# AN EXPLORATION OF PARTICIPATION OF NOMADIC PASTORALISTS' CHILDREN IN NON-FORMAL EDUCATION: A CASE OF MOBILE SCHOOLING IN TURKANA COUNTY, KENYA

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# **DECLARATION**

This study is my original work and has not been presented to	for academic credit to any other
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# **DEDICATION**

This work is dedicated to my children Cindy Karimi, Caleb Ngugi and Collins Munene who have been my inspiration and always reminded me that I should complete my studies on time. It is also dedicated to my parents, Mr. & Mrs. Charles Ngugi, who kept reminding me to read to reach the level they were never able to attain and to my sister Beth Njeri Kamotho, who saw the value of education and supported me unconditionally.

#### **ABSTRACT**

This study focused on assessment of the participation of nomadic pastoralists in Non-Formal Education: A case of Turkana County. The study addressed this in line with the conditions in which the intervention has enhanced enrolments. In addition, it will establish ways the various social groups are encouraged to enrol. Also, it will focus on ways the various enrolled social groups are supported towards completion of studies. Finally, the study will investigate the challenges that hinder them from enrolling in mobile schools. Multiple case study design was used involving three mobile schools. Maximum variation sampling was adopted for the study. Purposive sampling was used to select the participants to the study. Teachers, learners and parents were the informants. The three teachers of the three mobile schools were interviewed. Seven Focus group Discussions (FGD) were conducted by this study. Three of them involved learners while four involved parents. Teachers were interviewed and focus group discussions were used to gather data from the learners and the parents. In addition, focus group discussion guide, interview guide, document analysis guide and Observation checklist were the instruments employed in this study. The study found out that despite the mobile school intervention, the level of particapation of nomadic pastoralists' children in education is still minimal. Obstacles that need to be addressed at policy and grass root levels include teaching capacity, food security and insecurity related issues in general. This study suggests the need to use multifaceted approach in education provision and a monitoring and evaluation system to support the programme on the ground. The study concludes that futher research is needed in policy implementation in context of culturally hostile environment.

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# LIST OF ABBREVIATIONS

**ABET** Alternative Basic Education programme

**ALRMP** Arid Lands Resource Management Project.

**ASALs** Arid and Semi-Arid Lands

**ECD** Early Childhood Education

**EFA** Education for All

**FGD** Focus Group Discussion

**GER** Gross Enrolment Rates

**KESSP** Kenya Education Sector Support Plan

**KNBS** Kenya National Bureau of Statistics

MGD Millennium Development Goal

MOEST Ministry of Education Science and Technology

**NER** Net Enrolment Rates

**NFE** Non Formal Education

NGO Non-Governmental Organization

**UBEP** Undugu Society Basic Education Program

UNESCO United Nations Educational, Scientific and cultural

Organisation

**UNICEF** United Nations Children's Fund

**UPE** Universal Primary Education

#### **CHAPTER ONE**

#### INTRODUCTION

# 1.1 Background of the Problem

Efforts to provide education to the unreached and the marginalised groups through Non-Formal Education (NFE) have made minimal achievements over the years. By the close of twentieth Century, millions of children globally were still unable to access education. According to United Nations Educational, Scientific and culture Organisations (UNESCO, 2000), globally, children from nomadic pastoralists' community living in Arid and Semi-Arid Areas (ASAL) were among the 113 million children who were yet to access primary education by year 2000. Although education is a critical human right component globally endorsed since the Universal Declaration of Human Rights in 1948 (UNDHR, 1948) and followed in various international conventions (UNESCO, 2000), majority of pastoralist communities are yet to access education, a factor which undermines the Education For All efforts (Dyer, 2001). Consequently, going by the current trends, research indicates that 56 million children will still be out of school by 2015 (Clemons & Vogt, 2004), thereby creating the need to address this service gap.

The surge to focus on Non Formal Education was necessitated by various challenges facing education provision through formal education system. Historical chronology of NFE indicates that as early as 1970s, formal education was experiencing a global crisis (Coombs, 1974). Despite many new nations in Africa after gaining independence at the time, emphasizing on education provision, accessing education to many remained a challenge. However, at the time, most new nations were focusing on education as a route for economic development and independence in many African countries. Nevertheless, the population of

those that could still not access education was increasing alarmingly. The rural remote and the vulnerable groups were either not being reached or were dropping out of school. Coupled with the rising number of unemployed graduates, many countries were troubled by the turn of events, especially for nations that had just gotten independence (Ekundayo, 2001; Ruto, 2004). The need for alternative mode of providing education was crystal clear. Consequently, NFE was widely acknowledged quite early, at both national and international levels as an appropriate approach to improve participation of those left out, unreached or drop outs of the formal education system. Mobile schools fall in this category of NFE after the failure of the formal system of education. This therefore necessitated the current study due to challenges of practical operation facing this service provision to these wandering pastoralists.

Although in several developing countries in Latin America and Asia (Venezuela, India, China, and the Philippines), alternative schools were already instituted (Ranaweera,1989), it was not until early in the 80s when non formal education became a unanimous concern for Africa. The first declaration was made in Harare in 1982 at the Fifth Ministers of Education of Africa Conferences (MINEDAF). This coincided with Breton Woods's structural adjustment programs, which led to governments' cuts in public spending and so they had fewer resources to invest in education (World Bank, 2001).

Despite extensive experimentation with mobile schools in Africa as indicated in Tahir (1991), reaching the nomadic pastoralists through formal education has remained an uphill task. Studies in Africa indicate that, since the first mobile schools were attempted in Nigeria, the model has remained almost non-existence in over two decades. This hass been attributed to difficulties in its implementation. In addition, Kratli (2000) cited examples in Algeria and Nigeria as instances to show that mobile schools have not performed as expected. This means that establishment of mobile schools does not automatically enhance access to education. The

Nomadic Education Project in Darfur State is an example to exemplify the difficulties of implementing the mobile schools model. In this project, where the schools were used to provide skills development in animal husbandry and basic education, it proved impossible to continue classes because the nomads dispersed during the wet season (Gore, Eissa, & Rahma, 1998). Hence, determining the conditions in which NFE education is delivered can have a significant effect to the success of this venture.

Inspite of the global scale of nomadic pastoralists being large, they belong to those in low economic bracket. In Africa alone, they are found in at least 20 African countries. However, the home of the largest proportion of nomadic pastoralists are housed in the Horn and East Africa region which includes Sudan, Ethiopia, Eritrea, Somalia, Kenya, Uganda and Tanzania (Carr-Hill, Eshete, Sedel, & Souza, 2005). Considering its vast population, it raises concern for education providers in terms of efforts to reach them which have persistently been faced with failure. Over 80% of Kenya is mainly ASAL, estimated to be a home to 20% of its total population, which translates to around 8.75 million and is predominantly occupied by nomadic pastoralists (Republic of Kenya, 2007). The region not only experiences harsh weather conditions, but also, posts the lowest development indicators and the highest prevalence of poverty (Republic of Kenya, 2006).

Despite the Government of Kenya's concerted efforts to combat the low literacy levels in ASAL areas, the most recent trends still reflect very low levels of enrolments. Whereas the national Net Enrolment Rates stood at 91.6% in 2007, the ASAL region posted 13.9% (UNESCO, 2010). On the other hand, the Graduation rates have always been below 50% over the years resulting in increased numbers of Out-Of-School (OOS) children (Kenya 1999b). Hence, pointing to the need for addressing the level of participation of the nomadic

pastoralist children by looking at the drop-out, enrolments and completion rates in mobile schools.

Notwithstanding the challenges related to the over-all access of mobile education as examined in the foregoing within the global and African context among the pastoralist communities, mobile schooling is an issue with limited assessment. Reducing high levels of illiteracy is a vital social development goal of governments around the world and is a key component for Education For All (EFA-1990) agenda (UNESCO, 1990) and also for vision 2030 (Government of Kenya, 2007). However, persistent low literacy levels in Kenya's ASAL areas raise the fundamental question: with the introduction of mobile schooling in Turkana County, to what extent has it influenced the level of participation of nomadic pastoralists' children in education?

The significance of NFE in enhancing access to education for the unreached through the formal system of education is invaluable. The Ministry of Education (M.o.E) established the NFE desk in 1994 to cater for what formal education could not (Gathenya, 2004). Under this NFE, the Nomadic pastoralists are among the targeted groups. Later, the M.O.E. made a draft NFE policy and its curriculum (Republic of Kenya, 1999a). Ruto (2004) however points out that in spite of all these efforts, the Ministry has not really institutionalized NFE and therefore most of them are operating outside the policy, haphazard and are ill equipped. They vary from the way they are run, quality of teaching, subject content, and assessment criteria depending on the service provider. Hence this prompted the need for this study.

In addition to meet the educational needs of the unreached nomadic pastoralists group, the Government of Kenya and the Ministry of Northern Kenya in partnership with United Nations Children's Fund (UNICEF) and other stakeholders have developed policy framework

for nomadic education in Kenya. This is through National Commission of Nomadic Education in Kenya (NACONEK). The policy recognises the need for multiple approaches in meeting the complex and challenging educational needs of the nomadic communities and the need for partnership in service provision (NACONEK, 2010). This study strived to establish this, with regards to mobile schools.

Likewise, the crucial role played by non-formal education as a vehicle for transformation and empowerment of individuals and society is also highlighted in Sessional Paper No. 1 of 2005 (Kenya, 2005a). Most recent articulation of the significance of NFE is in Sessional Paper No.10 of 2012 on Vision 2030 (Republic of Kenya, n.d.a). This continued recognition and subsequent mention in the government's policies indicate that it is the only solution to reach the marginalized and vulnerable groups in order to deal with historical, regional and gender disparities in Education provision.

With the plight of nomadic pastoralists being identified quite early in Kenya (Republic of Kenya, 1965), the government mainly focused on formal education. Therefore, many NFE programs were left in the hands of Non-Governmental Organizations (NGO). NFE initially had two dimensions: Adult literacy and vocational training for youths in slums and pockets of poverty. However, with the persistent failure of formal education to reach many children in education, the dimension changed to include children who were left out by the formal system of education.

The genesis of Non Formal Schools in Kenya was Undugu Society which provided Undugu Society Basic Education Program (UBEP). The program composed of literacy and vocational skills to the children and youths in slums and other low income families. It differed with adult literacy since it was a strictly planned and structured programme suitable for children and

youths (Ruto, 2004). Its focus on school-aged children gave rise to its classification as a Non-Formal School (Asiachi, 1986). Other organizations however, strived to provide non formal education among the children and youths living in slums and pockets of poverty, but none was able to strike the government's attention like UBEP. However, for nomadic pastoralists, several Non-Formal Schools have emerged. They include: Shepherd school (Lechekuti) in Samburu District, the Organisation for Survival of Laikipia Indigenous Maasai Group Initiatives (Osiligi) in Laikipia District, the Quran Schools (Duksi) in Wajir District and Marsabit run by the Catholic Diocese of Marsabit (Education Office, Catholic Diocese of Marsabit, 2004).

Conversely, providing education through non-formal schools does not automatically imply that the participation level of these communities' children has changed. The challenges for nomadic pastoralists are peculiar because they do not lead a sedentary lifestyle. The forms of NFE in Turkana are two throng: on one hand we have Mobile schools and on another is Alternative Basic Education programme (ABET). According to Kratli and Dyer (2009), ABET which was established in 2004 with a population of 880 children, had grown to 10 centres with 2,146 children by 2008. Mobile schools on the other hand have increased to 42 centres (Ministry of Education official, NFE desk, 2012).

In Kenya, like many African countries, various kinds of mobile schools have been tried out since the 1970s, with hardly any formal evaluation (Kratli& Dyer, 2009). Practically, the teachers are from the community and are therefore familiar with the environment and can also teach in the local dialect. The aims are usually to prepare children to join a formal school at a certain grade which varies from country to country. For Kenya, it is grade four whereas for Sudan it varies from four to six (ibid.). If going by the UNESCO (2010) report the levels of literacy are still low in the region, then the mobile school intervention is of much concern.

In most of the North Eastern Province where over 99% of the inhabitants subscribe to Islam, mobile schools are modelled on the Koranic schools (duqsi). In Turkana County, the schools are set up to serve village clusters (adakars) (UNESCO, 2010).

According to the Global Monitoring Report on Educational Marginalization in Northern Kenya, some schools have been in existence for over ten years, a period long enough for a distinct structure to evolve, yet a substantial number is still struggling. Furthermore, for some areas such as Tana River County, most of the mobile schools have already settled (UNESCO, 2010). Basically, the Schools are intended to reach out beyond the operational catchment area of conventional schools though practically they rarely move (Kenya, 2008a). In the same report by (Kenya, 2008a), it is observed that in a way, mobile schools are similar to the NFE program and therefore, try to fill a service gap. Therefore, this poses the question of whether the schools have really been able to meet the immediate educational needs of the Turkana community whose lifestyle is not sedentary.

Mobile school intervention has been experimented in many countries world-wide including Mauritius, Iran, Nigeria and Mongolia with minimal success except for Iran (Dyer, 2005). Kenya alone has about ninety mobile schools funded by the World Bank and Arid Lands Resource Management Project in ASAL areas scattered in ten districts which include: Turkana, Wajir, Marsabit, Tana, Samburu and Ijara among others (UNESCO, 2010). Some of them are however managed by church bodies and the Ministry of education through Free Primary Education policy. The schools use the non-formal curriculum and the language policy is the first language. The teachers are attached to the nomadic family or group of families. Children, who are too young, graze the animals and attend school by day and the older ones together with the adults, attend at night. The schools are supervised by County education boards.

This study was undertaken in Turkana where the schools are established in mobile clusters. Having the largest number of mobile schools despite the low levels of literacy in comparison to other ASAL areas creates interest in this location. The researcher therefore, examined the participation rates of nomadic pastoralists' children in education focusing on the conditions in which access to education is enhanced, how they are encouraged to stay on till graduation and the challenges faced and come up with suggestions on ways of countering these challenges.

#### 1.2 Problem Statement

Over the years, provision of education to nomadic pastoralists has remained a challenge worldwide to policy makers and education providers. This has led to nations turning to use of NFE to fill this service gap. In a study among the pastoralists Rabaries of Western India, Dyer (2008) indicates that many governments have put several interventions in place in attempts to promote literacy among the marginalized and vulnerable. Despite this great concern, coupled with substantial investments and rapidly growing national enrolment ratios at the national level, Woldab (2012) asserts that pastoral nomads are still underserved and disparities within countries still persist. Studies on the other hand indicate that, defective policy has affected nomadic education in Nigeria (Aderinoye, Ojokheta, & Olojede, 2007). In Kenya, Sifuna (2005) confirms that various attempts to include them have had little impact on increasing access and participation of nomadic pastoralists in formal education.

Although Kenya has long envisaged education as a means of facilitating the social inclusion of disadvantaged groups (Republic of Kenya, 1964) through various programs (Sifuna, 2005), Lanyasunya (2012) emphasized that no significant changes have been seen in terms of access to education. Despite the low enrolments among these groups, even the provision of Free Primary Education (FPE) in year 2003 seemed to have had no difference, with a drop-out rate of 25% per year (UNESCO, 2010). Studies carried out in Turkana confirm that obstacles to

efforts of enhancing participation and access to basic education, such as Free Primary Education (FPE) policy in 2003 are vast, leading to high drop-outs from schools (Migosi et al., 2012; Ng'asike, 2011). This indicates that enrolling to school is one thing and staying on to completion is another.

Using the 2008 census, the total percentage of those who ever attended school of the age 6+ in Turkana was 16.3 % while nationally was 76.8% (Republic of Kenya, 2008a). In spite of this, Turkana still recorded the highest drop- out rate of 18.2% nationally. Moreover, the dropout rate for girls in 2007 was19.9% which was the highest in the country (UNESCO, 2010). On the contrary, while the Gross Enrolment Rates in Rift Valley Province, where Turkana is located was 112.4% in 2008, Turkana had 46.7% (Republic of Kenya, 2008b) hence aggregate data may be misguiding.

Nonetheless, Kenya has been recognized as being among the countries in Africa that have begun to address policy practice and gaps through extensive nomadic education programs among other countries in Africa such as Nigeria and Ethiopia (Dyer, 2008). Mobile schools are one such program intended to provide education to the children of the Turkana nomadic pastoralists. However, merely offering this alternative education programs does not necessarily imply their participation in education. This is what is being witnessed in Turkana as indicated by the existing data. Therefore, there was need to explore the participation of nomadic pastoralist of Turkana County in education. Specifically, the study sought to answer four pertinent questions. To begin with, to establish the conditions that encourage the children of nomadic pastoralists in Turkana County to enrol in mobile schools; conditions that determine enrolment behaviour among different social groups; what motivates the various social groups to stay on through to graduation, and the obstacles that hinder them to access mobile schooling.

# 1.3 Purpose of the Study

The purpose of this qualitative study was to explore the extent to which mobile schooling has enhanced participation of nomadic pastoralists' children in education in Turkana County.

# 1.4 Objectives

The following were the objectives of this study:

- i. To establish the conditions through which mobile schools have enhanced enrolments.
- ii. To determine the conditions that have resulted in differences in enrolment behaviours in terms of social groups.
- iii. To assess the extent to which the social groups of enrolled students are supported to complete their studies.
- iv. To find out the challenges that hinder children to access mobile schools.
- v. To come up with suggestions on ways of improving access to mobile schools.

# 1.5 Research Questions

The study was guided by the following research questions.

- i. What are the conditions that have enhanced enrolments in mobile schools in Turkana County?
- ii. What conditions have resulted in differences in enrolment behaviour among social groups in mobile schools in Turkana County?
- iii. To what extent does the social group of enrolled students influence how they are supported to complete their studies in mobile schools in Turkana County?
- iv. What obstacles hinder children from accessing mobile schools in Turkana County?
- v. What are the suggestions on ways of improving access to mobile schools?

### 1.6 Significance of the Study

The findings of this study will be useful to the body of knowledge, at the policy level and to the targeted Turkana nomadic pastoralist community. To the body of knowledge, the study has provided a broader understanding of mobile schooling in the context of nomadic pastoralists. While most of the studies on non-formal education have dwelt on schools in slums and adult education, those in nomadic pastoralist communities have received inadequate attention. In addition, mobile schools were initially articulated in Development Plans documents in early 1970s, yet very little documentation has been done on them (Kratli & Dyer, 2009). Furthermore, despite the fact that mobile schooling was designed to cater for children in ASAL areas, which constitutes about 80% of Kenya's landmass (Kenya, 2007), it has received inadequate research attention, hence making this study paramount. To this end therefore, this study will document the extent to which mobile schools have enhanced participation of nomadic pastoralists in Education.

It will also help in establishing the extent to which implementation of mobile schools in Turkana County has affected the participation of marginalized nomadic pastoralists Turkana children in education. In addition, this study will filling knowledge gap due to the limited research that has been carried out in Turkana, Kenya in relation to the conditions that encourage nomadic pastoralists children to enrol in mobile schools; ways of enhancing these enrolments and the barriers that hinder the enhancement of educational participation in the community. On the other hand, to the Turkana community, the research will provide insights into the levels of inequalities that need to be addressed in the non-formal mobile education among the nomadic pastoralists.

It is also thought to be of use in theoretical contribution on the conditions necessary for policy implementation which is affecting access to basic education among the nomadic pastoralists of Turkana County, Kenya. At policy level, the findings are hoped to provide insight as references in any educational reforms related to provision of education for the marginalized nomadic pastoralists. While provision of education to them has been faced with challenges over the years, there was need for research oriented to the specific policy for a particular marginalized group due to their unique socio-economic and cultural environment.

On the other hand, the core mandate of nomadic pastoralist framework was to enhance access to education among the nomadic pastoralists (Kenya & UNICEF, n.d.d.). Consequently, this study is aimed at helping to inform the government's service delivery in terms of policy implementation so as to attain vision 2030 within knowledge based platforms. Although the policy's main objective was to enhance service provision, the policy is lacking proper implementation framework especially for the actors on the ground. Considering the complex and challenging educational needs of nomadic pastoralists' communities, using alternative approaches such as mobile schools, there is need to establish ways that would enable strengthen its implementation. It is also hoped to provide as a case for point of reference at international and educational conventions, whose initiative includes attaining universal primary Education by 2015. Further, it could be reference to other nations that may be experiencing similar setbacks in promoting education to such disadvantaged groups such as nomadic pastoralists who are unreached by the formal system of education. By so doing, this will ultimately help in scaling such a venture by localizing the programs and suggest solutions to the challenges of successful inclusion for such a community.

