-scale processes regulate the response of extreme events to global climate change. Proceedings of the National Academy of Sciences 102:15774-15778.
http://dx.doi.org/10.1073/pnas. 0506042102
Friendman, S.A \& Dottridge, N.(2003) Considering Girls Invisible Labour in Despite of New ILO convention targeting the intolerable forms of child labour.

Glewwe, P. and Nanaan, J. (2004). An economic Analysis of Delayed Primary School Enrolment and Childhood Nutrition in Ghana. LSMS Work Paper Work Book; DC.

Huho JM, Mugalavai EM (2010). The Effects of Droughts on Food Security in Kenya. The International Journal of Climate Change: Impacts Resp. 2(2):61-72.

Hoddinott, J. (2006). Shocks and their consequences across and within households in rural Zimbabwe. Journal of Development Studies 42:301-321.
http://dx.doi.org/10.1080/00220380500405501
Jodha, N.S. (2008) Effectiveness of farmers' adjustment to risk. Economic and Political Weekly 13 (25): A38-A48.

Kamanou, G., and J. Morduch (2002) Measuring vulnerability to poverty. Discussion Paper 2002/58. Helsinki: World Institute for Development Economics Research (WIDER), United Nations University.

Kombo, D. K. and Tromp, L.A. (2009). Proposal and Thesis Writing. Nairobi: Paulines Publications Africa

Mugenda, O. \& Mugenda, A. (2003). Research Methods. Quantitative and Qualitative Approaches. Nairobi, Act Press.

Mugenda, O. M. \& Mugenda, A. G. (2003). Research Methods: quantitative \& qualitative approaches. Nairobi: ACTS press

Njeru, E. and Orodho, J. A. (2003). Access and Participation in Secondary Education in Kenya: Emerging Issues and Policy Implications. IPAR Discussion Paper Series No.037/2003. nairobi:IPAR.

Omaraka (2001) the effect of Gender, Socio-economic status and school location http/www.fundartticles.com/p/articles retrieve on $26^{\text {th }}$ August 2012.

Oreopoulos, P.( 2006). Estimating average and local average treatment effects of education when compulsory schooling laws really matter. American Economic Review 96:152-175. http://dx.doi.org/10.1257/000282806776157641

Orodho, J. A. (2002). Techniques of Writing Research Proposals and ReportNairobi Reata Printers.

Rathore, J.S. (2008) Drought and household coping strategies: a case of Rajasthan. Indian Journal of Agricultural Economics 59 (4): 689-708.

Schiefelbin \& Wolff (1992). Improving the Quality of Education in Latin America and the Carribean towards $21{ }^{\text {st }}$ Century.

Shivakumar, S., and E. Kerbart (2009) Drought, sustenance and livelihoods: 'Akal' survey in Rajasthan. Economic and Political Weekly 39 (3): 285-94.

Solomon, S., D. (2007). Climate change 2007: the physical science basis: contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, Massachusetts, USA. [online] URL: http://www. ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_ report_the_physical_science_basis.htm

Tungesvik, R (2000) Education Child Labour-an initial mapping of the field, LINS: Oslo College/Hogskolen i Oslo

Wiersma, W. (1986): Research Methods in Education: An introduction. $4^{\text {th }}$ Edition Massachusetts: Allyn \& Balon

World Bank (2001) World Development report 2000/2001: Attacking poverty. Washington, D.C.

World Bank (2005) Ethiopia risk and vulnerability assessment. Report No. 26275-ET. Human Development Group III, Africa Region. Washington, D.C.

World Bank (2008) World Development Indicators Database. Washington, D.C., http://devdata.worldbank.org; accessed May 2008.

World Food Program (2001 a). Global School Feeding Campaign into School, out of Hunger. WFP Public Affairs. Rome, Italy.

World Food Program (2001 b). Operational Contact between the Government of Kenya and the Kenya Country Program. Nairobi, Kenya.

## APPENDICES

## APPENDIX I: LETTER OF INTRODUCTION

University of Nairobi,
Department of Education,
Administration and Planning,
P.O Box 92, KIKUYU.

The Principal
$\qquad$ Secondary school
Dear Sir/Madam

## RE: HOME BASED FACTORS INFLUENCING ACCESS TO EDUCATION IN PUBLIC SECONDARY SCHOOLS IN DROUGHT STRICKEN SIAKAGO DIVISION MBEERE DISTRICT EMBU COUNTY, KENYA.

I am a degree of Master student at the University of Nairobi, undertaking a research project in emergencies studies. Attached is a questionnaire designed, so that you may give your views towards the home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya. Please spend some time and respond to all the questions Please note that your identity will be treated as confidential and will only be used for the purpose of the study. Do not therefore, write your name anywhere on the questionnaire. Thank you for your co-operation.

Yours faithfully, Njeri Emma Kienyu

## APPENDIX II

## PRINCIPALS' QUESTIONNAIRE

This questionnaire is designed to gather information on the home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya. You are kindly requested to tick $(\sqrt{ })$ the appropriate response or respond as indicated. Do not put your name or any other form of identification. Your identity will be confidential and the information you provide will only be used for the purpose of this study. Please respond to all items.

## PART A: Demographic information

Please tick $(\checkmark)$ to indicate your answer

1. What is your gender: Male [ ] Female [ ]
2. What is your age? Below 25 years[ ] 26 - 30 years $31-35$ years [ ] 36-40 Years [ ] Above 41 years [ ]
3. What is the level of your profession?

Masters [ ] B.Ed [ ] SI/SII/ [ BA/BSC with PGDE [ ]
4. How long have you been a principal in this school?

Below 5 years [ ] 6-10 years [ ] 11-15 years
[ ] More than 15 years [ ]

PART B Parental level of education and access to education
5. How do you rate the education of students in your school?

High [ ] Low [ ] Moderate [ ]
6. Do you consider level of education as a factor to low access to education in your school?

Yes [ ] No [ ]
7. Do you rate drought as a factor to low access to education in this area?

Yes [ ] No [ ]
8. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | Access to education is highly affected by the level <br> of education of parents |  |  |  |  |  |
| 10 | Low educated parents do not encourage their <br> children to school |  |  |  |  |  |
| 11 | Parental level of education is a factor in students <br> access to education |  |  |  |  |  |
| 13 | Parental level of education coupled with drought |  |  |  |  |  |
| affect students access to education |  |  |  |  |  |  |
| 14 | Students from well educated parents are likely to <br> complete educational cycle |  |  |  |  |  |

## PART C Household size and access to education

15. Do you consider household size as a factor affecting students' access to education in your school?

Yes [ ] No [ ]
16. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 17 | Students from large households have low access to <br> education |  |  |  |  |  |
| 18 | Majority of students who are not in school are those from <br> large families |  |  |  |  |  |
| 19 | Parents of large households are not able to provide for <br> their children in school |  |  |  |  |  |
| 20 | Large families can be blamed for low access to education |  |  |  |  |  |
| 21 | Large households lead to inequalities to educational |  |  |  |  |  |
|  | access |  |  |  |  |  |

## PART D Home environment factors and students access to education

22. Are there students who have not accessed school due to food shortages in the family?

Yes [ ] No [ ]
23. Do you know any pupils who have dropped out of school due to shortage of food in their families? Yes [ ] No [ ]
24. How would you rate the food shortage in decreasing access to education?

To a great extent [ ] To a less extent [ ]
To no extent at all [ ]
25. Are there drop in enrollment in cases where there are no family meals?

Yes [ ] No [ ]
Please explain your answer
26. How would you rate the food shortage in decreasing access to education?

| To a great extent | $[$ | $]$ | To a less extent |
| :--- | :--- | :--- | :--- |
| To no extent at all | $[$ | $]$ |  |

27. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 28 | Lack of food in the family contribute to low access <br> to education |  |  |  |  |  |
| 29 | Students are not able to access school due to lack of <br> school needs |  |  |  |  |  |
| 30 | Parents of this area are generally poor |  |  |  |  |  |
| 31 | Poverty at home is a factor to low education access |  |  |  |  |  |
| 31 | Students have dropped out of school due to poverty |  |  |  |  |  |

## PART E Students' involvement in household economic activities and access to

 education32. Do students in your school assist their parents in their economic activities?
Yes
[
]
No
[ ]
33. a)Do you have cases where pupils are absent from school to assist their parents in their jobs?
Yes
[
]
No
[ ]
b) Explain your answer
34. Students are involved in child labour?