# 1.7 Scope and Delimitation of the Study

This study was undertaken in Turkana, one of the ASAL areas in Kenya which range from the larger part of North Eastern region and parts of Northern Rift Valley. Data from Turkana County Education office indicates that there are 61(according to the data gathered at Turkana County Education office) schools that are government owned scattered in the six divisions, however, this study focused on three selected mobile schools in Turkana west and Turkana Central only. This study focused on the government owned schools only. Although studies have shown that other factors (such as provision of feeding programme and free education) have enhanced nomadic pastoralist children's participate in education (El-Tayed, 1990; Ndagala, 1990; World Bank, 2003), the present study zeroed in on mobile schooling only. The study was on establishing the extent to which nomadic pastoralists' children participate in education through mobile schooling. The main focus of the study was on determining the conditions that have enhanced enrolments in mobile schools and how these have resulted in differences in enrolment behaviour among social groups; the extent to which the social groups of enrolled students are influenced to complete their studies in mobile and what obstacles hinder children from accessing education through mobile schools.

The study was in Turkana and that means that the results are specifically for Turkana County. Therefore, generalization of the results cannot be done, and if it has to, it should be done selectively and with caution. The selection of the schools was limited due to constraints in terms of time and money in relation to the vast geographical distance of one school to another in the face of poor infrastructure.

# 1.9 Assumptions of the Study

This study was based on the assumption that the learners who had been transited to the formal primary school reflect the mobile schools graduates. It is also assumed that they had been in those schools from the time the schools were established. The study was undertaken in a community that leads a nomadic lifestyle. This means that the length of time in school is shared with the time the community members are required to carry out their social roles.

# 1.10 Theoretical Framework of the Study

This study was guided by two theories: Human Capital Theory by Becker (1964) and Policy Implementation Theory by McDonnell and Elmore (1987). These two theories were complementing each other in as far as this study was concerned. The need for the government to aim at provision of education to its citizens is built on the premise of Human Capital Theory. This theory argues that education of citizens of a country enables them to participate in development activities through equipping them with skills necessary for building the Human Capital. Therefore, mobile school is one of the alternative modes of Non-formal education provision modes that are aimed at enhancing access to education of the marginalised Turkana nomadic pastoralist child as per Nomadic Education Policy (Kenya & UNICEF, n.d.d).

On the other hand, the Policy Implementation Policy asserts that for successful implementation of a policy, there is need to have the necessary instruments in place and in the right proportions thus leading to enhanced educational access and consequently boosting the social economic status that is essentially required for nomads. The two theories on which this study has been anchored have been discussed in the following section, including the weaknesses and strengths of each theory. To begin with, the Human Capital Theory (Becker, 1964) has been discussed as a basis on which the government of Kenya emphasizes the need for providing education to its citizens. The other theory that has been adopted for this study is Policy Implementation Theory (McDonnell & Elmore, 1987) which has outlined the components that are needed to enable effective policy outcomes.

# **1.10.1 Human Capital Theory**

Human Capital Theory was selected to inform this study. The theory originated from a branch of Labour Economics. Schultz (1963) is the economist who introduced the concept of education as an investment by analysing the return-on-investment which involved an analysis of the costs of education as an investment and the benefits. It is from this that Becker (1964) developed Human Capital Theory. Becker viewed human capital as a means of production just like land, fixed capital and labour. He argues that, an investment in human capital leads to increased output. It is generally believed that education produces value-added citizens in terms of skills relevant to the production process and helps promote the overall standard of living in society. The concept of human capital emphasizes the fact that the development of skills is an important factor in production activities. In addition, it can be argued that education is an investment where individuals and households invest in it, either directly or indirectly. The costing of education is however, estimated both in terms of money spent directly and in terms of opportunity cost. For pastoralists' children, they require education so that they can contribute to economic development. However, the opportunity cost foregone by the children who would be expected to contribute to socio-economic development of their community through labour, is the cost on part of the community. Since this group is not able to finance their education, the government and other market players pay for their education. By so doing, they are investing in education. It is expected that the participation level in education will improve. Conversely, by investing in them, the expected output will be improved human capital.

Psacharopolous and Woodhall (1997) suggest that education is highly instrumental for development since it increases income levels, improves child and maternal health care and slows down the spread of diseases. Consequently, increasing access to basic education leads

to economic growth and improved social services which are necessary for survival too. By 1960's, most countries were attaining their independence and the need for investment in human capital had great implications as reflected in most education and development theories. In Kenya, investment in human capital is seen as an exit from poverty and therefore is one of the areas of economic recovery and strategy areas identified by the government (Kenya, 2005b). Coupled with constrain of skilled labour, at the time of independence in 1963, the need to invest in education in order to achieve nation's development goals was paramount. Kenya, for instance, invested a great deal in education as it was seen as the key to economic development. As early as 1974, Kenya had already realized the importance of investing in basic education by providing free primary education then. This led to increased participation in education at primary school level in most parts of the country, except for the marginalized groups in ASAL areas. It is the human resource of a nation that determines its character and pace of social development (Kenya, 2007a). This notion seems to compel any government to invest in its human capital. However, with regional disparities in terms of access to education, the pace of national economic development will not only be slow, but also, unrealized especially among the nomadic pastoralists.

Valuing of pastoral economy by this community makes it impossible to provide formal schooling, hence challenging the government's priority of promoting access to education. Yet, it is not until the pastoralists participate fully in education that addresses their immediate needs, that economic development in these areas will be realized. Mobile schooling has therefore been put in place as a way of enhancing access to education and encouraging the children from these nomadic pastoralists community to stay on till completion. When they access education then they not only benefit with economic development but are also able to gain social benefits such as good health.

Having been established that human capital is the principle input to economic development, education is seen to be instrumental to this end (Republic of Kenya, 2007a). This theory, however, has raised a lot of criticism in regards to some countries. For instance, Ayara (2002), reports that education has not contributed to economic growth in Nigeria. Olaniyan and Okemakinde (2008) add that despite huge investments in education in Nigeria, there is very little economic growth promoting externalities of education. Nevertheless, in the same study, there is a contradiction when they affirm that a World Bank study (1993) indicates that education is a substantial useful variable for East Asian economic growth. This clearly indicates then that they in a way agree that education is linked to economic development.

In Kenya however, education is placed at an integral cog of economic development. The introduction of Free Secondary Education policy in Kenya was prioritized in the context that it increases economic growth, "since this economic growth is shown to have a positive correlation to years of school attainment" (Milligan, 2011). The theme of education for economic growth pervades this policy hence portraying education at this level as crucial for economic development. Furthermore, primary education level is heralded as a catalyst for economic development. The need to focus on mobile schools, which fall in this level of education, is critical for enhancement of economic development to the nomadic pastoralists.

A study on human capital externalities and private returns to education in Kenya, have asserted that primary education enhances productivity such that returns to education are high, with increase in level of education and vice versa (Kimenyi, Mwabu, & Manda, 2006). The existence of human capital externalities is also ignored in most cases, yet very fundamental. These externalities suggest that the education human capital of one person will have impact not only on the earnings of the individual, but also, on earnings of other individuals which by extension translates to a social benefit.

The theory also assumes that formal education is highly instrumental and necessary in the production capacity of a population (Olaniyan & Okemakinde, 2008), yet, other forms of education: non-formal and informal are known to contribute to human skills necessary for economic developments. This brings us to the question of the marginalized nomadic pastoralist communities who are excluded from education. Mobile schooling is a form of Non Formal education, implemented to provide education to these communities. This is because of both the private benefits and the externalities associated with primary education. It is well known that education means healthier family, healthy environment among other externalities. This explains then that the pastoralists will also benefit their economy if they participate in education.

Therefore, the central argument of this theory is that when education is accessed, it enhances development. Contrary to the perception, formal education has failed to reach the nomadic pastoralist Turkana child and hence has continued to register low enrolments due to their social economic lifestyle. However, mobile schooling as a non- formal kind of education was aimed at filling this service gap. Mobile schools are structured in such a way that those who complete the third grade are able to join formal school at class three. Therefore, they are part of Primary Education level which is held to have the highest returns to education as an investment. Consequently, mobile schools are a critical basis for Human capital development. In addition, since education Human Capital of one person has other externalities such that it translates to social benefits through the effect it has on other individuals by extension, then enhancing access to education of the nomadic pastoralist child in Turkana County is critical.

On the other hand, since the government has made attempts to provide education to the marginalized communities and support them by encouraging enrolments and funding the institutions, unless the marginalized Turkana are able to access education, then, they can't be

able to participate in development. Therefore, this study is aimed at establishing if mobile schooling has improved the level of participation in education among the nomadic pastoralist group of Turkana County.

# 1.10. 2. The weaknesses of Human Capital Theory

Considering that accumulation of knowledge and skills constitute the importance of human capital (Sleezer, Conti, Nolan, 2003), learning is seen as a core factor to increase human capital. However, the human capital theory exhibits a weakness in that it does not give the precise contribution of investment in human resources. It does not also explain how variations in the level of investment affect the level of output and growth rates and how the structure of human capital formation affects the social relations of production. Therefore, this study could not establish the exact contributions of mobile schooling to human capital. However, the study reckons the contribution of education to development of human capital and in effect to economic development, unlike when people do not get access to education at all.

The other shortcoming of Human Capital is the assertion that it independently contributes to individual development and national economic growth. According to Ashton & Green (1996), the link between human capital and economic performance should be considered within a social and political context to precisely measure the human capital. Moreover, though it emphasizes on the contribution of education as the means to empower human capital, it does not specify on the length of time needed to measure it. Therefore, this study may not be able to give a precise measure of this in reference to mobile schools. And as a limitation of the study, the mobile school by itself is not the only contributor to economic development. However, for the sake of this study, it was assumed to be the driving force towards provision of education through mobile schools.

# 1.10.3 Strengths of Human Capital Theory

Human Capital Theory asserts that the education systems work best for the development of individuals and nations, especially developing countries. Throughout the investment of human capital, an individual's acquired knowledge and skills can translate to certain goods and services (Romer, 1990). This translates to the belief that learning is the core factor to increase the human capital. Kenya acknowledges the critical role played by education in relation to economic development. This has made the government address the needs for those unreached and the marginalised groups through alternative modes of education such as mobile schools. This significant role played by educations advocated by this theory is paramount.

In addition, it recognized that accumulation of human capital through learning significantly influences many sectors. Studies indicate that at macro level, accumulation of one human capital on education largely affects the growth of an individual's wage, firms' productivity and national economy (Denison, 1962; Schultz, 1961). Therefore, the theory advocates for the need for policy makers to allocate significant resources to the expansion of education systems. In order to enhance human development in the general society, it is necessary to apply the theory of human capital to educational system. By such means, productivity is enhanced and sustained based on an increased and diversified labour force. Investing in mobile schools for the government means extra costs on education for the unreached nomadic groups. In effect according to the proponents of the theory, the expected future positive returns for this will outweigh the costs. Therefore, government of Kenya has embraced the provision of education to the nomadic Turkana pastoralists with the aim of empowering the Human Capital.

# 1.10.4. Policy Implementation Theory

This study also adopted McDonnell and Elmore (1987) theory of policy implementation. This theory stemmed from desire to find a "a more specific model of the determinants of implementation outcomes and critical policy effects, while retaining those variables entrenched in the political and organisational context that have produced pay-offs" (p.134). Their aim was to find ways of shaping policy outcomes so that when enacted, they have long-term policy effects. They came up with the notion of policy instruments or mechanisms that translates substantive policy goals into concrete actions. Although, the government of Kenya has made efforts to provide education to the Turkana nomadic pastoralists through mobile schools, its realization needs attention. The successful implementation of such a policy is therefore pivotal. Establishing their level of participation in education through the lenses of these policy instruments is critical and necessitates this study.

For there to be education provision among the excluded nomadic pastoralists, a policy needed to be in place that can cater for their needs, in this case mobile schools. Its implementation is critical for them to participate in education. Implementation of a policy takes different forms and shapes in the context of different cultures and institutional settings. These settings are included in what McDonnell and Elmore (1987) referred to as; variables entrenched in the political and organisational context. Moreover, since the said variables determine the success of the policy outcome, then for the nomadic Turkana pastoralists, who have a unique lifestyle, warrant attention. Their nomadic lifestyle and socio economic related issues affect their participation in formal education. The persistent failure to reach them through formal schools has led to the non-formal approach through mobile schools. Since policy implementation embraces carrying out and accomplishing a given task, it was important to address the issue of mobile schools in this study.

This theory of McDonnell and Elmore (1987) identified several policy instruments that are needed as essential components of ensuring policy implementation once it is made. These components are from both the implementers and the targeted group. It may embrace the actions of public or private individuals or groups directed towards achievement of objectives set forth in policy decisions. These have been classified as policy instruments. Provision of education through mobile schools not only involves the government, but also Non-Governmental Organisation (NGO) and church organisations.

McDonnell and Elmore (1987) classify policy instruments into four distinct categories: mandate, inducements, capacity building, and transfer of official authority. Later they improved on the four by adding dialogue (McDonnell & Elmore, 1991). These tools were used in a study that carried out an evaluation on Education Reforms in Sub- Saharan Africa (Moulton, Mundy, Welmond, & Williams, 2002). Noteworthy, these different types of mechanisms for policy implementation are used selectively and in varying combinations to produce intended outcomes. The use of each policy instrument, or their combinations, reflect various sets of assumptions and ultimately leads to different consequences (McDonnell & Elmore, 1987). This means that different policies require policy instruments of different strengths Cohen, Moffit, & Goldin (2007) seem to agree with them when stating that "instruments vary in strength, or their influence in practice, and in salience, or how closely they connect with what must happen in practice to achieve policy aims" (p.35). In effect, the policy aims and the socio economic and cultural environment of the targeted group determines the strength and salience of policy instruments.

To begin with, dialogue as a policy instrument tool is a necessary input for a policy to be relevant to the intended population. It involves bargaining which is recognised as a key element of policy implementation. However, the local actors do not have incentive for

participation in a bargaining arrangement unless the possible pay-off is tangible and valuable. This can only be realised through awareness and sensitization. This has been done through creating awareness so that the community can enrol their children to the mobile schools. On the other hand, the theory urges that sufficient flexibility must exist in the policy outlines to allow for the local bargaining process to work. This means that the terms of the deal cannot be fixed in advance by law and regulation, thereby necessitating dialogue. Hence success in this arena is determined by each participant's objectives being met and not in set overall objectives. This indicates that education provision should not interfere with the social cultural lifestyle of the nomadic pastoralists, instead, there is need to strike a balance.

Moreover, this assumption of dialogue between the different stakes implies that policy outcomes will never be discrete, hence cannot be measured and specified. However, if a policy is consistent with the organizational culture and self-interests of the targeted community (Schein, 1987), then there is likelihood for support. Therefore, mobile schools' being NFE mode is expected to meet these conditions, hence, successful in its implementation.

Capacity building necessary for developing instructional material, intellectual, and human capacity is another immediate condition for implementation of a policy. The development of curriculum and instructional material, together with the training of teachers are crucial so that the schools can have adequate supply of the same. This study sought to answer the question of the extent the prevailing capacity in regards to mobile schools has contributed in any way to the implementation of the policy.

When the existing institutions working under existing incentives cannot produce results that policy makers want within their environment, this prompts for transfer of authority. For nomadic pastoralists' children, formal education system has failed to enhance educational

access despite various interventions by the government. However, since the government has mainly focused on providing formal education, provision of NFE is mostly in the hands of churches and NGOs. This means that there is transfer of authority from the hands of the government to those of other agencies. However, most of these organisations establish the institutions and then after running them for some time, hands them to the government. However, this study focused on mobile schools that are run mainly by the government only in efforts to address the needs of government managed institutions. In addition, due to the varying NFE approaches in terms of implementation as noted earlier in this study, the government owned may have to adhere to the policy guidelines unlike the Non Governmental Organisations ones.

On the other hand, transfer of authority introduces the other policy element of inducement. The role played by the church organisations and NGOs to provide education to nomadic pastoralist groups is significant. This transfer of authority involves transmission of official authority versus money (inducement) among individual agencies' involved in delivering of public goods and services. Moreover, it leads to altering of the existing institutional structures through which public goods and services are delivered (McDonnell & Elmore, 1987) The expected effect of inducement is production of value through a process that should lead to achievement of the desired results through a policy initiative. Accordingly, such agencies support those mobile schools through inducement. However, their involvement in support of education provision creates the need to establish the extent government has enhancement educational participation of nomadic pastoralists' children.

Finally, mandate policy implementation instrument aims at ensuring that the policy is being implemented. Mandates are the rules that are introduced in order to create uniformity of behaviour or reduce variations to some tolerable level. It aims at meeting minimum

standards. Establishment of a mobile school in a certain place is viable only if these conditions are met according to Arid Lands Resource Management Project (ALRMP) in conjunction with the Ministry of Education:

- 1. Be situated in a community targeting "pure" pastoralists rather than "static" populations.
- 2. Have no less than 25 children
- 3. Be in places that have great distances between primary schools
- Be established in areas with low enrolment and low transition to secondary schools."
   (UNESCO, 2010.p.34).

A school is regarded as mobile since it is moveable from one place to another and flexible in mode of approach, making it appropriate to the target group whose lifestyle is nomadic by nature. It must be geared towards serving the excluded from the formal education system, hence, the distance to the nearby primary schools must be great. In addition, the school must be established in regions that have very low enrolments and transitions to secondary schools. Furrthermore, the minimum population for the school is also a determiner of the establishment and in this case it should exceed 24 children.

The government of Kenya has made efforts to promote access to education to this marginalized group by establishing mobile schools. Therefore, this study employed the policy instruments tools as stipulated in McDonnell & Elmore (1987; 1991) theory of policy implementation. It was hoped that the theory was appropriate in enhancing the establishing of conditions that have influenced participation of nomadic pastoralist children in education. By doing so, it was hoped that this would help in establishing the obstacles that hinder its implementation. Having a policy alone is not enough. Ensuring that the policy is implemented appropriately with the applicable strength of the instruments is critical in order

to make this intervention a success. This is in accordance to what the proponents of this theory emphasize as the components that needed in order to have long term policy effects and achievable outcome. This study is therefore built on this theory and was aimed at promoting access to education among this unreached group. The need to establish the extent of participation of the marginalized Turkana nomadic pastoralist children in the prevailing policy environment, are therefore, paramount.

## 1.10.5 Strengths of Policy Implementation Theory

Use of policy instruments will help policy makers identify certain recurring problems and give them a predictive structure at the policy formulation level. This would therefore help them strengthen the policies such that some of the obstacles to its implementation are resolved beforehand.

Identifying the policy instruments is also vital in that the policy makers understand the instrumental relationship between objectives and policy choices. This implies that they will be in a better postion to provide the right instrument options and their appropriate strengths so that policy implementation is successful. Mobile schools therefore require instruments such as capacity building. Such a tool is critical in determing the extent that the capacity available is able to contribute towards the success of the implementation of the policy. In this case the mandate of the teachers was seen to be to the extent that they were working as volunteers, hence explaining why there is relatively high incidences of teacher turnover.

# 1.10.6 Weaknesses of Policy Implementation Theory

This theory has identified capacity building as one of the instruments. However, failure by this theory to address the ability of capacity building to deliver those public services is a limitation (Grindle, 1980). Since capacity building is aimed at raising the quality of life of the

citizens targeted by the government, consideration of their expertise is critical. Without their quality as a component being given attention, then effective service delivery as planned by the government would be compromised. Teachers' recruitment in as far as service delivery was concerned through mobile schools, was based on the premise of the most learned individual in the village. This may have influenced the outcome of this study to the due quality of teaching that took place in the mobile schools.