| Strongly agree | $[$ | ] | Agree [ ] | Disagree [ ] |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Strongly disagree | $[$ | $]$ | $[$ | $]$ |  |

35. Students' involvement in household economic activities affect their studies

| Strongly agree | $[$ | ] | Agree [ ] | Disagree [ ] |
| :--- | :--- | :--- | :--- | :--- |
| Strongly disagree | $[$ | $]$ | $[$ | $]$ |

## APPENDIX III

## TEACHERS QUESTIONNAIRE

This questionnaire is designed to gather information on the home based factors that affect pupils' access to education in drought prone areas of Siakago division Mbeere district, Embu county Kenya. You are kindly requested to tick $(\sqrt{ })$ the appropriate response or respond as indicated. Do not put your name or any other form of identification. Your identity will be confidential and the information you provide will only be used for the purpose of this study. Please respond to all items.

## PART A: Demographic information

Please tick $(\checkmark)$ to indicate your answer

1. What is your gender: Male [ ] Female [ ]
2. What is your age? Below 25 years[ ] $26-30$ years $31-35$ years [ ] 36-40 Years [ ] Above 41 years [ ]
3. What is the level of your profession?

4. How long have you been a teacher in this school?

Below 5 years [ ] 6-10 years [ ] $11-15$ years
[ ] More than 15 years [ ]

## PART B Parental level of education and access to education

5. How do you rate the education of students in your school?

High [ ] Low [ ] Moderate [ ]
6. Do you consider level of education as a factor to low access to education in your class?

Yes [ ] No [ ]
7. Do you rate drought as a factor to low access to education in this area?

Yes [ ] No [ ]
8. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | Access to education is highly affected by the level <br> of education of parents |  |  |  |  |  |
| 10 | Low educated parents do not encourage their <br> children to school |  |  |  |  |  |
| 11 | Parental level of education is a factor in students <br> access to education |  |  |  |  |  |
| 12 | Parental level of education coupled with drought |  |  |  |  |  |
| affect students access to education |  |  |  |  |  |  |
| 13 | Students from well educated parents are likely to |  |  |  |  |  |
|  | complete educational cycle |  |  |  |  |  |

## PART C Household size and access to education

13. Do you consider household size as a factor affecting students access to education in your class?

$$
\text { Yes }\left[\begin{array}{lll}
{[ } & \text { No } & {[ }
\end{array}\right]
$$

15. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 16 | Students from large households have low access to <br> education |  |  |  |  |  |
| 17 | Majority of students who are not in school are those from <br> large families |  |  |  |  |  |
| 18 | Parents of large households are not able to provide for <br> their children in school |  |  |  |  |  |
| 19 | Large families can be blamed for low access to education |  |  |  |  |  |
| 20 | Large households lead to inequalities to educational |  |  |  |  |  |
|  | access |  |  |  |  |  |

## PART D Food security factors and students access to education

21. Are there students who have not accessed school due to food shortages in the family?
Yes [ ] No [ ]
22. Do you know any pupils who have dropped out of school due to shortage of food in their families?

Yes [ ] No [ ]
23 How would you rate the food shortage in decreasing access to education?

To a great extent [ ] To a less extent [ ]

To no extent at all [ ]
24 Are there drop in enrollment in cases where there are no family meals?
Yes [ ] No [ ]
Please explain your answer
25. How would you rate the food shortage in decreasing access to education?

To a great extent [ ] To a less extent [ ]
To no extent at all [ ]
26. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 27 | Lack of food in the family contribute to low access <br> to education |  |  |  |  |  |
| 28 | Students are not able to access school due to lack of <br> school needs |  |  |  |  |  |
| 29 | Parents of this are generally poor |  |  |  |  |  |
| 30 | Poverty at home is a factor to low education access |  |  |  |  |  |
| 31 | Students have dropped out of school due to poverty |  |  |  |  |  |

## PART E Students' involvement in household economic activities and access to

 education32. Do students in your school assist their parents in their economic activities?
Yes
[
]
No
[ ]

33 a)Do you have cases where pupils are absent from school to assist their parents in their jobs?