Moreover, Grindle (1980) has further critiqued the policy arguing that it has addressed the tangible resources only, (which include human, financial and material resources) but ignored non-tangible resources as components. These have to do with leadership, commitment and the social environment for effective policy implementation. Once a policy has been made, the success of its implementation depends on the support and the motivational input by the government of the day. Issues of political support by change of any government are critical for an on-going policy implementation. Hence, such a factor may influence the success of a given policy implementation. Consequently, the outcome of this study may have been influenced by such factors considering that policy implementation requires a conducive social environment for it to thrive.

Therefore, mobile schools not only require enough teachers, but also the teachers' ability needs to be considered. In addition, the aspect of leadership and commitment by the government together with a conducive social environment are also critical for the success of this intervention. This study however did not strive to address these issues and instead recommends them as critical areas for future research.

## 1.10.7 How the Two Theories Apply to this Study

The government of Kenya has prioritized universalization of primary education as a prerequisite for economic development of the nation. This has been demonstrated through the various interventions as stipulated in most of its policies since early 70s. However, these interventions have not had same effects in terms of providing access to education to all parts of the country. Some communities have been left out due to their socio economic and cultural orientations. These communities come from ASAL areas and therefore reaching them through the formal system of education has been difficult. This is why other alternative modes of education, the non-formal education and in this case mobile schooling have been put in place. The aim is to raise the level of participation of the nomadic pastoralists' Turkana children in education, through a flexible mode of education after the failure of the formal system of education. Therefore, the mobile school is meant to be an approach that is flexible and adaptable to the nomadic lifestyle of the marginalised Turkana children. Since education as an investment is believed to equip people with skills that would make them participate in economic development, then mobile schooling approach is appropriate to provide education to this unreached group. In addition, mobile schools are part of primary education which is also recognized as the level of education with the greatest returns. In addition, the externalities that are associated with education confirm the need to promote access to education among this marginalised group despite their previous low levels of participation in education.

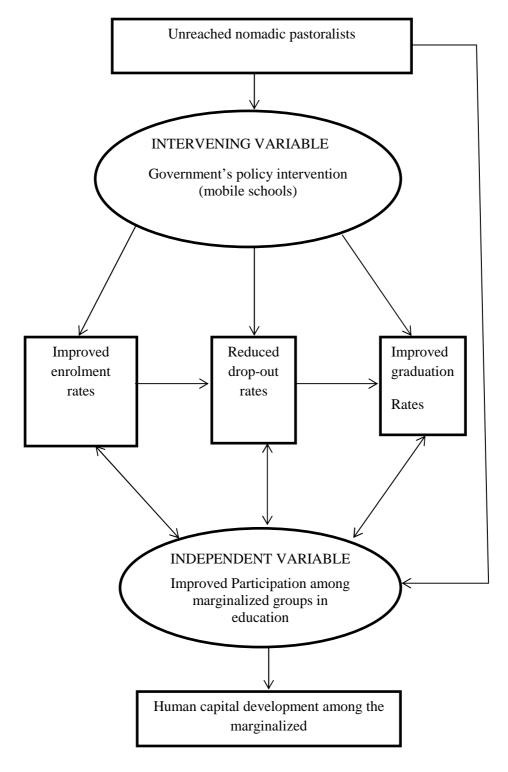
On the other hand, for a policy to have the greatest pay-offs, there is need to address policy implementation instruments that shape the policy outcome. These instruments are intended to remove any obstacles that may hinder them from accessing education after mobile school intervention. Moreover, the ultimate goal of providing education is to empower the human

capital from this region to enable them to participate fully in economic development. This is in line with what the proponents of Human Capital Development theory stipulate.

Policy Implementation Theory by McDonnell and Elmore (1987) stipulates that for successful implementation of a policy, there are four policy instrument tools that must be set in place. These are dialogue, capacity building, inducement, mandate and transfer of authority. These are necessary conditions for the successful implementation of the policy. However, they need to be combined in the appropriate strengths. For instance, in case of a global crisis, the policy interventions need to cushion the vulnerable groups, among whom nomadic pastoralists are included, from falling out (Ingubu, Kindiki, & Wambua, 2010). For the case of mobile schooling which is a programme under non-formal education policy, there is need to explore the level of participation in this intervention so that ways of improving its implementation can be established. This is through establishing the extent the components of dialogue, capacity building, inducement and mandate in this policy implementation have influenced its success However, for the sake of this study, dialogue is a critical component in order to implement a policy whose level of success is influenced by the culture of the targeted community. Moreover, when implementing a policy where the local actors lack incentive for participation, then the parents must be sensitised on the need to send their children to school and the possible pay-offs. The eventual outcome should be a situation where each of the needs of the two actors has been met. Consequently the government will have managed to implement the policy of mobile schools and the targeted community will be able to continue with their economic livelihood. It is for these reasons that the study in anchored on Policy Implementation Theory to establish if these components are in place in as fas as mobile schooling is concerned.

## 1.11 Conceptual Framework

The ultimate goal of mobile schooling is to enhance participation in education among the unreached children of nomadic Turkana pastoralists. This is a move taken by the government of Kenya in efforts to fight illiteracy which is seen as a threat to economic development. Since education is seen as a vehicle to human capital empowerment and consequently leading to economic development, failure by formal education to reach this group necessitated the intervention. Mobile schooling was intended to enhance educational access through improved enrolments. Apart from this, it was meant to improve retention for the enrolled learners through reduced drop-out rates as was the case before the intervention. This is because the school is modelled in such a way that it is supposed to be flexible in approach, such that as the community moves in search of pastures, the school also moves with them. This means that the retention of the enrolled learners through to completion will be enhanced. Therefore, with appropriate policy implementation, then it is hoped that such the intervention would be successful in improving the participation rates of this community in education as proposed by McDonnell and Elmore (1987) in their theory. In effect, if the aforementioned policy implementation instruments are in place, it is expected that enrolments will increase and consequently be encouraged to stay on till graduation time. In essence, this is hoped to lead to improved participation rates in education and consequently growth in human capital development. This study therefore is aimed at establishing if these relationships exist in regards to mobile schools. How the mobile school is hoped to enhance participation in education is shown in the various relationships presented in the conceptual framework shown in Figure 1.



**Figure 1:** A model of Policy Intervention in Enhancing Participation in Education for the unreached (Author, 2013).

## 1.12 Organization of the Study

Chapter One is an introductory chapter which contains a general background to the study, problem statement, purpose and the research questions, Scope and Delimitations, Assumptions and significance of the study, a discussion of the Theoretical Framework underlying the study, the Conceptual Framework and the Organization of the Study.

In addition, Chapter Two contains a discussion of the literature related to the study along the notion of NFE as an alternative mode of education; rationale for NFE and evolvement of Education for nomadic pastoralists in Kenya. In addition, the chapter has discussed an overview of mobile schooling, followed by the conditions through these schools have enhanced and supported participation in education. Finally, the chapter has discussed the challenges that hinder children to access mobile schools; then the participation of nomadic pastoralists in education and the research gaps addressed by the study.

Chapter Three mainly contains the Research Design and Methodology. The following are discussed in the chapter: the research design; study locale; sample size and sampling techniques. In addition, the Description of Research Instruments; Dependability and Credibility are also discussed here. Lastly, Data collection techniques; Data analysis and the logistical and ethical considerations are presented.

Chapter Four covers the Presentations, Interpretations and Discussion of findings. This chapter gives the analysis of data and the relationship between the research questions and the theoretical frameworks and the coding procedures employed and how the categories and themes were developed.

Finally Chapter Five has given Summary, Conclusion and Recommendations of the study. This chapter outlines the assertions that arose from the study, the conclusions and the results. It has also given a summary and recommendations of the study.

1.13 Definition of Terms

Conditions: These constitutes the environmental, socio cultural and socio economic

requirements that enhance access to education through mobile schools

Curriculum: Refers to an organized course of study designed to respond to the specific

conditions of nomadic children.

**High performing schools:** Schools that have been in existence for over 5 years since most

government development plans last for 5 years (yet for this particular program lasts 3 years).

Other parameters to measure this will be based on population size which should indicate

gradual increase over time and the relatively large catchment area where there is no formal

primary school.

**Low performing schools:** These are schools that have been in existence for over 5 years but

are struggling to survive in terms of sustaining children in school.

Non-Formal EducationAlternative Basic Education: This term refers to systematic

educational activity organized outside the formal system of education which addresses the

learning needs of specific target groups.

Nomadic pastoralists: Refers to members of ethnic groups that move with their animals

from place to place in search of pasture and water.

Mobile schools: This is a school that is flexible in terms of mode of delivery, curriculum and

the school calendar and is moveable from one place to another.

Participation: The extent to which nomadic pastoralists are able to access, enrol and stay in

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school through to graduation.

**Multi shift:** Multi-shift is an arrangement where a school organizes teaching and learning for different groups of learners at different times of the day to be taught by the same teacher using the same facilities.

**Multi-grade:** This is a teaching and learning approach which involves the combination of two or more grade levels in a class taught by one teacher.

#### **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

#### 2.1 Introduction

This chapter presents the literature review of the study. The chapter focuses on the notion of NFE as an alternative mode of Education; the rationale for Non Formal Education and evolvement of Education for nomadic pastoralists in Kenya. In addition, the chapter has discussed an overview of mobile schooling, followed by the conditions through these schools have enhanced and supported participation in education. Finally, the chapter has discussed the challenges that hinder children to access mobile schools; then the participation of nomadic pastoralists in education and the research gaps addressed by the study.

## 2.2 The Notion of NFE as an Alternative Mode of Education

Finding a definite definition of NFE has proved futile. In illustrating the difficulty of defining the term Non Formal Education, several authors have given differing definitions. For Mani (1984) non-formal education is "an alternative system of education outside the formal system, based on the learners' needs and interests, for the illiterates, drop-outs, pushed-outs and left-outs or non-starters..." This view is shared by Courtney and Kutsch (1978) who have also supported the interpretation that non-formal education is "an alternative" or "a substitute" (not supplementary) to formal education. It is noteworthy that NFE should not be viewed as an option or an easy way to provide education but is an alternative for provision of education for those who had not been to schools and those who have not been able to access education, hence complementing the formal education (UNESCO, 2000; Bishop, 1989). The extent to which this NFE has enabled putting nomadic child at par with other children who do conventional participation in education is unanswered. In view of the poor performance in terms of education in ASAL, is the mobile schooling really relevant? These studies therefore,

sort to answer this question.

However, non-formal Education can be defined as any organized, systematic and quality education and training programmes, outside the school system, that are consciously aimed at meeting specific needs of children and adults (Republic of Kenya, 2012). Ethiopia and the Institute of Curriculum Development and Research (Ethiopia & ICDR, 1999) share the same definition. This has gone further than the preceding two definitions by adding the idea of organization and quality. Within this definition, however, there is need to answer the question of whether education in Turkana really meets the education needs of the child or are distant apart. So far there is little research that has been done in this area. On the other hand the definition varies from one country to the other depending on its level of development. Courtney and Kutsch (1978) have differentiated the role of NFE in industrialized countries, which is preparatory, complementary (extracurricular) or a "follow-up" to schooling, and the role of NFE in developing or poor countries, which is "heir to the mammoth 'unfinished business' of the primary and secondary school".

In general, Rogers (2005) observes that there is no clear cut definition of NFE and indeed some educational activities stride across formal and non-formal modes of delivery. Conversely, in Kenya, the definition is unclear. The fact that at some level non formal schools fall under Ministry of Culture and Social services and at some level in the Ministry of Education, communicates volumes on the issue. With imprecise definition, each country interprets NFE in its own way. To some, it means schooling provided by NGO, to others, adult literacy while others as community based organizations. By and large, emphasize is on non-conventional delivery or facilitation methods, approaches and techniques. Conversely, Freire observes that they offer to many out of school children and youths opportunities to access education (Freire, 1970/2000). These opportunities are available through accelerated,

mobile, multi grade and multi shifts school models that operate under a broad umbrella of Non Formal programmes. In Kenya, Mobile schools are treated differently from Non Formal Education schools. However, since they operate outside the formal system, they have a flexible approach in terms of mode of delivery, time and content. This study has taken it as an NFE.

In efforts to understand NFE better, several authors have brought out its distinct qualities. Fordham (1993) suggests that in 1970s, four characteristics came to be associated with NFE, which are: Relevance to the marginalized populations, being concerned with specific category of people, being focused to a defined group, and being flexible in its organization and methods. Similar qualities are shared by Simkins (1976) who states that, non-formal education initiatives have a characteristic of flexibility, localness and have responsiveness to the out of school children. Mobile schools have these qualities. More importantly, for Kenya where the concept was first endorsed in Development Plans in early 70s, the level of participation for nomadic pastoralists in education is worth questioning. Has the target clientele been reached through education? This study solicited to answer this question.

On the other hand, NFE is the best means that can be used to meet the needs and objectives of physical survival (Colleta, 1996). The study further asserts that NFE has some commonality with indigenous and cultural transmission. It has a focus on basic needs of the recipients rather than the theoretical knowledge. It is dynamic and responds to the changes that happen in different circumstances such as the changes that occur in the lifestyles of the nomadic pastoralists. The need to carry out a study on mobile schools was important in order to strengthen it as a mode of providing education to the nomadic pastoralists. Further still, in efforts to describe what NFE is all about, Simkins (1976) analysed NFE programme in terms

of purpose, timing, content delivery systems and control. He further contrasted it with formal educational programmes and came up with an ideal type framework. In this framework, he emphasized flexibility, localness and responsiveness of NFE initiatives. Moreover, his assertion was that NFE initiatives still remain located within a curricula form of education. This indicates that mobile schools fall within this mode of education.

**Table 1:** Ideal- type modes of Formal and Non Formal Education

	Formal	Non Formal
Timing	Long cycle/preparatory/	Short cycle/recurrent/part
	fulltime	time
	standardized/input centred	Individualized/output
Content	Academic entry requirements	centred
	Determine clientele	Practical oriented determine
		Entry requirements
Delivery	Institution-based, isolated	Environment based,
	from environment, rigidly	Community related, flexible,
	structured, teacher centred	learner centred and resource
	and resource incentive	saving
Control	External/ hierarchical	Self-governing/democratic

Source: Simkins (1977)

Table 1 shows the distinction between the ideal types of modes of formal and non-formal education. The two modes of Education seem to operate at two extremes such that, formal education is a long cycle in terms of time while NFE is a short cycle that in most cases takes

about four years or even shorter. NFE is also reflected as being individualized; flexible and self-governing in terms of time schedule and content. The formal mode of education is standardized, institutionalized and very rigid in terms of allowing customer tailored changes. Mobile schools have a cycle of up to class three after which the children may join formal schools. The non-formal education system attempts to adjust to the learners' situation rather than vice versa. For instance, for the case of the mobile school programme, a mobile teacher moves from one village to another. The programme appeals to the culture and lifestyle of the people and it is a convenient way of reaching the scattered school aged children. However, this is not the actual situation and instead, its outcome is a case in theoretical terms than in practice. This argument is legitimate particularly when viewed in what some of the official government documents in Kenya purport. For instance, NFE lacks certification which should not be an issue (Republic of Kenya, 2001). Both documents, on Education For All, Republic of Kenya (2001) and the Draft Policy Guidelines, Republic of Kenya (1999a), advocate for a common curriculum which contradicts the NFE adage of flexibility. Such issues indicate the need to explore the extent to which mobile school have enhanced access to education. The question of this type of education being tailored to meet clienteles' needs in terms of its flexible nature was also sought.

On the other hand, the Kenyan situation is not any different in terms of the definition. There seems to be a contradiction in regards to policy and research documents when explaining NFE. For example, the "Policy Guidelines on NFE" (Republic of Kenya, 1999a) define NFE as "any organized systematic learning activity outside the formal school system" but goes on to assert that some Non-Formal Schools (NFS) follow regular primary school curriculum, and recommends that the Kenya National examination Council ought to develop and administer examinations for them. However, bringing the issues of curriculum and examinations makes

Non-Formal Schooling fall within rather than outside the formal school system as implied in the definition. The mobile school however, is meant to be part of primary school hence the learners are required to transit after grade three. This study therefore, sort to investigate the method of certifying that a leaner could transit to the formal school.

In a nutshell, rationales for most of the reviewed NFEs, take their starting point from service filling gap after the failure of formal schools. This failure of formal education as a means to achieve both educational and non-educational ends has necessitated the need for attention to NFE. Precisely, frustrations due to expense, rigidity, perceived poor quality, relevance and coverage of the formal education programs, have triggered the increased attention to NFE. Moreover, formal schools encourage sedentary lifestyle making it a challenge to access education especially for the nomadic pastoralists who live in ASAL areas. Nevertheless, the question of whether it increases enrolments and retention of nomadic pastoralists' children in school still remain unanswered, and therefore was paramount in this study.

In conclusion, NFE is expected to be flexible and adaptable to meet the minimum essential learning needs of children within the broad conceptual framework of a life- long learning system. This study attempted to ascertain this claim. In this study, mobile schools and non-formal schools have been conceptualized as alternative, supplementary and complementary educational provisions for the nomadic pastoralists' children. Since for various reasons the formal school provisions.has failed to serve them, there is need to focus on NFE.

# 2.3 Rationale for Non Formal Education

Education is a critical human right which has been globally endorsed since 1948 in various international conventions (UN-DHR, 1948). After the Second World War, education emerged as a universal entity, although full participation has never been attained throughout the world.

Since the United Nations' declaration of education as a basic human right way in 1948, attainment of universal participation has remained a challenge. Notwithstanding, since then it has featured consistently in international development agendas, but still without much gains. Varied needs of learners worldwide remain unmet in spite of global efforts to increase enrolments for several decades now. A study by Clemons and Vogt (2004), affirmed that 875 million adults were still illiterate and 100 million children had no access to school. They further assert that untold number of youths and adults who attend school do not reach the level to be considered literate by today's world standards (ibid., 2004). Moreover, 72 million children worldwide were still out of school by year 2007 according to the Global Monitoring Report (UNESCO, 2010). This confirms the challenging efforts to have all children participate in education worldwide. Factoring in population growth and various attempts to change this picture indicates that this has only slightly reduced. Of this population, some are completely unable to access formal education due to its poor quality. Furthermore, the curriculum is irrelevant to meet the needs of the learners including their social cultural and economic development. Such include the children of nomadic pastoralists. Besides, the lifestyle of this population seems unfavoured by the formal education system that encourages sedentary lifestyle and makes it hard for them to participate in education.

For most of the 1940 and 50s, Africa was under colonialism, and tended to pursue the political agenda more vigorously than other subsectors of their economies. With very minimal attention on education sector, participation of Africans in education remained low. A united front on education was still non-existent until early 1960s, when many African countries, began pursuing education as an integral component of independence. The first conference of African States was held in Addis Ababa in 1961, on the Development of Education in African States, with the goal of expanding education both quantitatively and

qualitatively (Republic of Kenya, 2001). Major education achievements in Africa in the 1960s include the Addis Ababa meeting that focused on Adult Education, and the 1964 meeting in Nairobi that dealt on usage of indigenous language for instruction (Ruto, 2004). The aspect of Adult Education forms the genesis of non-formal education in Africa and also the need to promote literacy among the unreached. During this period, countries like Kenya had identified ignorance among the key priories to address which were to be tackled through provision of education (Republic of Kenya, 1964). Since most young nations who were ready to develop their countries had the notion that education is the only way to propel the economic development of a country forward, NFE was slowly being embraced. Most nations took it as an alternative route to providing education to those unreached through formal education.

The significance of NFE in Third World development was established in the 1950's. It was largely viewed as a means of enabling those who had previously missed educational opportunities to 'catch up'. Initially, it was presumed as obsolete in comparison to formal education. This fundamental error is often referred to as the 'literacy myth', because of the assumption that:

Learning the mechanics of reading and writing was the touchstone that could liberate poor and un-educated people everywhere from the bonds of ignorance, disease and hunger' (Coombs, 1968).

However, in 1960, scholars and educational practitioners acknowledged the significance of Non formal education as an important factor to national development. While formal education was formerly seen as the only means to human resource development, Coombs (1968) established that NFE provides faster means for community development. However, it was not until when Coombs published the World Education crisis analysis which advocated

for alternative approach to formal education that NFE became popular. This brought about a debate on the role of NFE in addressing the needs of the marginalized and those that had not accessed education (Ekundayo, 2001). Therefore, NFE is an alternative mode of education to reach the marginalized groups and dropouts. Based on this premise, then through this alternative mode of education, human capital development is enhanced.

Although, Coombs (1974) saw the rural areas as gaining the fewest benefits from modernization, he proposed that efforts should instead be directed to agricultural development. By focusing on agricultural development, the approach would be appropriate for boosting production and creating employment. This perspective was based on the premise that it would attack rural poverty, hence preventing imbalanced development of third world Nations. According to Coombs, the challenge of meeting the minimum essential learning needs of millions of educationally deprived rural children and adolescents through NFE was critical. In order to help accelerate social and economic developments in rural areas, the need to look for alternative ways of education provision was critical. Therefore, a central question was raised by Coombs on what might be done through NFE to meet these needs. Such a question was instrumental in regards to nomadic pastoralists' children.

By the middle of 1970, non-socialist countries were turning to embrace the need for NFE in addressing the education for the masses. It was recognized as the only way that the education for illiterate masses, the neglected masses, those out of school, and also, those unable to access formal education due to their lifestyles was addressed (Coles, 1987). The nomadic pastoralists qualify in these categories and hence suitable target for NFE in addressing their participation in education. Kratli (2000) asserts that, formal schooling has become a challenge; hence, millions of nomadic children remain outside the education system. The only way to reach them is through non formal education. However, little research has been

done in mobile schooling as a non-formal type of education, leading to the concern on their actual participation in education.

# 2.4 Evolvement of Education for Nomadic Pastoralists in Kenya

From 1960s, UNESCO and other arms of the UN organized numerous Ministers of Education (MINEDAF) of Africa Conferences in order to give directions to developments in education in Africa. One of the earliest meetings was the Addis Ababa conference. The next one was held in Abidjan in March 1964 which not only addressed the previous concerns but also emphasized on the Adult literacy programmes. This formed the genesis of non-formal education. Later in 1968, MINEDAF III was held in Nairobi and stressed on the importance of inclusion of indigenous languages for instruction. Going by the prevailing wave of the birth of new nations at the time, these meetings were not intended for reforms. The main purpose of these meetings was to steer the educational expansion which was the driving force during that period for economic development. Consequently, has mobile schooling a non-formal mode of education encouraged educational expansion provision in any way? This study strived to answer this question.

Studies by Kratli (2004), Kiungu (2000), Sifuna (1990) and Nkinyangi (1981) indicate that reaching the nomads with formal education has been a major challenge. Attempts to hook them into school with interventions such as free education, school feeding programmes, introduction of boarding schools, provision of uniforms, equipping and provision of books and stationery to pupils have persistently failed. Retaining them in schools is problematic and dropping out appears to be the norm. Those who did not drop out were pushed out by early marriages and migration among other factors. Kratli (2004) indicates that enrolment of pastoralists' children in schools has been low in comparison to the number of school going children in these areas. Therefore, there has been growing numbers of nomadic pastoralists'

children who are out of school. However, there is little systematic evaluation to explain the reason for this trend. On the other hand, the sharp growth of formal school that had begun in the late 1950s seemed to be failing. With financial constraints, enrolling in school or staying long enough to enable acquisition of literacy contributed to this failure. The growth rate of unemployed graduate was also on the rise (Ekundayo, 2001, Coombs & Ahmed 1974, Shaeffer 1992). This led to a growing need to have a parallel process of enabling those outside the formal education system to have access to education (Townsend-Coles 1994:13). With mobile schooling intervention, the need to establish the level of participation of nomadic pastoralist' children in education was crucial.

Africa, on the other hand began to welcome alternative forms of education at MINEDAF V held in Harare in 1982. This was however, met with the challenge of funding since the governments had fewer resources available for education. Consequently, many NFE programmes were backed financially by organizations, communities and other sympathizers. With other organizations funding, there seem to be some hope in NFE schooling. Yet, with very few studies in the area to gauge the level of participation, there was need to establish whether these schools are filling the intended service gap. Kenya's need to involve nongovernmental organizations (NGOs) and international agencies in education was predetermined quite early (Kenya, 2001). This therefore, left NFE programmes to NGOs and other charitable agencies, while the government concentrated on the formal school sector (Asiachi, 1986). Considering the value and importance of such a venture, it should not be left in the hands of NGOs alone. There is need for the government to institutionalize it.

Although Kenya developed its education following the international and regional conventions discussed above, formal education was introduced in Kenya by the missionaries. The missionaries mainly concentrated on agriculturally productive areas which were the

highlands, hence creating a genesis or educational inequalities. Of significant is the fact that, the first articulation of Universalization of primary education was made in KANU manifesto of 1963 and further emphasized in Ominde Report of 1964. In addition it was further articulated subsequently in Sessional Paper No. 10 of 1965. This made remarkable improvements in enrolments in 1974 and 1979 especially for those living in agricultural areas (Sifuna, 2005). However, for pastoralist areas, schools were built through government initiatives and later on by church organizations and Non-Governmental Organizations (NGOs). For these groups, even funding for education was a challenge, hence their access and participation in education was still very low. However, according to Muhoho (1975), an estimated one million children were still not enrolled in school.

At the same time, the following concerns captured the attention of educationalists: (a) the level of adult illiteracy and (b) the school leaver and dropout problem that had resulted from the dramatic expansion of schools after independence. These groups were earmarked for Non-Formal Education (NFE).

The tragedy is that from most surveys on Net Enrolment Rates (NER) in 2007 among the Public Primary Schools nationwide, the lowest ten districts were Wajir, Garissa, Ijara, Nairobi, Turkana, Mandera, Samburu, Mombasa, Marsabit and Tana River. Noteworthy is that, 80 % are arid districts of which Turkana is among them. The other 20 % are cities which account for the largest populations of urban poor (UNESCO, 2010). These districts fall within the ASAL areas which are mainly arid areas, consequently, their source of livelihood is mainly livestock keeping as nomadic pastoralists. Mobility therefore, is a challenge to service providers and especially, for education which assumes sedentary rather than mobile users. Hence, it was important to assess the extent the mobile schooling, an intervention measure, enhanced participation in education of children from these communities.

The plight of pastoralists in Kenya was first addressed in the Ominde Commission of 1964. Having been the first post independent education commission of the time, it highlighted the need for the government to address educational regional inequalities especially the ASAL areas. The approach was mainly geared towards raising the levels of enrolments in these areas. It proposed among other things more government grants, building of boarding schools and mobile schools. The Development Plan of 1970-1974, (Sifuna, 2005) observes the following with regard to pastoralists:

All areas in Kenya particularly those with widely scattered populations have not yet participated equally in the recent expansion of primary education. Less than 50% of the total primary school population are enrolled in schools in Baringo, Samburu, West Pokot, Turkana, Kajiado, Narok, Wajir, Mandera, Garissa, Isiolo, marsabit, Tana River and Lamu districts.

Nevertheless, the participation of pastoralists worsened in the late 1980s due to introduction of the World Bank's Structural Adjustment Programme and execution of the cost sharing policy. This period marked the time when the government shifted the cost burden of education to the recipients (Republic of Kenya & UNICEF, 1992). This change of events seems to suggest very slim chances of improving participation levels for the marginalized communities such as the nomadic pastoralists.

Furthermore, enrolments and attendance are allowed to fluctuate according to the prevailing weather conditions. Enrolments are reported to be high during the wet season and low in the dry season since pupils have to move with their animals in search of pastures and water. Therefore in times of drought, both enrolments and attendance drop considerably (Ekundayo, 2001). This was in relation to formal education, but there was need to study what the situation was like with introduction of mobile schooling intervention. Considering mobile schools are

regarded as schools on wheels and with collapsible roofs, the question of fluctuations needs to be investigated. The question of whether those who drop out ever return to school, is important at this point. In that case does the average year of schooling per cohort remain the standard three years?

# 2.5 Overview of Mobile Schooling for Nomadic Pastoralists

The earth is made up of 40% Arid and Semi-Arid Lands (ASALs) which is occupied by one billion people who depend on it for their livelihoods. The inhabitants of these areas are among the world's poorest and most marginalized people. The nomadic pastoralists therefore practice a mobile lifestyle in order to balance the water and grazing requirements of their livestock (Ngome, 2002). Due to this, the level of literacy is also quite low in these districts since they are unable to attend the formal schooling.

Conversely, Kratli (2001) asserts that in spite of that, parents still have the will power to have their children go to school. However, it is noteworthy that majority of Turkana people depend exclusively on government and non-governmental organizations for food which is regarded as a basic need (Ng'asike, 2011). For Turkana families therefore, to afford to pay school levies or even put up schools is almost impossible, coupled with the problem of insecurity due to ethnically instigated conflicts. This community is culturally inclined to rely on their traditional practices such as nomadism to ensure their livestock survive as their source of livelihood. Since the survival of families is fundamental, the expectation of every member of the family is to give support to this institution, including the children (Ng'asike, 2011). The mobile schooling intervention was implemented as a way of enhancing access to education in this community inspite of their lifestyle. Therefore, in order to examine the true picture of the level of literacy in such areas, this study was vital. It also sought to establish how mobile

schools could be strengthened as an alternative approach in provision of basic education in Turkana County.

In Africa, few countries have embraced mobile schooling. By 2001, Nomadic pastoralists in Nigeria were estimated at 9.3 million children of school going age and totalled to about a third of this population. The literacy rates of the nomadic population range from 0.2% to 2%, and their participation in both formal and non-formal education is very low. Association of development of Education in Africa (ADEA) observes that their lifestyle makes it extremely hard for them to participate in schooling (ADEA,2001). A commission was appointed to address ways of improving participation and came up with several options and among them mobile schooling. Later an evaluation was carried out in 1999 to assess the impact of this innovation on the participation of pastoralist children in education. It indicated that the enrolment of nomadic children rose from 18,831 in 1990 to 155,786 in 1998 of which girls' enrolment shot up from 5,068 to 65,855. The gap between male and female enrolment was reduced by 85 percent. The transition rates from primary to junior secondary school rose from 45 percent in 1992 to 53 percent in 1998, higher than the national average of 47 % (ADEA, 2001).

Closer home, Sudan introduced mobile schools in 1980 and by 1994, had a total of 178. In Kenya, there is Hanuniye mobile schools in Wajir. The project was started in 1995 to cub the high illiteracy levels and low enrolment rates among adults, youth and children in Wajir district. This programme is modelled on the Duksi system (Quranic Schools) that are mandatory for Muslim children. Learning takes place early in the morning or in the evenings-before or after taking livestock to pasture fields. A group of families (Duksi) hires a teacher who is paid in kind for his services. Duksi teachers accompany pastoralists who move in search of water and pasture to continue with teaching. The mobile schools project adapted

this concept by broadening the curriculum to cover arithmetic, Kiswahili, English, agriculture, animal husbandry in addition to learning the Quran. The model is viewed by pastoralists as suitable and has benefited 1,653 adults and 2,480 children. The anticipated optimistic outcome is that the mobile schools project may stimulate enrolment in schools and thereby increase the participation level (ADEA, 2001). However, this venture seems to have benefited the nomadic pastoralist community in Wajir by enhancing access to education. Therefore, there was need to establish the Turkana mobile school intervention.

In Kenya, the ASALs occupy over 80 percent of the country and provide home for about 10 million people (Kenya, 2006). A total of 39 districts fall under ASALs. Four years ago, according to Kenya (2008a), there were over 50 mobile schools supported by the government across six districts out of which 60 % were in Turkana. At present, Turkana has 61 Mobile schools (Ministry of Education office, Turkana County). Apparently, the first pilot study for mobile schools was carried out in Turkana during the 1974-78 Development Plan (Kenya, 1974:69). These "schools on wheels" did not prove viable and no mention is made of them in subsequent official documents (Ngome, 2005). This indicates the need for evaluation of such schools. In addition, surprisingly, there is no formal evaluation of the innovation exists. Yet going by the prevailing data, the Gross Enrolment Rates in Rift Valley Province, in which Turkana is located was 112.4 % but for Turkana County, it was 46.7 % (Kenya, 2008b). This created interest for this research.

The concept of mobile schooling suggested that the teaching staff and the instructional material could move from one watering point or grazing area to another in consonance with the movements of the community's pastoral herds. The watering points or grazing areas would be equipped with semi-permanent school structures where children attend daily instruction while returning to their families at night. Alternatively when the nomadic group is

too small to provide full intake for the partial mobile school, a single teacher instructs smaller classes of mixed ages (Republic of Kenya, n.d.b.). This study therefore addressed the question of whether the participation of nomadic pastoralist children was similar for the different social groups based on sex.

The teachers are mainly recruited from the local community hence making it easy for instruction in the local dialect. The curriculum is localized to the needs of the local community but with some literacy and writing skills. The curriculum is also condensed to take a shorter time than the formal schooling, yet since at some point a student is expected to join the formal system without compromising the quality of education, it ends to an extend becoming formal education in alternative mode. Despite this, the study strived to fill the gap in the area of whether the mobile schooling enhanced participation level in education among the disadvantaged Turkana community. The question of if mobile schools promoted access to education to them was fundamental. The study also looked at the extent to which it promoted education to this community, given its flexible mode of time and delivery. And whether the fact that those teachers are from the community, did it contribute to the sustainability of the programme in any way? Overall, this study also focused on the obstacles that hindered improved participation of these children in education, if any.

# 2.6. Conditions through which Mobile Schooling has Enhanced and Supported Participation in Education.

Despite the fact that non-formal education could be the solution to increasing access to the marginalized groups, certain conditions must be in place for it to succeed. To begin with, the government needs to make policies that are clear and involve the targeted communities and elements of their existing traditional education institutions in order to improve participation of nomadic pastoralist groups in education (Sifuna, 2005). Sifuna further study indicated that,

nomadic pastoralist communities in Kenya have remained marginalized in educational provisions since the colonial era. Despite government's efforts to equalize these inequalities, little impact has been experienced since they have been put in place without considerations of their social economic conditions. Secondly, intensification of the development budgets for education sector will guarantee basic education improvement (Ingubu, Kindiki &Wambua, 2010). If such budgets are well instituted in the marginalized regions, equity will widen access to all children regardless of region or gender. In a study addressing Global crisis and Educational agenda among the marginalized, the trio assert that such a measure would help lift the educational spending burden of most marginalized households, consequently leading to improved access to education.

On the other hand, money as a factor seems to echo what the policy implementation Theory advocates which links inducement, capacity building and transfer of authority to money (McDonnell & Elmore, 1987). This makes it an important component for the success of the intervention. Nomadic pastoralists belong to this group and mobile schools as an intervention are funded by the government and other private agencies to promote access to education. The fact that Turkana is already marginalized economically, implies that the ability of such a community to sustain itself is almost impossible. With introduction of mobile schooling which is provided by the government, there was need to determine the participation rates of nomadic pastoralists children in education.

Socio economic related issues are a factor contributing to low participation rate of nomadic children in formal education. Imhabekhai (2004) conducted a study on extending of education among the disadvantaged nomadic groups in Nigeria and found out that nomadic education has been marred by several factors. Child labour, which is central in the production system, is one of the major hindrances. For the Fulani nomadic group of Nigeria, they would

rather release adults than children to participate in formal education programs so that the latter can be left available to herd cattle (ibid). Even among the fishing groups who lead nomadic lifestyle in Nigeria, the children are engaged in fishing and correlated activities hence are hardly in class during the peak periods. Therefore, the pastoralists do not share the view that schooling is relevant to the practice of pastoralism, which is the thinking underlying contemporary thinking about the relationship between education and pastoral development (Dyer, 2001). This study however, addressed the nomadic pastoral Turkana communityThis study attempted to fill the gap of ascertaing if child labour practice is still a hindering factor to educational provision.

Although there has been great concern with substantial investment and rapid rise in enrolment ratios nationally, nomadic pastoralists are still underserved coupled with persisting disparities. Over a long time, providing education to nomadic communities has proved challenging yet an issue requiring urgent attention to policy makers and practitioners. Woldab (2012) observed that socio economic and socio-cultural features of the society are not the only impeding factors that affect the educational participation of nomadic pastoralists' children. The school environment factors, on the other hand, generate a substantial number of constraints. To begin with, the curriculum lacks apt connections with situations familiar to students (ibid., Imhabekhai,2004). The school distance (Woldab, 2012; Semali, 2007) and low teacher motivation are the other factors according to the study. These findings are however in regards to a study done in Ethiopia. A curriculum designed for sedentary people has no relevance for nomadic pastoralists' people. Imhabekhai (2004) argues that the nature of the curriculum being provided for them, in formal primary education discourages them from attending school, hence accounting for low participation rates.

Further, Ng'asike (2011) asserts that drop out cases are many among the Turkana community due to the failure of incorporation of cultural concerns of nomadic families in the curriculum. Of such, the youths who drop out are not able to participate in urban modern industrial economy and yet they are unable to fit in their cultural lifestyle. This portends them as failures yet in actual sense they are not. Mobile school on the other hand is a non-formal type of education that is expected to address this challenge. Therefore, there was need to address the question of whether mobile schooling improved the participation rates of the children from this community in education.

Other factors hindering education provision among nomadic pastoralists include shortage of teaching and learning facilities, inadequate facilities such as toilets and lack of teachers (Woldab, 2012; Imhabekhai, 2004; Ng'asike, 2011). Ng'asike (2011) goes on to add that the children who attend early childhood schools do not have teachers. Going a whole day and another without guidance of an adult leads to their finally dropping out from schools. This automatically implies that a hostile environment and lack of facilities affect learning for the students. The study was however carried out in Ethiopia and on formal education. This study therefore established the obstacles that prevent the children from the marginalized Turkana in Kenya from accessing education through mobile schooling.

Reduction of the unacceptably low literacy rates is a major development goal for any government around the world. Kenya is no exception to this. 'Literacy' is perpetually associated with 'development'. However for nomadic pastoralism, it is a holistic way of life and not simply a mode of production reduced to issues of productivity and economics (Dyer, 2001). Dyer observes this in a study on Nomads and Education for All in Western India. Another study among the pastoralists Rabaries of Western India, indicated that in spite of this, many governments have put several interventions in place in attempts to promote

literacy among the marginalized and vulnerable groups (Dyer, 2008). However, defective policy has affected nomadic education in Nigeria (Aderinoye, Ojokheta, & Olojede, 2007) and by extension, the Turkana's nomadic pastoralist group too. However, unless the persistent gap between policy intention and practice are addressed through extensive nomadic education programs such as mobile schooling, there can be no meaningful intervention. Hence, creating the need for close scrutiny of which kinds of 'literacy' link with recipients' own perception of development.

Comparatively, in terms of policy implementation tools, this can be referred to as 'dialogue' (McDonnell & Elmore, 1987). The need for consultations at policy formulation level so that there is a nexus with what is perceived to be development to the recipient of the intervention, is paramount. This raises the question, of whether mobile schooling is perceived as having connections with development for the nomadic pastoralist community's economy and by so doing ascertaining whether the dialogue policy implementation tool is used in this intervention.

Nature of the curriculum is a determinant of level of participation of nomadic pastoralists' children in education. Formal education is not good enough for groups whose survival rests largely on their livelihoods. In his study among the Fulanis of Nigeria, Iro found that the formal curriculum used among the Fulani was unsuitable (Iro, 2002). For example teaching of English was not appropriate for these populations who had not even mastered their local language. On the other hand, language of instruction is also a contributing element of barriers to teaching learning activities (Ng'asike, 2011). The curriculum was also deemed as inappropriate in cases where children were taught things that were not of interest to them as pastoralists such as being taught about cockroach breeding, playing basketball and mountain climbing which were not interesting to them. This raises the question of the extent to which

the curriculum content has promoted access to education among the Turkana nomadic pastoralists.

Similarly, when the teachers are chosen from among the local community, denoting their being familiar with the culture and traditions of the people, understand and use of the local language as a means of instruction and working together with the participants, improves participation (Imhabekhai, 2004). There was need to investigate if this was the case with education provision through mobile schools in Turkana County.