Yes [ ] No [ ]
b)Explain your answer
34. Students are involved in child labour?

| Strongly agree | $[$ | ] | Agree [ ] | Disagree [ ] |
| :--- | :--- | :--- | :--- | :--- |
| Strongly disagree | $[$ | $]$ | $[$ | $]$ |

36 Students' involvement in household economic activities affect their studies

| Strongly agree | $[$ | ] | Agree [ ] | Disagree [ ] |
| :--- | :--- | :--- | :--- | :--- |
| Strongly disagree | $[$ | $]$ | $[$ | $]$ |

## APPENDIX IV

## STUDENTS' QUESTIONNAIRE

This questionnaire is designed to gather information on the home based factors that affect pupils' access to education in drought prone areas of Siakago division Mbeere district, Embu county Kenya. You are kindly requested to tick $(\sqrt{ })$ the appropriate response or respond as indicated. Do not put your name or any other form of identification. Your identity will be confidential and the information you provide will only be used for the purpose of this study. Please respond to all items.

## Home based factors affecting students' access to education

Please tick $(\sqrt{ })$ to indicate your answer

1. What is your gender: Male [ ] Female [ ]
2. What is your age? Below 15 years[ ] 16-20 years[ ]
3. Indicate the level of education of the your parents/guardians

| Parent | University <br> /college | Secondary | Primary | Never been to |
| :--- | :--- | :--- | :--- | :--- |
| school |  |  |  |  |

4. Do your parents encourage you to attend school?

Yes [ ] No [ ] sometimes [ ]
5. Do your parents encourage you to reach their level of education?

Yes [ ] No [ ] sometimes [ ]
6. Are your parents willing to provide for your school needs?

Yes [ ] No [ ] sometimes [ ]
7. In a scale of 1 to 5 where 5 is strongly agree and 1 is strongly disagree, indicate the extent to which you agree or disagree with the following statements

Key 5 - Strongly agree; 4 Agree; 3 = Undecided; 2 Disagree; 1 Strongly disagree

| SN | Statement | $\mathbf{5}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8 | My parents level of education is low |  |  |  |  |  |
| on my education |  |  |  |  |  |  |
| 9 | Lack of education of my parents make them not bother |  |  |  |  |  |
| 10 | Parental level of education is a factor in my access to <br> education |  |  |  |  |  |
| 11 | My home environment is not conducive for learning |  |  |  |  |  |
| 12 | My parents do not afford school for all my siblings |  |  |  |  |  |
| 13 | Poverty at home hinders my education |  |  |  |  |  |
| 14 | My large household is a hindrance to my education |  |  |  |  |  |
| 15 | Lack of food in my family affects my schooling |  |  |  |  |  |
| 16 | I am forced to engage in economic activities to |  |  |  |  |  |
| 17 | Many students in this school have dropped out of |  |  |  |  |  |
|  | school to look for jobs to sustain the family |  |  |  |  |  |

## APPENDIX V

## RESEARCH PERMIT

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## APPENDIX VI

## RESEARCH AUTHORIZATION LETTER



## NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

| Telephone: $+254-20-2213471$, | 9th Floor, Utalii House |
| :--- | :--- |
| $2241349,310571,2219420$ | Uhuru Highway |
| Fax: $+254-20-318245,318249$ | P.O. Box 30623-00100 |
| Email: secretary@nacosti.go.ke | NAIROBI-KENYA |
| Website: www.nacosti.go.ke |  |
| When replying please quote |  |
| Ref: No. | Date: |
|  | $\mathbf{1 0}^{\text {th }}$ June, 2014 |

NACOSTI/P/14/4177/1949

Emma Njeri Kienyu
University of Nairobi
P.O. Box 30197-00100

## NAIROBI.

## RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Home based factors influencing access to education in public secondary schools in drought stricken Siakago Division Mbeere District Embu County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Embu County for a period ending $31^{\text {st }}$ August, 2014.

You are advised to report to the County Commissioner and the County Director of Education, Embu 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.
Na woern
DR. M. K. RUGUTT, PhD, HSC.
Ag. SECRETARY/CEO
Copy to:

The County Commissioner
The County Director of Education
Embu County.


[^0]:    National Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovati ational Commission ior Science, Technology and Innovation National Commission for Sclence, lechnology and Innovation National Commission for Science, Technology and Innovati隹
    
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