For nomadic pastoralists, livestock is the communities' source of livelihood. Access to water and pasture for their cattle is crucial to sustain their livelihood. Their movement is not confined to Kenya alone. It sometimes spills over across to the bordering countries. Conflicts emanate from these movements as they compete for the scarce pastures and source of water. This has resulted to acute food and physical insecurity, low levels of education, inadequate or non-existence education facilities (Kumssa, Jones, & Herbert, 2009). Culturally, livestock plays several significant roles, apart from being their source of livelihood, in the lifestyle of nomadic pastoralist. For instance, socio-cultural and religious functions such as paying of dowry, and asset and security against risks for compensation for family feuds for instance and store of wealth (Kaimba, Njehia, & Guliye, 2011; Schilling, Opiyo, & Scheffran, 2012). For mobile schooling, there was need to ascertain if education provision was still threatened as they move with the cluster. Of importance also was the question of whether the mobile schooling was able to address their needs since education is linked with development.

Another motivating factor that leads to improved level of participation in any educational programme is a function of the amount of awareness created in the target population (Imhabekhai, 2004). Adequate mobilization through awareness is important for effective

participation. For the excluded Turkana there was need to establish if awareness promoted participation in mobile schooling This gap was addressed by this study.

Nomadic pastoralists perceive the world around them to be antagonistic. Their dismal participation in modernizing society is reflected where survival and achievement are largely driven by social status and formal education, which they do not possess. Many of their values are challenged since they are at odds with the ideology of market-oriented consumerism (Dyer & Choksi, 2006). It is this pressure that at times drives them to join school. In an ethnographic study carried out in Kutch in India, leaders indicate that they have interest in education as a means of development for the community and support efforts of providing appropriate, peripatetic mode of teaching (ibid.). However, their determination to retain their own values instead of negative interaction with outsiders forms an economic and social unit. Does this condition influence mobile schooling too among the nomadic group in Turkana County? This study addressed this question.

In addition, Semali, (2007), provides a broad context of obstacles to literacy, affecting migratory subpopulation groups in his study among the Maasai of Tanzania. The findings of his study point out that newspaper, leaflets, and posters were rarely seen in the local shops or markets. In addition, books were rarely used outside the context of school. Moreover, the study came up with the findings that the local traditional learning systems were closely linked to the Maasai community's survival needs. It was also observed in the same study that the practice of nomadism was an esteemed lifestyle by the community. Therefore, the nomadic groups pose a great challenge in education provision. This led to a general question of determination of the challenges facing mobile schooling.

## 2.7. Challenges that hinder Children to Access Mobile Schools

Non formal education as an alternative mode of education has in most cases not received adequate attention from the governments, thereby being left mainly in the hands of NGOs and other private agencies. Vogt andClemont (2004) assert that with most of the central governments having less money to spend on education, coupled with persistent economic and political pressures on many of these governments have culminated to decentralization of their education system. This has transferred the burden to Non Governmentao Organisations and local governments (p.89).

The study argues that the need for research on decentralization process is paramount. It is the unclear understanding of decentralization process of education provision within community that makes it fail (ibid.). The study contends that there is need to address non formal education with care to ensure that all stakeholders are involved to avoid killing its very essential intent. In their analysis of Kenya and Senegal case studies on non-formal initiatives, they established that the failure of NFE is due to lack of dialogue and collaborative efforts with policy makers, implementers, and grass root organizations (ibid.). This is seen to help bridge the gap between the expectations and the implementation of a policy (McDonnell & Elmore, 1987). This study was however on non-formal education in general. Mobile schooling intervention is on the other hand specifically provided to the marginalized nomadic pastoralists in Kenya. Hence, the need to establish if it had been successful in enhancing participation of the children from this community in education was critical. Of importance also was to ascertain if it experiences the aforementioned challenges.

The migratory nature of nomadic pastoralists limits their participation in formal education which favours sedentary lifestyle (Aderinoye, Ojokheta, & Olojede, 2007). For them to

access education, the mode of delivery is a condition that must depart from the traditional system. They require building of temporary structures in locations where they stay for a while during a season particular before relocating. This ensures that they are able to participate in education without disruption from normal activities (Imhabekhai, 2004). In Kenyan situation, some mobile schools in Tana County have already turned permanent settlement. So far for Turkana County, there is little documentation on mobile schooling. There was need therefore, to establish whether they are actually mobile or have settled. Hence, determination of the participation rates of Turkana's nomadic pastoralists' children in education was vital.

Moreover, although schooling is viewed to bring many advantages of physical and material survival, Rabaris- a nomadic pastoralist group in India- disapproves this. Girls schooling is seen with incongruity, since women generally are viewed as the carriers of their cultural values. This view is less so for men because upholding of cultural values is not associated with them. School therefore, appear to be a threat to the Rabaris moral fabric; hence, hindering education provision among marginalized nomadic pastoralist groups (Aderinoye et al, 2007). For the girls who complete formal schooling, they report an uncomfortable sense of displacement (Dyer, 2001). Imhabekhai (2004) asserts that the education program provided to nomadic pastoralists should be categorized according to age and sex in a study that was conducted in Nigeria. However, there was need to establish whether the social groups affected the level of participation of nomadic pastoralists' children in education in any way.

Enumerating of pastoralists has been a major challenge due to their nomadic lifestyle. With India alone having a total of 60 million (Dyer, 2010), on the other hand, Asia is observed as having never enumerated according to Kratli and Dyer (2009). This is also shared by Carr-Hill (2012). To start with, the numbers of those who should enrol are obtained from census or household surveys. The household surveys at times still miss the mobile groups even when

conducted in high standards of competence. With very many adults and children without birth certificates in India, it would be difficult to give the correct estimate of this marginalized group and hence may give misguided policy directions. Unreliable and obsolete data is a major hindrance articulation of sound policies in the context of the target community (Aderinoye et al, 2007). In relation to schooling, this gives a misrepresentation that misinforms the state's interpretation of enrolment targets (Dyer, 2001). This situation is not any different in Kenya and therefore this study addressed the mobile schooling intervention among the excluded Turkana nomadic Pastoralists County. Thereofore, the documentation of this phenomenon was paramount.

The other factor affecting implementation and consequently participation levels in nomadic education is funding. Without adequate funding, the educational programmes cannot thrive well since its distinctiveness makes it quite expensive (Imhabekhai, 2004; Aderinoye et al, 2007). This study seems to affirm the Theory of Policy implementation which has identified money as a major component cutting across several of the other policy implementation tools (McDonnell & Elmore, 1987). Thus, for any government that is concerned with pursuing inclusion, equity, quality and equality in education to excluded groups and the deprived, must appropriate adequate budget allocations. The question of the influence of Mobile schooling funding on implementation of nomadic education was paramount. In addition, whether this affected enrolments and graduation in any way was also of importance.

### 2.8. Participation of Nomadic Pastoralists in Education

The available statistics and research findings reveal that, nomadic pastoralists form the majority of the poorest and most vulnerable of African population. Millions of children have been denied access to education and record low participation rate in primary education level. However, despite many African countries' commitment to the universalizing of access to

primary education and intensified attention in the provision of relevant education to nomadic pastoralists, these segments of population have serious limitations to equitable participation in education, due to various impeding factors (Woldab, 2012). However, many of the non-formal education schools apparently have resulted in great success.

Sifuna (2005) conducted a study on increasing access and participation of pastoralist communities in primary education in Kenya. The outcome of the study indicates that there is need to articulate vibrant policies and include such communities in planning as well as integrate elements of their prevailing traditional education institutions. This has been tried out by many governments in attempt to provide educational interventions among the marginalized and excluded groups.

So far, several studies have been done on both formal and non-formal education provision among nomadic pastoralists. In a study conducted to establish the extent to which NFE had raised participation of basic education levels in rural Bangladesh, the findings indicated that the program had been successful. Drop-out rate from school had reduced significantly and over 80% of those enrolled were able to complete schooling. Furthermore, for the non-formal education programme (NFPE) of the Bangladesh Rural Advancement Committee (BRAC), the level of performance in four components that were used in basic education indicated that, those in NFPE performed relatively better than their counterparts in formal schools. BRAC children performed significantly better, in life skills and writing skills than their peers. In reading and numeracy skills on the other hand, they had equal performance (Nath, Syvia, & Grimes, 1999). The significant performance of NFE in enhancing participation in education is noteworthy in Bangldesh. Elsewhere in Senegal, a study conducted by Kuenzi (2006) on non-formal education and community development in Senegal indicates that, NFE education

which targeted mainly those excluded from formal education had a relationship with community participation. This was an indication of success of the NFE in enhancing education provision. Is mobile schooling in Kenya successful in promoting access and participation in education among the nomadic Turkana? This study strived to answer this question.

In regards to efforts to improve participation of nomadic pastoralists in Education, mobile schools were found to be appropriate for the peripatetic culture, lifestyle and livelihood of Nigeria's nomadic people (Aderinoye, et al., 2007). However, mobile school system is used sparingly in Nigeria due to the enormity of problems associated with it, though several others in other states are still operational. This was however in Nigeria, leading to the question of whether they are really effective in promoting access to education. The question of challenges that may be facing mobile schools is also paramount. Hence, this study sought to fill this gap.

Sa'ad (2002) established that home chores and festivities held by the community affected their schooling; hence, non-formal schooling could provide a better option. The findings of the study which was conducted on Assessment of Nomadic Education in Nigeria' showed that the average attendance rate of the learners was 96%. Out of 145 classes, 93% learners responded positively on the need to participate in the follow-up course. At the same time 100% learners completed all the 60 lessons. Surprisingly no drop out was experienced. This indicated that non-formal education was important in enabling many people access basic education and stay on until completion. This study does not however elaborate what conditions supported or encouraged the enhanced participation in education. This study therefore attempted to address this gap.

Still in Nigeria, a rural adult education programme with a health curriculum focus was established and implemented among the Fulani women pastoralists by the federal government of Nigeria. This NFE program outcome had sociological implications in rural development and raised the level of equity of access and participation between genders (Usman, 2009). Originally, the National Commission for Nomadic Education responsible for the programme collaborated with the community leaders in order to come up with culturally relevant curriculum content. This is a key characteristic of non-formal education. Though mobile schooling is also an NFE, the question of whether it has improved access to education and participation at large is paramount. The question of curriculum being relevant to their culture also arose (ibid.). This study therefore made efforts to fill these gaps.

Imhabekhai (2004) carried a study on extending education to disadvantaged nomadic groups in Nigeria. The study confirms that there was improvement in enrolment among the nomadic pastoralists who were highly disadvantaged. However, the study contends that, with a literacy rate of 0.02% among nomadic populations, this enrolment of 203,844 in 2001 is comparatively low; hence, the objective of educating the nomads and their integration into national development efforts cannot be achieved quickly. This questions the basis on which Human Capital Theory is built on and as to whether education really contributes to economic development of the community. The question on the best approach to build human capital using education in this community is fundamental. These gaps were addressed in this study.

In Kenya, a study was carried out in Samburu on factors affecting access to basic formal education among the nomadic pastoralists of Northern Kenya (Lanyasunya, 2012). The outcome indicated that distance, cost, domestic work, gender, guardian's education level, occupation and mobility of the household were the main factors affecting access to education

among the Samburu and other nomadic pastoralist communities by extension (ibid). ASAL areas are said to have tenacious low participation in education due to child labour (Munene & Ruto, 2010). Mobile schools are expected to integrate with the routine lifestyle of the nomadic pastoralist community. However, whether the same challenges are still experienced in this kind of non-formal education is unanswered. On the other hand, a study was conducted on determinants of primary school access and participation rates in the pastoralists Turkana County. The findings revealed that security, establishment of boarding schools, adequate provision of food to schools, good school infrastructural development, and availability of teachers and learning materials were the strongest factors that enhance education in the area (Migosi, et al., 2012). This however, was in regards to formal education, hence creating the need to establish the factors that encourage the nomadic Turkana pastoralist children to stay in school once they enrol in mobile schools (a non-formal education).

# 2.9. Summary of Related Literature

Literature review in this chapter tackled the concept of NFE, the rationale, the evolvement of non-formal education and the conditions enhancing the participation of nomadic pastoralist children in education. It has further addressed the obstacles that hinder education provision to nomadic pastoralists. Basing on the literature reviewed in this chapter, the following gaps were identified.

The foregoing literature review reveals the areas to be considered when studying participation of nomadic pastoralists' children in relation to mobile schools. This is with focus on conditions that enhance enrolments to Mobile schools and determine whether the conditions have resulted in differences in enrolment behaviours in terms of social groups. The study has

also addressed the obstacles that have hindered the nomadic pastoralist child from accessing mobile school. Research done on nomadic pastoralists' education in other countries and even outside Turkana County did not adequately address the participation of nomadic pastoralists' children in education. For those that have addressed the nomadic pastoralists, they have mostly focused on formal education. Even for those that have addressed NFE, they have mainly confined to adult and youth and children in slums with limited attention on mobile schools.

Further still, the current research is a qualitative study, a variation in approach, most of the other studies have used descriptive survey which takes qualitative approach. With limited studies that have used qualitative approach, this study aimed at adding new knowledge to previous findings. Consequently, this study attempted to address these gaps in the research study with the intention of establishing the extent to which the nomadic pastoralist children have participated in education after mobile schools intervention.

#### **CHAPTER THREE**

### RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

This chapter presents the research methodology that was used in the study. The chapter is divided into eight sub sections: research design, location of the study, sample size and sampling technique, research instruments, pilot study, description of data collection instrument, data analysis and logistical and ethical considerations.

### 3.2 Research Design

Mixed Methods design was used but qualitative dominant. It was appropriate since by using either qualitative or qualitative methods would have been insuficient to allow researcher's understanding of the problem under investigation as suggested by Creswell and Plano-Clark, (2007). This necessitated the researcher to adopt survey methodology with the aim of studying specified cases. This was done in order to illuminate relationships portrayed in a correlational pattern and then interpret through case study to display processes and patterns (Miller & Salkind, 2002).

The selection of the cases was done after a survey was carried out to reveal those that were high or low on a criterion variable or those that displayed significant characteristics as suggested by Miller and Salkind (2002). In this study, the researcher undertook three cases. The criterion for selecting two of the mobile schools used in the study was high and low performing. The choice of the third school was based on its being relatively average. The parameters for this selection were based on the school size; the distance of the school from the main road; the security of the area; and lastly, the number of years it has been in operation.

This study focused on three mobile schools. This aligns with case study description that a case study can be used to study one or more cases within a bounded system, which can be focused on a single unit, a group, organisations or programmes so as to gain in-depth understanding of the phenomenon (Yin, 2003; Baxter & jack, 2008; Creswell, Hanson, Clark Plano, Morales, 2007). This enabled the issue of concern be illuminated from different perspectives through extensive analysis of each of the mobile school. Use of several cases enhanced broadening of the overall scope of the study, giving evidence that is more compelling and robust (Yin, 2003).

This was aimed at enabling this study achieve its objective of understanding the mobile school in detail and in depth from its naturally occurring context as argued by Creswell (2007). It was also aimed at enabling the study to offer suggestions of improved policy implementation to education providers. The case study allowed the researcher to use Focus Group Discussion and in-depth interviews which entailed gathering rich information from participants in their own context.

Furthermore, the flexibility of case study enabled the researcher cope with contextual uncertainties which had not been planned for. Creswell (2009) contends that 'the initial stage plan for research cannot be tightly prescribed, and all the phases of the process may change or shift after the researcher enters the field and begins to collect data' (p.175). For instance, the plan to have a focus group of between eight to twelve learners for learners in grade three changed to a group of four since it was not possible to have the big children in school as the field work coincided with the time for grazing in some cases as their culture requires them to perform certain roles during the day.

## 3.3 Study Locale

Turkana County is located in the North Western region of the country within Rift Valley province. It is approximately 77,000 km<sup>2</sup> in size and borders Uganda to the west, Sudan to the northwest and Ethiopia to the northeast. The main livelihood in the district is pastoral. The area is prone to constant cattle rustling clashes between the Turkana and their neighbours in Uganda, South Sudan and Ethiopia. As a result of this, the district suffers a lot, in terms of loss of life, loss of property, displacement of families, destruction of infrastructure e.g. schools, health and water facilities and disruption of education (Republic of Kenya, n.d.b). Turkana is also identified as one of the poorest districts with major causes of poverty being harsh topography and climatic conditions, insecurity, cattle rustling and low school enrolment (Ibid.). Also, this notwithstanding, HIV/ AIDS is also rampant with 33 % of bed occupants in the district hospital being HIV/AIDS patients (ibid.) this has aggravated the situation in Turkana.

Perennial droughts feature prominently in the region, a condition that forces majority of Turkana people to depend entirely on relief food provided by the government and non-governmental organizations (NGO). Coupled with the fact that this geographic region embraces traditional practices that make up the social fabric of this community, this nomadic pastoralist group does not often augur well with the strongly centralized formal school provision. Therefore, Turkana people naturally have to rely on their traditional cultural practices such as nomadism to ensure their livestock survive for the sustenance of food security of the families and children. The mainstream society in Kenya, from the assumptions of western lifestyles, considers nomadic practices as barbaric and primitive. However, pastoralist lifestyles have continued to persist even as the educated elites attempt to change Turkana from nomadism to modern lifestyles. With increasing dropout from formal schools

and lack of finance to keep nomadic children in schools, education provision remains a major challenge, hence, is not the best option for survival of families.

In general, the pastoral communities in Kenya today, are the least served by the formal education system and therefore pose a distinctive problem. The status of education in Turkana County is typical of all the ASAL counties of Kenya characterized by low enrolment levels, high dropout rates and poor infrastructural development, in spite of its having the highest number (61, according to Turkana Education Office, 2013) of mobile schools in comparison to the rest of ASAL districts. The mobile school system aims at adapting to the socio-economic lifestyle of nomadic people. It is an alternative mode of providing education to nomadic pastoralists in ASAL areas.

The target population for this study was drawn from the total number of mobile school Centres in Turkana County which were 61 then in 2013 according to the Ministry of Education NFE information desk. The mobile schools were taken as the units of analysis.

## 3.4 Sample Size and Sampling Technique

The sampling frame included all the parents of the enrolled learners in the 61 mobile school Centres and also the teachers in Turkana County (from Turkana County education office, 2013). Maximum variation sampling was used, a non-probability sampling approach. This allows the researcher to purposively and non-randomly select a set of cases which exhibit maximal differences on the variables of interest (McMillan, 2008; Mugenda, 2008). Since the aim of the study was to "discover, understand, and gain insight" (Merriam, 1998 p. 61) into the participation of nomadic pastoralists' children in NFE through mobile schools, this method allows the researcher to use cases that have the required information in respect to the objectives of the study as proposed by McMillan (2008). Creswell (2012) suggests that it

would be ideal in order to display the different dimensions of a mobile school phenomenon as represented by the cases falling at both ends of the continuum. The 61 mobile schools are spread in the six divisions which include, Turkana East, South, West, Central, North and Loima of Turkana County. However, this research was conducted in two divisions that were purposively selected as proposed by Mugenda and Mugenda (1999), the schools found here possess the required information and characteristics with respect to the objectives of the study. Two of the schools were purposively selected from Turkana West division. The two extreme values used for sampling were high and low performing schools which were screened through the parameter mentioned hereafter. In order to allow for multiple in-depth case studies and comparisons between them, the researcher purposively selected the middle performing school, which fall at the middle of the continuum of the other two extremes. Selecting these ranges of choice was hoped to provide robust findings of broad dimensions of the phenomenon.

Initially, a formal case study screening procedure was employed. This was based on reviewing documents and enquiring from area educational office. Thereafter, the choice was based on the number of years the school has been in existence, the distance of the school from the main road, demographic characteristics such as population size; in terms of enrolments, sustaining students through to graduation and the number of clusters that it serves, accessibility (whether the data needed can be collected from the individual case); resources available (whether resources are available to support travel and other data collection and analysis costs); the time available and lastly the security of the area.

#### 3.4.1. Selection of Schools

**Table 2: Distribution of Mobile Schools per Division** 

Division	Mobile Schools	No of Enrolments		Total	No. of schools selected for the
		Girls	Boys	Enrolled	study
West	24	2298	2259	4557	2
Central	14	949	701	1650	1
North	6	372	493	865	
East	7	382	333	715	
South	2	101	120	221	
Loima	8	505	487	992	
Total	61	4607	4393	9000	3

Source: Turkana Education Office, 2011.

Table 2 shows a summary of the schools in Turkana County as at year 2011. The summary is given in terms of Number of mobile schools in Turkana County per Division. The researcher purposively selected the best two performing divisions within Turkana County in terms of the number of schools found in them. These according to the data from Turkana County office shown in Table 2, were Turkana Central (14 mobile schools) and Turkana West (24 mobile schools) Districts, with a total population of 6,207 learners.

From the two purposively selected divisions, two schools were selected that were accessible and had the highest population. However, they were picked from Turkana West division using maximum variation sampling and another one was selected from Turkana central Division as an average performing school in terms of enrolments and that was done purposively. These being the divisions with the highest number of mobile schools meant that using purposeful sampling, the information rich cases were obtainable from the two divisions.

## 3.4.2 Study Participants

In all the three schools used in the study, each had only one teacher officially appointed from the village they were attached to. Therefore, a deliberate (purposive) sampling technique to pick the only three teachers was used as is asserted by Ogula (1998). From the selected three cases, the parents of the third grade were purposively selected to form a focus group discussion. They were presumed to have had their children in school for a long period of time, hence were information rich for the study. The use of parents enabled the obtaining of the perspective of the main stakeholders who brought on board the perspective of the community. Further, it can be argued that they are the once who release their children to go to school. In addition, the teachers of these schools were interviewed as respondents. They were also viewed as being knowledgeable regarding the children as their custodians when they are in school. Lastly, the children in the third grade which is the final grade of the mobile school were used to form a focus group. With the help of the teacher, four learners per school were selected for the study. This type of FGD helped in capturing of the voices of the children and enabled them to be heard as the main beneficiaries of the schools in terms of accessing education contrary to the assumption that children may not be able to or are not entitled to have a point of view (Greig, Taylor, & Mackay, 2007). This is because they are the main beneficiaries who are presumed to have been in the mobile school the longest hence were also deemed information rich.

# 3.5 Description of Data Collection instruments

The following instruments were used for this study: interview guide, observation guide, focus group discussion and document analysis guide in order to produce qualitative information concerning participation of nomadic pastoralists' children in education. Each of these tools is described below.

## 3.5.1 Interview Guide for Teachers

These were formulated for teachers so as to get in-depth information. The first part of the interview guide sort to get information on the biographic data of the teacher in relation to age bracket, education qualification and the length of stay in the school. The next section dealt with general historical background information of the school; information ranging from the general growth of the school and the enrolments trends in the mobile schools. It also sought information based on the objectives of the study to do with conditions that have influenced the enrolment trends and the completion rates of those who enrol and stay through to completion. The challenges influencing accessing of education through mobile schools have also been addressed.

In-depth unstructured interviews were used in order to understand the conditions under which mobile schools enhanced enrolments; the factors that encouraged the enrolled to stay in school till graduation and also the obstacles that face mobile schools. This method was ideal because it created an opportunity for hearing what a participant had to say in own words, voice, language and narrative (Linchtman, 2011). Therefore, this was fundamental in constructing and interpreting the reality from the respondent through the interviewee's lenses so as to understand mobile schooling phenomenon in depth.

# 3.5.2 Document Analysis Guide

The researcher used a document analysis guide to establish the true picture of the level of participation of learners in mobile schools in Turkana County. Documents analysed were the school register and other office records such as minutes which the researcher was interested in finding out the enrolment trends, drop-outs and completion rates. However, some of the drop outs in some of the schools were still recorded as being in school. The other documents were the materials used for teaching such as text book and syllabus and the writing material.

This was intended to help corroborate the information collected through this with that gathered through interviews with the teachers in establishing the curriculum followed. However, the study found out that, all the schools followed the official curriculum prepared by Kenya Institute of Education.

Although the instrument comprised of a format of rows and columns with items to be observed document, these items included enrolments, drop outs and completion rates on yearly basis from year 2010 to 2012. The other tables sort for information which included the subjects taught and the sessions when classes are held.

The study also adopted document analysis guide in order to be able to study the aspects of access to education in terms of enrolments; drop-outs and graduation in mobile schools selected for the study were concerned. McMillan (2008) states that documents supplement or verify data obtained from interviews and observations. The documents included but not limited to class registers, minutes of meetings and other official documents that deemed information rich for this study and hence authentic for use in this study (Scott, 1990). These documents were therefore important in helping the researcher advance understanding and unearth meaning of the study. It was also useful for triangulation of data collected. The information gathered from them enhanced the evidence needed to establish the participation of nomadic pastoralist children in education.

# 3.5.3. Focus Group Discussion Guide

The Focus Group Discussion Guide was used on both learners and the parents. This instruments collected qualitative data and addressed issues related to the objectives of the study. The FGD guide for parents sought information on the general way the mobile schools have enhanced enrolments; the second section was on the conditions that have encouraged the enrolled to stay in school through to completion. And finally, the last section is on the

challenges that have hindered the mobile schools from promoting access to education. On the other hand, the instruments for learners sought to answer two objectives of the study. These include: the conditions that have encouraged them to enrol and stay in school with the aim of completing, being the final level according to the structure of mobile schools. The other objective addressed in the next section dealt with the challenges that they face as learners against their societal expectations. Finally, it sought suggestions for solutions of enhancing access to mobile schools.

The focus group discussions were important since they promoted interaction and insights that would be less accessible without the interaction found in a group (Flick & Foster, 2008). Furthermore, focus groups are economically and practically efficient in terms of data collection from numerous participants, hence increasing the overall number of participants in a qualitative study (Krueger, 2000). In addition, the participants' interaction can yield important data (Morgan, 1988). In this respect, the main aim of the use of FGD was to enable the gaining of more views held by the group than individual standpoints as regards mobile schools. The interaction between participants is a helpful device for encouraging discussion on the topic as it performs a useful instrumental function in gathering data (Krueger, 1994). Morgan (1998:58) asserts that "the conversations in focus groups can be a gold mine of information" about the ways that people behave and the motivations that underline these behaviours. Hence were used for this study.

#### 3.5.4 Observation Guide

This study also used observation as a method of data collection. The researcher conducted observation to cross-check the information obtained through the interviews and focus group discussion. The researcher observed the availability of the school structure, classroom setting, toilets for chalkboard, learners having exercise books and pencils. McMillan (2008)

acknowledges it as one of the essential methods of data collection in qualitative studies. It was used to help triangulate with other data collected through interviews as a way of validating. It was however going to be a complete non- participant observer role on the part of the researcher since she was not involved in the activities of the participants, the researcher obtained information directly from the source as either an interviewer, an observer, or as a person who studies documents.

### 3.6 Pilot Study

A good research strategy requires careful planning and a pilot study will often be a part of this strategy. A pilot study was carried out in Turkana County in a centre which was not to be part of the sampled population for the study. The pilot study was conducted at a Mobile School in Turkana West Division. This school was selected from the Division from which the study selected two other schools used in the study, hence has almost similar characteristics. The pilot study addressed a number of logistical issues. As part of the research strategy the following factors were resolved prior to the main study. It checked for weaknesses of the instruments, clarity of questions or items that the instructions are comprehensible and in line with the objectives of the study. It also ensured that the investigator and technician were sufficiently skilled in the procedures and checked the correct operation of equipment. Piloting also enabled early detection of flaws in administration of the research instruments. In general it helped understand the context within which the research was to take place.

# 3.7. Dependability and Credibility

This is the degree to which all of the evidence points to the intended interpretation of the test scores for the proposed study (Creswell, 2012). This study used triangulation in order to establish facts through the use of more than one source of information. In qualitative research, determining the validity of the study requires 'many sources of data because

multiple sources lead to a fuller understanding of the phenomenon' under study (Yin, 2009). Therefore, triangulation enabled researcher to make use of multiple and different sources, in order to provide corroborating evidence (Creswell & Clark, 2007; Merriam, 1998). For the purpose of this study, interviews, observations and document analysis were used to establish trustworthiness.

The researcher used a thick and systematic and detailed analysis in order to obtain internal validity. According to Merriam (1998), this is the ideal way to answer the question of how one's findings capture what is really there. Through the use of rich thick descriptions, it was hoped that it would allow this study to yield valuable explanations of the conditions under which the mobile schools enhance participation of nomadic pastoralist children; how they are encouraged to stay on till graduation and the obstacles that hinder them to join mobile schools.

Dependability refers to the extent to which what is recorded as data is what actually occurred in the setting that was studied as well as whether the interpretations and conclusions are accurate (McMillan, 2008). The researcher strived to enhance this through several ways such as detailed field notes and the review of these field notes for accuracy by participants. The researcher also used tape recorders, photographs, participants' quotations, literal descriptions and actively sought for discrepant data or cases.

Dependability was also enhanced by abundant use of detail of conversations for instance by including as much verbatim language from participants as possible. In addition, details of both observation and conversation were also used to help illustrate patterns and interpretations. Moreover, the researcher has given details concerning the process that was

used in the research and the setting in order to give a framework from which one can understand the context.

Dependability was also enhanced through member checking. This was done by the researcher who made arrangements for participants to evaluate the conclusions through phone calls, so that the participant can verify that the recording was accurate. This also helped obtain an accurate match between researcher's categories and interpretations and what was actually true. Multiple methods of data collection were used which enhanced reliability of the study and accuracy of the results through triangulation.

Finally, since the researcher is a teacher by profession and was the key data collector, researcher's bias was a concern. The researcher relied on "practicing reflexivity," which Guba describes as revealing the researcher's own assumptions to his audience (Guba, 1981p.56). This was done with the help of an education expert from the area of study who used the instruments for data collection to indicate the researcher's assumptions which helped reduce biases in the study (Yin, 2003). By specifically addressing the concerns of the study and by examining and clarifying researcher's own assumptions, experiences and orientations at the outset of the study, the researcher sought to dispel any prejudices that could impact the study.

### 3.8. Description of Data Collection Procedures

Data collection from each school took several days due to issues related to the availability of the respondents. The researcher used Focused Group discussion Guide, interview guide, observation guide and document analysis guide to collect data from the participants. The written consent of the parents or guardians of the children to be used in the study were also sought prior to conducting FGD with them. The teacher then organized for the parents to be

used in the FGD after which the tentative date and time for conducting it were agreed upon. The researcher carried out face to face interview with the teachers of the targeted schools through the use of a tape recorder. This was in order to ensure that the researcher did not miss out on the information that sometimes is envisioned through participants' body language and voice modulation. On the other hand, the Focus Group Discussion were conducted by the research assistants who were from the local community and hence they were done using local language. Prior to going to the field, the researcher had taken three days to train the research assistants so that they could be acquainted to the study and its objectives.

Focus Group Discussions (FGD) were conducted among parents who have children in the selected schools for the study and children in the third grade. This being a masculine cultural community, the constitution of the FGDs composed of either men or women only. Their views on learning, schooling, own views and values held towards all that pertains taking children to school, financing, management, timing of non-formal school were also sought. They constituted 8-12 people as suggested by Krueger (1994). The constituting of the group was purposive based on gender and all were having learners in grade 3. This being the final year of mobile school, they were presumed to have had their children at the school for long and therefore, more experienced in as far as the objective of the study was concerned. One focus group for parents of grade three per centre was selected for the study. Each focus group discussion was hoped to take approximately two hours. On the other hand, there was a focus group for students in grade three who were also purposively selected. The group involved 4-6 students from grade three and took approximately one hour as recommended by Creswell (2012).

The community being studied has its own cultural way of opening discussions with some refreshments for instance in form of tobacco. In order to break the ice, the group began with some kind of warm up, e.g. people introduced themselves and the researcher specified what the study was all about. This was necessary for the researcher to employ such approaches in order to establish common interests and gain confidence of the participants. Afterwards, the actual interview followed. The researcher employed probes so as to gather as much information as possible. The researcher requested to use a tape recorder during the interview/discussion. The researcher also encouraged them to discuss freely. The researcher tried as much as possible to maintain informality in the focus group discussion without drifting away from the research objectives (Puchta & Potter, 2004).

## 3.9. Data Analysis

Since qualitative research is not a linear, step-by-step process, data collection and analysis was simultaneous. Analysis began with the first interview, the first observation, or the first document read. Data analysis of case study is recursive and dynamic and presents thick description and use of triangulation of multiple data sources to provide strong evidence of issues and factors (Creswell, 2003). Pseudonyms were assigned to the interview participants. This being a multiple-case research study, once transcribing of data from interviews and field notes was done, translation of data from focus group discussion guide was done. Then coding and categorising of field notes and interview for all the cases involved in the study followed. This allowed the researcher to move beyond basic description to the construction of recurring themes and categories. Identifying of categories was systematic and was informed by the purpose and the theoretical prepositions of the study (Merriam, 1998).

This was followed by within case analysis which was used to identify themes within each single case including unique themes or themes that are common to or different from all other

cases involved in the study. Once the analysis of each case was completed, a cross-case analysis was conducted to identify common themes from all cases. Data gathered from document analysis were analysed statistically and the results were discussed in frequencies and percentages.

### 3.10. Logistical and Ethical Considerations

The researcher obtained a permit from the National Council of Science and Technology (NCST) through the Dean, Department of Research and Evaluation, The Catholic University of Eastern Africa before administering the research instruments in the field. The researcher visited the area of study where the research was to be conducted in order to establish rapport with the teachers and also discuss the relevance of the study through the help of the contact person who is a teacher from the local community. Other considerations included getting informed consent from the respondents before interviewing them. Using information only for the disclosed purpose, respecting their right to withdraw at any time and treating respondents with dignity, are necessary requirements that the researcher strived to achieve. The research assistants were also trained for two days prior to field work. They included the moderator and the note taker. They were informed of the purpose of the study and were trained on FGD methods and techniques.

This being a masculine culture community while the researcher is a female, then in order to be acceptable to the community, being in company of a male and a female person (the research assistants) from the community was instrumental in order to gain entry and set the ground for data collection. The FGD did not mix men and women together due to the cultural expectations. Finally, the researcher through the research assistants articulated the contribution that each individual could make to the work especially during the preliminary meetings. The researcher also acknowledged the participants for their time, cooperation and

expressed the dependence on what they had to offer. The researcher also indicated the need to retain contact in case of any clarifications that may be needed from the respondents. By doing so, such psychological benefits cannot be underestimated, yet, it's essential for the researcher to maintain such positive relationships with the organizations and informants (Shenton & Hayter, 2004).

#### **CHAPTER FOUR**

#### PRESENTATIONS, INTERPRETATIONS AND DISCUSSION OF FINDINGS

#### 4.1. Introduction

This chapter presents findings of the study carried out on mobile schools in Turkana County through in depth interviews with the teachers, Focus Group Discussions with parents and learners, and document study. This chapter is guided by the research questions as well as the assumptions of policy implementation theoretical model that has outlined the components necessary for effective and long lasting policy outcomes. Since any policy is put in place so as to provide a service that for other reasons may have failed, success in this arena is determined by each participant's objectives being met and not in set overall objectives. Therefore sufficient flexibility must exist in the policy outlines to allow for the local bargaining process to work since the terms of the deal cannot be fixed in advance by law and regulation.

The features that form the arguments in this section include demographic data which is presented first. This indicates the characteristics of the sample of the study in terms of age and sex for parents and learners; while for teachers, it is presented in terms of age, sex, years of experience and level of education. The findings on participation of nomadic pastoralists in education were analysed in a thematic sequence guided by the following research questions. To begin with, the study aimed at determining the conditions that have enhanced enrolments in mobile schools in Turkana County and how those conditions resulted in different enrolment behaviours among the social group determines. It also addressed the question of the extent the social group of enrolled students' influence how they are supported to complete their studies in mobile schools in Turkana County. In addition, it focused on the conditions

that determine the obstacles that hinder children from accessing mobile schools in Turkana County and lastly the solutions suggested by the participants of enhancing enrolments in mobile schools.

Descriptive statistics were adopted to give a visual impression for example frequency tables and graphs and a commentary provided. Whereas data from Focus Group Discussions and indepth interviews is presented and interpreted and cross-checked with information gathered from documents, interpretation involves making sense of the findings or the 'lessons learned' as described by Lincoln and Guba (1985). This involves forming some larger meaning about the phenomenon based on personal views, comparisons with past studies, or both (Creswell, 2012, p. 257).

# 4.2 Demographic Characteristics of the Respondents

This section presented information of the participants involved in the study. This study used three categories of participants. These included teachers, parents and learners of the three mobile schools used in this study. However, since each school has only one teacher, the demographic information of this category will be handled separately from the rest. For the case of teachers who participated in the study, information about their age, years of experience, and their academic qualifications of those who participated in the study were discussed. With regards to the parents and learners, the distribution of the participants who were involved in the study is presented by sex and also by age. The section begins with teachers, and then parents together with learners will follow.

## 4.2.1. Demographic Characteristics of Teachers

Teachers were asked to give their age, marital status, education level and the length of stay in their current schools. Out of the three teachers involved in the study, the female teachers were two and the other one remaining, a male teacher. Each centre had only one teacher employed by the government. This study however established that two of the schools informally had support teachers who were not officially appointed by the Ministry of Education. This study found it appropriate to involve teachers without considering the support teachers as these were the ones who were information rich. They are all married and in the age bracket of 20-30 years. The length of experience for three teachers is about three years. This in comparison to the age of the schools (School A, 4 years; School B, 5 years and School C, 5 years) indicates that they have information on the schools having been there the longest time. Their education level ranges from KCPE certificate, KCSE certificate to ECD certificate. This triangulates with information from the interviews that they are recruited on the basis of the highest qualified person in a given village; therefore, there is no set out standards for recruitment in terms of level of education. Hence, explaining the variations in levels of education.

This also confirms that their academic qualification is relatively low. It is also in agreement with an education officer from the Ministry of Education, who gave the observation that for a teacher to be qualified to teach, they are recruited on the basis of the highest qualified in the village. This reveals that majority of the community members have not been to school. It also indicates that teaching is carried out by people who are not trained as teachers, considering two out of the three teachers used in the study are not trained, and so the way they handle students of multi-grade and shift systems is questionable. This perhaps may have an effect on the quality of teaching in mobile schools. Although Okumbe (1998) argues that academic qualification will always affect the way individuals perceive different ideas and carry out their duties, this study did not establish this fact. Therefore, age and lack of qualification could be a contributory factor to functionality of the mobile schools. However, for the school that is performing relatively poor and with the lowest enrolments (in 2012, had 50, when the

other two were at 73 and 137 respectively), it is headed by a holder of KCPE certificate. On the issue of gender for the case of teachers, the researcher was unable to determine whether it impacted on influence of participation of children in any way. Therefore, the critical and priority issue with regards to teacher recruitment was the availability of the teacher who had to basically come from that particular community and village.

The length of years of experience was important to determine the information rich teachers of the schools selected for the study. However, with mobile schools, they only have one teacher employed by the government and the services are almost voluntary since they are only paid once a year when the government provides funds, therefore, teachers' turnover is high as they move in search for greener pastures. The amount to be paid is determined by the school management committees and varies from time to time as indicated in discussions of this study later in this section. Perhaps this in a way demotivates them. In addition, due to the fact that this is a payment that is done once a year which is in line with when the government provides funds for running schools, is an issue of concern.

Age of the teachers was of importance to assist the researcher triangulate on the issue of mobility, since the community is mobile and the classes are in shift. Age is a factor that plays a role in the lifestyle of the community and hence the youths are regarded as being stronger due to the harsh environmental conditions, hence can be able to manage to teach under the prevailing nomadic lifestyle inclinations.

## 4.2.2 Gender of Parent and Learner Participants by Gender

Focus Group Discussions (FGD) were held in all the three schools with both the parents and learners who were involved in the study to collect data. Therefore, in each school, two Focus Group Discussions were held except for School A where a total of three Focus Group Discussions were conducted. Two were for both women and men parents separately.

Table 3: Distribution of Parent and Learner Participants by Gender

Respondents	Sex						
	Frequency	Percentage	Frequency	Percentage	N		
	(Male)		(Female)				
Parents	13	29	32	71	45		
Learners	4	25	8	75	12		
Total	17	30	40	70	57		

The study sought information on gender of the parent and learner participants and came up with the information as summarised in Table 3. Table 3 indicates that out of the total 45 parents, who participated in the study, 71 % were female and 29 % were males. Majority (75 % ) of the learners who participated in the study were females while the rest were males. This therefore indicates that female respondents formed the majority (70 % ) while male respondents were 30 %. The lower number of male representation in this study could be attributed to the different family roles for various social groups in this community. This confirms that as the study found out, the women would be left behind carrying out the domestic roles when the men take care of livestock which is their source of their livelihood. On the other hand, for the case of learners, most boys of the school going age bracket were in the fields grazing the animals.

# 4.2.3 Graphical Distribution of Parent and Learner Participants by Gender

The distribution of respondents who took part in the study in terms of sex is further shown below in form of a graph. The X- axis represents the percentage while the Y- axis indicates

the respondents of the category of learners and parents. Figure 2 shows the distribution of Parent and Learner participants by gender.

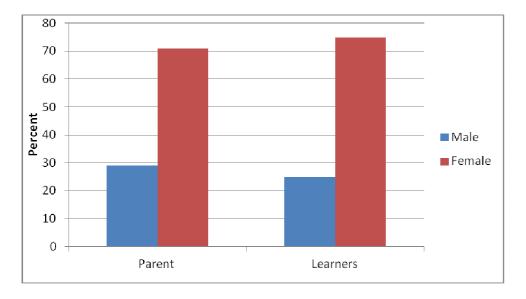


Figure 2: Gender Distribution of Parent and Learner Participants

From the above graph, the female respondents were more than male for both parents (71 % female and 29 % ) and learners (75 % female and 25 % ), respectively.

# 4.2.4. Age of Study Participants

The age of participants in the category was important since there are social groupings within the community set up both in terms of age and sex which influence one's role in the society. This was important to help triangulate with data in line with addressing the objective of participation of various social groups in education and what conditions influenced the existing level of participation in education. The learners used in the study were those in the third level which is the final year of mobile schooling. Varying age characteristics for learners as such enabled the giving of detailed information including different perspectives of mobiles schools as it helped triangulate the data in relation to the extent the various social

groups are able to participate in education through mobile schools in Turkana County. Data obtained from the field regarding the ages of parents and learners were analysed and are presented separately in tables.

Table 4 shows that majority (64 %) of parents were aged within the age range of years 46-55 years. This seems to confirm the fact that most of the strong younger women have already moved up into the hills, accompanying the young strong men in search of pastures. This is according to information as gathered through in-depth interviews with the teachers. Therefore, despite early marriage practices by the community, those involved in the study were the elderly, majority of those who fall in the age range of 46-55. The community set up allows the young women to move with young men far away into the hills in search of pastures, hence leaving behind the young children and the elderly. Therefore, though they may be elderly parents as per the study, they were still information rich since they were with the children who are left behind consequently attending school.

**Table 4: Age Distribution of Parent Participants** 

Parents' Age	Respond	lents	
	Frequency	Percentage	
	N	%	
Below 35	10	22	
36-45	4	9	
46-55	29	64	
56 -65	2	5	
Total	45	100	

On the other hand, the majority (49 %) of learners' age range who are about to transit to formal schools are between age range of 12-15 years, followed by 16-19 (34 %) age range. This may be explained by the cultural setting that allows them to carry out their family roles as they attend school, hence this age range. It also can be explained by the fact that the introduction and establishment of government owned mobile schools is a recent invention with the oldest school having been in existence for five years.

**Table 5: Age Distribution of Learner Participants Learners Age** Respondents **Frequency Percentage** % 8-11 3 17 12-15 8 49 16-19 6 34 **Total** 17 100

## 4.3 Findings according to Research Questions

Themes that emerged from the study were largely related to conditions in which the nomadic pastoralists are able to access education through mobile schooling intervention based on the objectives of this study. With livestock as the economy of this community, coupled with harsh climatic condition that is characterised by perennial drought, then the children are needed look after their livestock. On the other hand, this marginalised group requires a kind of education that is adaptable to their lifestyle. Mobile schooling as an intervention was meant to address this. This study strived to establish the level of participation of nomadic Turkana pastoralist children in education as a result of the intervention.

In their quest to access education against this background, several themes have emerged which will be discussed in relation to the objectives of the study. These are conditions that have enhanced enrolments in mobile schools in Turkana County; conditions that influenced differences in enrolment behaviour among social groups in mobile schools in Turkana County; ways the different social groups of the enrolled students are supported to complete their studies in mobile schools in Turkana County, and conditions determining the obstacles that hinder children from accessing mobile schools in Turkana County.

**4.3.1** Conditions that have Enhanced Enrolments in Mobile Schools in Turkana County In this section, objective (1) of this study (refer to 1.5(i) was discussed. Enrolments of nomadic pastoralist children of Turkana County have been low since the colonial times (Sifuna, 2005). However, this study was carried out in three mobile schools in Turkana County and came up with the following findings. Some of these findings agree and in some cases contradict some grey literature as regards this community.

## 4.3.1.1. Creating Awareness and Sensitization

According to the in-depth interviews and Focus Group Discussions with parents, what emerged as having encouraged people to access school was awareness by the local chiefs, Non Governmental Organisation and seeing what others have benefited with, after having taken their children to school. In investigation of what may have led to one taking their children to a mobile school, a lot of information was gathered from the discussions with both the parents of children in these schools and the teachers. The parents were able to identify chiefs and Non Governmental Organisations such as Norwegian Church Aid and UNICEF as the main sources of information that really encouraged them to have their children join school. Others got to hear from parents who had their children already in school. Since they also wanted their children to get educated and help them, they saw the need to take them to

school. A parent in one of the Focus Goup Discussions said that she had been informed by their chief about the school. The chief had further advised them that they did not have to take all their children to school. Instead they were told to take "half of their children". This was an appropriate approach by the chief considering that the community values their family roles.

Apart from that, the mobile school as an approach is intended to be flexible so that it can meet the educational needs for learners.

### Another one was quoted saying;

I knew about it through our chief who informed us about the school. He told us to take children to school after they have completed their work. So I sent my child to school. I also saw others of our children going.

In another Focus Group Discussion with the parents, some also pointed out that they had been informed by someone they did not know where he came from. But the person told them to send their children to school instead of going to work away from home. Still in another FGD with parents, one of them specified that her child had followed other children who were going to school and later she started attending. This indicates that as more and more children join school, others tend to develop interest and follow what their peers are doing.

These observations indicate that the community had been made aware of school in their village and had also been sensitised on the need to have their children attend school. In the process, what comes out is the component of bargaining according to the theory of MacDonnell and Elmore (1987) which is instrumental for effective policy outcomes.

When this is corroborated with information gathered from the Focus Goup Discussions with learners, it was found out that most of them were informed by their parents to go to school.

This implies that the parents are the ones who mainly made decisions for the learners to go to school.

On the other hand, evidence gathered through in-depth interviews with the teachers indicated that they also played a role in this. For all the three teachers in the three centres, they went round the village talking to parents about the need to take their children to the schools. This was because as found out by this study, the departure of teachers did not imply immedicte replacement with another teacher. This also implied that during that temporal period without a teacher, the schools are not in operation. Hence the teachers who take over the schools have to do recruitment of learners once more. This period however implies that the some of the learners may completely drop out of school and this would have perhaps been avoided if the schools were running continuously.

## Another teacher aptly put it:

This school was mainly established to prevent children from going to work at the camp and also take care of those who were not in school at all. I went to the camp to gather children to come to school. The church did a lot of work in discouraging parents from having their children going to the camp to work there and sell charcoal.

These discussions indicate that with the presence of a school within the village, and then the enlightenment of parents concerning their children to go to school, have encouraged many children to join school. This has played a part in increasing enrolments of the number of nomadic pastoralist children joining school. It also indicates that awareness has played a role in enhancing access to mobile schools. In addition, this being mainly a nomadic pastoralist

We have managed to control this. (Teacher, School A).

community, a lot of lobbying may have played a pivotal role to convince them to have their children leave their duties and go to school. This data can be corroborated with what was found in document study. Enrolments by the close of the first year was 70, while in the second year was 125 learners and in the third year it had 137 in total (data from documents in School A). This indicates that the enrolemnts had been improving yearly.

Findings from FGDs with the learners have also indicated that awareness of importance of education has played a role in motivating learners to attend school. Through their career aspirations, the readiness of the community to embrace education as an alternative footing for a source of income was observed.

In addition to the above argument, the study found that the learners are also driven by different career aspirations ranging from becoming doctors, nurses, teachers and managers of Non Governmental Organisations. Others however were not specific. Some are quoted saying that they will take up any kind of jobs that they will find. While others indicated that they aspire to become anything that will enable them help their people. This implies that the learners are willing to embrace education.

However, despite the role played by awareness in raising enrolments in mobile schools in Turkana County, not all the children of school going age are in school. When asked if they had taken all their children to school, some of them raised the challenge they faced preventing them due the need to have the livestock taken for grazing and search for water. One of the parents in one of the Focus Group Discussions observed:

The goats and camels have to be taken to graze. This cannot stay hungry without food and water. That is the work of the children and the big boys. But the young children cannot graze animals, they can go to school.

This indicates also that the level of participation of these children in education will remain a challenge since they get older, they will take up new roles as expected in the family set up of this community.

On the other hand, some of them had all the children in school but they took shifts to come to school, such that if one was in school for a day, the other sibling takes time to go look after the animals so that they can also have a chance of being in school. One of the teachers observed:

For some of them, if one child attends school for a day like today, the other sibling attends the day that follows. Or if one attends school for two days continuously, the other sibling attends for the next two days that follow.

This shows that prioritisation has been placed on attendance to school with varying alternative approaches being given to the parents regarding releasing of their children to school. This has enhanced school attendance and participation in education to some extent. This may however have led to strain on part of the teachers which is also a problem as far as teaching and learning is concerned.

Despite the fact that there have been improved enrolments in mobile schools, children are able to attend school but not continuously due their family roles. With one teacher per school, coupled with inconsistent attendance of learners to school, the teachers observed that attending to all of them effectively is at times a challenge. In two of the schools used in this study, they already have support teachers. This indicates the need for the government to increase the number of teachers as the need arises so that the growth of the mobile schools is not threatened by insufficient capacity to do so. McDonnell and Elmore (1991) have

acknowledged capacity as a requirement for the success of a policy implementation. This also brings the need for continuous monitoring of the schools so that the provision of services can commensurate with the growth of schools on part of the government which is the sponsor of these schools under study.

Creating awareness through the churches, the NGOs and arm of the government via the chief, has therefore played a role in enhancing enrolments in mobile schools in Turkana. The sensitization on the importance of prioritising of taking their children to school, against the value placed on a nomadic Turkana child in terms of the family roles, has also played a role such that the parents are given the option of having some of the children in school while others are taking care of the livestock. This consequently has led to improved participation of the nomadic pastoralists children in schools.

## 4.3.1.2 Flexibility Found in Mobile Schooling

Flexibility has played a key role in the improved participation of nomadic pastoralist children in school. Flexibility, on one hand, is in terms of not having all the children in school at the same time as already illustrated beforehand. On the other hand, it is in terms of the time which the children attend school and also in terms of place and venue.

According to the information gathered from Focus Group Discussions with parents, learners and in-depth interviews with the teachers, the flexible way in which the parents are treated in regards to their children's attending school is a motivating factor. Parents are able to have their children at school after they have carried out their family roles such as grazing on part of the boys and taking care of their younger siblings in case of girls or going to look after young ones of goats when the rest of the herds has gone far away distance. This can be confirmed by information gathered from Focus Group Discussions with learners when they

were asked the things that prevent them from attending school. One of them observed:

I do not come to school when I have to go and look for the lost young one of the goat.

Also when my mother is sick, she tells me to take care of our child. So I stay with him.

Also, another one was quoted saying;

I do not come to school if we are taking the big animals far away to look for water and food. I wait until we return, then I come to school. I also learn when I am in the hills grazing the animals.

This observation indicates that the learners are able to carry out their family roles and still continue with schooling though at varying times and in that case seasonally. This is because, when food and water is avilable for the animals, they do not need to go very far away. Hence they would be able to attend school. This is a way of showing the flexibilty of the school calender of mobile schools. However, it also implies that the learners are likey to have forgotten what they had learnt and perhaps this may be a contribution to the low enrolments and participation in the mobile schools. Nevertheless, the teacher is expected to use multi grade and shift teaching approaches, being the only teacher in the school.

These observations further indicate that the presence of a mobile school does not interfere with the social roles of the community hence the parents are encouraged to have their children in school. The children therefore have family roles which they have to carry out before coming to school. The parents also value family roles and as long as they are met, they send their children to school. Therefore, flexibility in terms of the time when the child is to be in school is a motivating condition that has encouraged many to access the education

provided through mobile schools. This encourages some form of shift learning, where the teacher attends to the learners depending on their availability. According to findings of this study from in-depth interviews with the teachers, in most cases a teacher holds up to three to four sessions in a day. One of the teachers observed:

I have four sessions in a day. Three during daytime and one is held at night. So I do two in the morning, one in the afternoon and one at night. But those who attend at night are mainly the old 'wazees' (Swahili name implying the parents)

## Another teacher aptly put it:

I do three lessons in a day. Two are held in the morning and one in the afternoon. They take about two hours. I have learners of different ages that may be at different levels in terms of what I have taught because their attendance is not regular like what is found in normal schools.

Since learners are at different levels of learning, it makes it a form of shift and multi-grade classes. Therefore, a child could still catch up on lessons in the mid-morning, afternoon or evening class. This is a factor that indicates enhancement of access to education in this community. The study is in agreement with the findings in Ingubu, Kindiki and wambua (2010), when they emphasize that having shifts in education provision rapidly increases access and improves retention of learners since there is an increase of school places. Giffard-Lindsay (2008) has also confirmed that learning in shifts is feasible in pastoralist areas. However, with shortage of teachers, this may not be done effectively. The fact that some of the teachers as already noted have support teachers, confirms this. Moreover, perhaps the teacher qualification has contributed to the quality of teaching, thereby influencing the low participation levels of these children I education.

The criteria for recruitment of teachers in mobile schools is based not so much on professional experience and qualification but more on basis of being from the target village where the school is established and must be the most educated person in the village in terms of the highest level of schooling. This further indicates that perhaps the quality of teaching is compromised, hence contributing to low participation in education. The findings of my study corroborates with ADEA (2001) who claims that teachers of non-formal schools lacked the necessary training and lacked the skill to organise multi grade class effectively. Furthermore, the need for having support teachers, whose qualification is also not known, to assist as already done in two of the schools used in this study, also questions how effective multi-shift teaching is, for one teacher per school. Moreover, how effective this is in enhancing participation of nomadic pastoralists children in education is questionable. The teachers' desire to have other teachers helping them is an indication of this.

Flexibility in terms of place where the class is to be held was also observed as a condition that has enhanced accessing school of nomadic pastoralist children. Despite the schools being mobile by nature, the learners attend school when and after they have carried out their family roles. Although for all the three schools used in this study have a classroom structure where the classes are held, it is not used on all occasions. On some occasions, the teacher shifts the class to the watering places such that when the children bring the animals for water, then they hold a class from there. A teacher had this to say:

If I happen to know that certain families water their animals at certain points, I normally time when they bring the animals and then I teach them from there. I also give them some work to do while they go back to graze the animals, then I plan to see them another time.

Another teacher observed:

I rarely move the class structure. When the village decides to move, I move with them for as long as they are out there far away in the bush. Then when again there is water and food for the animals, we return.

Some of the parents in the FGDs emphasized that due to the flexibility involved in having one child attending school so that the other can take care of animals was a good thing. Other parents indicated that taking their children to school did not interfere with them in any way since when a need arises whereby they require a child to do something, they just call them from school.

This indicates that due to flexibility of the mobile school, they can take their children when they want them from school. The fact that a parent can decide on when to have a child attend school, and when not to, makes it convenient for parents who prioritise their family roles and cultural practices. The findings of this study is supported by the findings of Patrick and Ijah (2012) in their study on Adult and Non-Formal education Programmes of Non-Governmental Organisations for Poverty Alleviation in Nigeria. Their results show that the level of participation and enthusiasm for participation is increased because the programme is located within the domains of the beneficiaries. Due to proximity of the school to the Manyattas, there is a sense of ownership of the school by the local community. This reduces allays of fears about safety and opens up possibility of flexible hours in the morning or evenings. The schools are located within the Manyattas. This has contributed to easiness in terms of access to the school and the safety of the children especially in times of insecurity. Therefore, this study established that mobile schools have enhanced enrolment of nomadic pastoralists' children in Turkana County in education due to its flexible nature. This is in terms of the time when the classes are held, the place where learning takes place, the flexible approach of attending school for instance on certain days and helping with family roles on

others, the children are able to carry out their family roles and still attend school. This implies that multi-grade and multi-shift of learners of different ages and abilities characterises mobile schools. These are essential characteristics found in NFE which is also flexible in terms of timing when the classes are held and uses multi- grade teaching. The mobile school approach has therefore played a major role in enhancing access to education among the marginalised Turkana nomadic pastoralists group.

## 4.3.1.3. Community Participation in Enhancement of Access to Mobile Schooling

Although the schools that were used in the study are sponsored by the government, the actual running of the schools is in the hands of a management committee that is made up of seven members. This sense of ownership in a way has contributed to the enhancement of participation of the nomadic pastoralist children in education. The study confirms what McDonnell and Elmore (1991) have advocated in Policy implementation. This theory affirms that since a policy is put in place to provide a service that may have failed in its initial provision by a government, then for it to succeed, there is need for transfer of ownership. In this case, authority has been transferred from the government to the recipient of the policy.

This committee has the responsibility of allocating the funds that the government provides after every six months. The committee does the budgeting and is responsible for providing instructional material for both the teachers and the learners. It is also this committee that decides what to pay the teachers. This brings a sense of ownership for the community and the strength of the committee is felt as one of the teachers aptly puts it:

This committee is in charge of all matters of the school. Once they go for the money, they sit down and agree on how it will be used. They normally require three signatures before any money is spent. They go for the money from the Education Office. Even what I get paid is decided by them. ...of course they give me different

amounts always.

This excerpt indicates that the management is in the hands of the local community. However, the fact that the committee is the one that also decides what the teacher should be paid and as was noted, with the payments varying from time to time, then this may be the cause of high teacher turnover. It may also be an indication that having a close monitoring and evaluation system in place to make follow up of what really happens in these schools is important. Therefore, this will provide the necessary changes from time to time that are important.

In addition, this study found out that the community is embracing change in terms of their attitude towards education. They now perceive education to be worthwhile and this can be attributed to the improved enrolments in mobile schools. One of the teachers observed that;

With the mobile phone technology, parents are able to get help from their children as regards may be to the money in the phone accounts. This makes them really appreciate the kind of education their children are acquiring to a point of some of them opting to join school with their children.

This indicates that some of the parents see education as an option to the solution of their problems. It also shows that the mobile schools are able to address the needs of the community to some extent. This can also be corroborated with what some of the learners indicated as their career aspirations when asked in the FGD what they would like to be in future. Some of them said they would like to be doctors, nurses and for some, managers of Non Governmental Organisations. This indicates that the community is already viewing education as an alternative investment for income in future. However some of the learners still linked their aspirations after school with the community's livelihood which is built around livestock keeping. One of them was quoted saying that he wanted to become

"anything" when he completes schooling. Others wanted to own many goats and help their families. Still another was quoted saying that she did not know what she wanted to do after schooling but hoped to help his family when he will be of age and with a lot of wealth.

These excerpts indicate that the learners are also ready to embrace new approaches to life and if such opportunities would arise through education, it would be of importance and help in building the human capital.

The role that the teachers play in enhancing access to education in this community is paramount. This study found out that teachers are recruited from the community and therefore live with the group and in times of moving they move together. This has contributed to enhancement of participation of nomadic pastoralists children in education which may be attributed to the determination of the community to retain their own values, than it would have been the case, if the teachers were from outside the community due to what would be regarded as negative interaction from outside. This also has several benefits attributed to it. To start with, being from the local community implies considerable availability of the teachers since they are with them even as they move from one place to another in search of food and water as demand arises. Inclusion of the use of local language for instruction which was found in all the schools used in this study also creates a sense of ownership. This coupled with the fact that the teacher is from the community gives the mobile school a reflection of the culture of the local community. It also contributes to some sense of security with regards to upholding of the cultural beliefs and values of the community unlike what the community would have experienced if they were to have a teacher who is an outsider. Therefore, this study found out the importance of their cultural beliefs and values being safeguarded, playing a pivotal role in deciding whether to take them to school or not.

When corroborating with findings from the teachers, the study found out that the teachers being from among them are placed in a better position to run the schools effectively. One teachers observed:

The parents would be up in arms if they are told to have their children remove the beads around the necks for the case of the girls or even shave their hair. These are meaningful symbols. Like the beads will tell you of the number of herds the girl's people will be paid when she gets married

### Another observed:

These are our people, we know them too well. Picking a quarrel with them is very easy. You cannot dare stop a child from going to graze animals so that they can come to school. Even they call their children from class when they need them to go and search for lost goats.

By having the schools run by committees which are constituted of members from among the community, coupled with the fact that the teacher is from their own village such that the use of local language for instruction would be easy, has given the mobile schools a reflection of their own cultures. This means that for a community that highly values their traditions, culture and skills that are useful in supporting the survival of the family, they require their children to attend school in an environment that provides a sense of security. Therefore, such a condition is necessary as it implies that it does not alienate the children from the families and disempower them socially and economically as Dyer (2006) purports with regards to what formal schooling does to traditional cultural societies. Consequently, the community is encouraged to send their children to school, hence the enrolments are increased.

## 4.3.1.4. Linkage of Education Provision with Meeting of other Needs

This study found out that the enrolments in mobile schools were enhanced by other benefits that go with it. This ranges from school environment related issues to other related paybacks that come with it. The parents find the school environment warm and friendly and this is a motivating aspect to have their children attend school as already observed beforehand in another section. This indicates that the parents appreciate the children's being in school and hence are encouraged to have them enrolled in school because of provisions such as food that comes with their being in school. In addition, they are encouraged by availability of other amenities for instance water for both domestic and animal use in areas close to the school. One parent observed:

The school is good and the teacher is good. They give food to our children and when I want the child to go take animals for water, I call him in school and he goes. The child can stay and take care of the livestock, I see him doing something for the teacher and then he may come back to school again.

These are just some of the ways in which a nomadic pastoralist child is encouraged to stay in school and balances with family roles as expected by the society they live in. It is a contributory factor to their enrolling their children in school as they feel it does not threaten their social set up whereby a child is able to play the role of a learner without neglecting their family roles. This confirms Ng'asike (2011) when his study points out that nomadic communities prioritise the survival of the family above everything else, thereby making it a prerogative for every member of the family to contribute to the welfare and support of the family. It spells out that the Turkana nomadic pastoralist child has to carry out their roles as expected in the family setting making education secondary and hence can always attend school when the other obligations have been met.

In a way of triangulation from data gathered from the teachers through in-depth interviews, this is in agreement with what two teachers in two of the schools emphatically put it that some of the big boys go away for up-to three months to take camels up the hills, and then they return. In addition, when there was continuous food supply previously as observed by two of the teachers in the schools used in the study, school attendance was good. However, with reduced supply of food, the enrolments have dropped. Considering the harsh environmental condition of the region, food for both animals which is their economic livelihood and human beings is a challenge. Therefore, a mobile school enhances enrolments when it is linked with availability of food and water: hence, on the other hand, the enrolments are reduced when there are no such linkages with other amenities. The teacher in one of the schools observed that;

Currently we are experiencing a drop in enrolments since the time the government stopped providing food. I hear we shall be provided through other means. Currently I borrow from the nearby primary school where we are attached. And the food they give is enough to take us for only one week. But whenever I bring that food, the attendance is very good.

Since the nomadic education framework is aimed at promoting access to education among the marginalised nomadic pastoralists' in Turkana County, then for it to be successful, there is need for the government to contextualise the policy. Most educational policies in Kenya as is also seen in this nomadic pastoralists education policy framework, use a top down approach in policy implementation. Yet, as McDonnell & Elmore (1987) assert in their Theory, the recipients of a policy determine its success to a greater extent. Hence, there is need to allow a bargain between the policy makers and the people targeted by the policy. This is what Ng'asike (2011) seems to emphasize, when he says that the nomadic Turkana people need a

kind of education that matches the cultural lifestyles of Turkana families and children and hence, the policies of education should go beyond provision of education. Therefore, the other inputs that are required to have them in school should also be addressed so that they can participate in education. This confirms that there is need at policy level to ensure that the persistent gap between policy intentions of enhancing access to education among this marginalised group is concerned and what is workable on the ground in order to have meaningful intervention have a nexus. The researcher therefore, suggests that there is need to improve the policy implementation framework at the grass root level.

This can be corroborated with information collated from interview guides with the teachers when probed on challenges that the learners face in school. Some of them indicated that scorpion and snake bites are a common occurrence. Two of the teachers also indicated that there had been cholera outbreak citing the importance of teaching them science. One of the teachers took us to the well where they were fetching water for both domestic and livestock consumption. Figure 3 shows this well. The teacher observed that she teaches the learners on hygeine related topics when teaching Science subject. This was as a way of preventing spread of water-borne diseases like cholera.

From the above conversations, it is observed that some of the teachers link what they teach with the needs of the learners. Looking at the photograph, Figure 4.2, water borne diseases are likely to be a common occurrence with water sources of that kind, coupled with the absence of a proper toilet. Therefore, education would play a pivotal role in empowering such a community.



**Figure 3:** A Photograph of a well

Figure 3 is a photograph of a well where they obtain water from for domestic and animal consumption. The darker part depicts the depression where sand is scooped so as to allow sometime for water to collect before fetching it for consumption. Noteworth is the fact that even animals take water from the same point. Therefore, providing education to the nomadic pastoralists calls for provision of their other needs so that they can access education as they look for ways of meeting their other needs.

In another school where we found a water tank and a permanent structured toilet, the teacher observed:

There was a time last year when we had many people falling sick because of water

shortage. World Vision brought us a lot of medicine and put up that toilet you seeing over there, for us. Later "UNICEF" gave us a water tank. We had been having the problem of water and people used to fall sick often.

This indicates that shortage of water is a perennial problem and since the community has to share the little that is available with livestock, this has some consequencesas, in this case, of outbreak of diseases.

An important feature that was noted about mobile schools is that, despite its being moveable, it is not at times able to cater for all the children in the village, given that the teacher is only one. This is because this study found out that the school, even when the villagers move, they do not all move at once. At times it is the young men and women only who move in search of pastures, hence leaving the rest behind. In that case, the ones who are left behind are the ones who continue with schooling. This is because most of them are the children. Hence this is also seen as one of the causes of low enrolments in mobile schools.

The above conversation indicates that provision of education among the nomadic Turkana pastoralists, becomes the platform in which other social needs are met. For this particular case, having started as a mobile school and now the presence of a water storage tank and a toilet creates a feeling of a permanent home especially for the very old, the nursing mothers and the very young children. This observation shows that the benefits of having a water tank and a toilet in a way makes the community stay around the school considering the gains they are getting from them. However, it implies that the mobility of the school will be curtailed to some extent such that the distance the teacher goes is related to availability of water. This means that for the rest of the groups as they move in search of pastures for the livestock, the school is not likely to move. Therefore, education provision among the community under study is linked to provision of other amenities.

#### 4.3.1.5. School Related Conditions

The mobile schools are established within the domains of the village. This means that the learners are able to access school after and when not carrying out their social roles. The study however found out that the learners are taught various subjects which include English, Kiswahili, Mathematics and science. When however probed on what subjects they liked most, they indicated mathematics. One of them was quoted saying that he loves counting and reading which helps him count goats and money. In another school, one of the learners emphasized that she enjoys learning in the local language especially when they learn songs on "number work" using mother toungue although it is mixed with other languages which she does not understand. This when corroborated with what was gathered from indepth interviews with the teachers, where one of them confirmed that number work is taught for instance through songs whereby a child is taught how to count in local language, English and Kiswahili.

These observations indicate that there is learning taking place in these schools. However, the subjects taught may not be a reflection of what the learners enjoy. This however could perhaps be an indication of the use of local language for instructions playing a role in as far as learning is concerned in these schools. Counting and in that case, Mathematics was observed to be the preference for majority of them. This however does not mean that they are not taught the other subjects. This study found out that to some extent "what they learn in school" encourages some of the learners to attend school. This observation can also be corroborated by what was found out when they were indicating their career aspirations as ranging from, being teachers, doctors and managers of Non-Governmental Organisations



Figure 4: A Photograph Portraying Lesson Content

Figure 4 is a photograph of the contents of what was taught in a one of the schools involved in the study. It confirms that Mathematics as indicated by the "number work" and English as shown by the "alphabets" depicted on the blackboard were being taught.

In addition, the findings indicated that the issue of food and the love for their teachers are some of the issues that have enhanced their attending school. When asked on what they loved

most about schools in the Focus Group Discussions, some of the following were the observations by various learners. One of them pointed out that the school is good because they are given breakfast there and the teacher teaches them "very many good things" and also tells them to be clean. Still another learner also indicted that school is good because they eat and learn in there.

This observations indicate that with provision of food, enrolments have been enhanced in mobile schools. It also implies that learners are motivated to go and learn because the schools are meeting other basic needs. On the other hand, lack of food was one of the challenges affecting their attending school. Some of the learners made observation that they are not able to come to school at times when food is not being provided. Others indicated that their parents told them to go to school so that they can be given food.

These observations indicate that the availability or lack of food affects attending of school. This being an intervention program implies that there is need for the government to ensure the sustainability of mobile schools by not only linking it with provision of other amenities such as food but also maintaining consistency so that it can succeed. This is emphasized in the Policy Implementation Theory by McDonnell and Elmore (1987) which argues that effective policy outcomes require consistency in terms of ensuring that the components needed for a given policy is maintained.

#### 4.3.1.6. Social-Economic Related Conditions

The main cause of the low literacy levels among the nomadic pastoralist community of Turkana County is related to erratic climatic condition. The climatic condition of this region where the study was carried out is very harsh, such that the only means of survival is keeping of livestock which contributes to their nomadic lifestyle as they move for long distance in search for pastures. This translates to learners being in school partially as they have to carry

out their family roles such as grazing of animals and family chores for the girls. In all the three cases used in the study, since at the time of the study, it was during the dry season, the total number of enrolments per school were low as observed by the teachers. One of them had this to say:

Right now the students are very few, but in the next three months, they will be many, especially if the animals will have pastures. But it is difficult to give the exact number of learners. At any one time, we have some of them who have taken the livestock very far away. Although all of them still come back though at different times.

This indicates the difficulty of keeping the exact numbers of the total number of continuing learners in a school, considering their lifestyle as nomadic pastoralists. In addition, it implies that even the mobile schools still face the challenge of providing education to all the learners, despite its flexible mode of approach. Therefore, the low enrolments in mobile schools is to some extent attributed to their lifestyle. However, perhaps if there were more teachers, the enrolments in schools would be more. This concurs with Migosi et al. (2013), in their findings that the main factor that explains low enrolments levels in primary education in Turkana is harsh climatic condition. This confirms that enrolments keep fluctuating due to reasons related to availability of food and water for both domestic and animal use.

Although they were addressing this issue in regards to formal primary schools, the condition still affects participation of nomadic pastoralist children in education through mobile schools to some extent. However, mobile schooling has enhanced participation in education. This suggests that there is a scope to improve their participation in education further.

In addition, internal insecurity, poses the problem of movement even for children and the teacher who is to facilitate learning. This is because teachers are at a risk of attack both in and

out of school. This makes it difficult for the teachers and gives them little motivation to teach in an environment that is insecure. On the other hand, parents are not motivated to have their children go to school lest they are killed while on their way, or even in the school. A parent in an FGD aptly put it:

In times when it is insecure, we all have to move, you don't know when the enemy might strike. Such a time you want your child near you. You don't know if the child will be killed on the way to school...even the teacher can be attacked by the enemy

### One of the teachers observed:

When they are getting attacked, we do not have classes at night. I also don't want to work at that time for fear of my life. I used to have classes at night but when we started having insecurity, I stopped.

These comments indicate that security is a matter that affects learning so much in these mobile schools. The schools do not run when there is insecurity, since any person may fall a victim. Insecurity is mainly caused by conflicts related to livestock raiding in many pastoral societies as a cultural practice of restocking herds especially after periods of drought or outbreak of diseases.

This affirms Schilling et al, (2012) when he emphasizes that insecurity interrupts education, hence posing an obstacle to development. Kaimba, et al (2011) in their study on effects of cattle rustling on household characteristics on migration decisions among pastoralists in Baringo District, found that insecurity destabilizes communities such that they are unable to pursue their normal livelihood strategies.

In addition, cultural issues affect mobile schooling, as is implied through early marriages.

The need to have the girl child staying in school long enough to acquire basic literacy skills is

curtailed by such cultural practices. Yet, as triangulated through an FGD with learners, they have various career aspirations that are cut short once they are married off. The situation was exacerbated by the fact that the decision on who should attend school or not is determined mainly by the parents and in this case the fathers who are the decision makers in the family. This makes it difficult and frustrates children in realising their dreams as already noted earlier on that they look at education as a way of empowering them to become doctors, managers, nurses and teachers among others.

The main obstacle to provision of education to the nomadic pastoralist is their mobile lifestyle in search of water and food for both human and livestock. Considering that livestock is their main economy, there is need to approach provision of education to this marginalised group in a multi-faceted approach. This study concedes to findings by (Lanyasunya, 2012), who suggests the need for focusing on provision of water and food, medical facilities and enhancing their capacity for diversification of livelihoods may ease the burden of provision of education. Coupled with the need for security to be in place so that the schools run smoothly, then there is need to ensure that these pull factors to school are put in place so that they would benefit the schools in terms of promoting access to education. This is because by default, the cost of providing education to one nomadic pastoralist child, if other provisions such as food and medical services have to be included, would be relatively high. As already indicated in this study, school attendance when food is provided, is very high and goes down when the food is exhausted. Such an issue needs to be addressed by the government in the context of the nomadic pastoralists.

## 4.3.1.7. The Extent the Mobile Schools have Improved Access to Education

Considering the populations of students who are enrolled in the three schools, access to

education among nomadic pastoralists in Turkana County have increased over time. The study found out that children who were not able to access school before are able to. However, the enroments are still low inspite of the challenge the fact that monitoring the actual number of those who are still in school is difficult due to the lifestyle of the community. Moreover, the teachers in the two of the schools where food was no longer being provided indicated that the enrolments were very low. This however they attributed to issues of food security. One of the teachers said:

The number of learners in this school has really grown. We have seen them increase in numbers so greatly. In most cases they only attend when they are within the village. You might think they are few now. It is because sometimes they go far away into the hills. The only problem is getting all of them at once, together.

#### Another teacher observed:

I can say that many children can now be able to get a chance to know how to read and write. They have been staying in the bush for so long. They need this so that they can improve on their lives. We encourage parents to send their children to school so that they can have their breakfast here. And for the children who refuse, we advise the parents to deny them breakfast even at home. When they know they will get something to eat, they come in big numbers.

Considering the climatic condition of this region, the issues of drought abound. Hence use of food as an incentive is effective in encouraging children to attend school. This indicates that enrolments have gone up over time. The motivation of knowing they will take some food in school drives them to attend school where they are also learning.

On the other hand, when the issue of increased enrolments is corroborated with data gathered from document analysis, indicates the reverse since the enrolments have been decreasing over the last three years in two of the schools. As shown in Table 6, School B in 2010 had 85, in 2011, 75 and in 2012, 73 learners. In school C, 90 learners were enrolled, in 2010, 75 learners in 2012 and 50 in 2012. This indicates that the enrolments have been declining over time. Unless this decline in enrolments is put to check, then some of the mobile schools may eventually close down. The findings of this study therefore confirm Kratli (2001) who argues that the relationship between pastoralism and education is generally known to be problematical.

**Table 6: Distribution of School Population** 

Year	School Population					
	School A	School B	School C			
2010	90	85	90			
2011	125	75	79			
2012	137	73	50			
Total	352	253	219			
Yearly Average						
Enrolments	117	84	73			

Table 6 shows the enrolments for the past three years in the three schools used in the study between years 2010 to 2012.

To obtain the Yearly Average Enrolments, the following formula was used:

$$Average = \frac{total\ enrolled\ in\ three\ years}{number\ of\ years}$$

In addition, table 6 has further shown the average enrolments per school that has been computed using the above formula. School A has the highest average yearly enrolments (117

learners), followed by School B (84 learners) and then School C (73 learners). School A has food programme under a church organisation which is regularly provided unlike the other two schools which are experiencing food shortage as a result of the government's directive as reported by the teachers during the in-depth interviews. Among the schools that were used in this study, School A is also the only one that has a learning session at night which constitutes the elderly. Perhaps this may be attributed to availability of food. This therefore, explains that the differences in enrolments trends as reflected in Table 6 is not just because of the presence of a mobile school, but also as a result of multiplicity of factors.

More evidence indicating that this community is accessing school was also indicated by the learners. In this regard the learners indicated that they have different interests that have drawn them to go to school. In one of the Focus Group Discussions with the learners, some of them on being asked what drew her to go to school, they raised a number of ways. Some of them followed others who were going to school and some were told by their parents. This study therefore found out that at this level of education, the children from the Turkana nomadic pastoralist community are accessing school leading to improved enrolments due to varying reasons as indicated above.

# **4.3.2.** Conditions that Influence Differences in Enrolment Behaviour among Different Social Groups

The findings of this study indicate that access to education for a Turkana nomadic pastoralist child is pegged on varying family roles that each member of the family plays. This is based on the gender and the social role of an individual learner. This section will look at the conditions that influence access to education based on these two different social groups among unreached children of the nomadic Turkana pastoralists.

#### 4.3.2.1. Education Provision Based On Gender

To start with the enrolments of children in the mobile schools is after a lot of awareness campaign's as already highlighted in this study. It was however noted from the in-depth interviews held with the teachers that early in the morning, girls were able to attend school but most of them are in company of their younger siblings. This is an indication of the role of the girl child in the family setting which is to take care of their young siblings. Hence, they are even able to attend school without much of a problem. On the other hand, boys are able to attend school from mid-morning and in the afternoon. This is after they have taken the animals for grazing. In an interview with the teachers one of them observed:

The animals go for grazing early in the morning before it is very hot. Sometimes they go very far. When it is around 1 o'clock in the day, they bring the animals to take water. This is when I teach the big boys. Also, sometimes when the strong men take the big animals up there in those hills, they at times take several months, and it can even be three months, then they come back. So I teach them when they return. (Teacher, School B)

This implies that the boy child is not able to attend school so much when they are young in comparison to the girl child as will be seen in the data discussed in the next section, however as they get older, the boys do stand a better chance of being in school more than the girls. On the other hand, the girl child is able to attend at a young age because their social role at this time is still minimal, in this case, taking care of the siblings.

However this study found out that most parents especially in all the Focus Group Discussions indicated that they felt there was need to have all the children in school so that they could find jobs and take care of them. This implies that most of them are already taking up a different approach to survival. One of the participants in the FGD with the parents aptly

captures this consensus when he observed that;

For me I was taught how to take care of animals at home. Let them go to school and learn something else there. Other children have gone to school and are able help their people. Let many children go to school so that they can help us.

In this particular mobile school, they had recently lost most of their livestock through drought in the past. This could therefore be an indication of the reason that holds back a Turkana nomadic child from attending school. This also indicates that for this community to take their children to school, it is based on sound reasoning aimed at solving daily problems. This concurs with Kratli (2001), when he argues that taking a child to school is like standing with two legs, one in school and the other with the livestock. This metaphorically implies that their regard for education is taking route as an alternate route to economic empowerment.

#### 4.3.2.2. School Attendance Based on One's Social Role

The present study confirms the importance of livestock as playing a significant role in influencing the level of participation of nomadic pastoralist children in education especially the girls. Determining of who should be at school and when they should be in school and when to stop, indicates the pivotal role of livestock among the Turkana nomadic pastoralist. This confirms findings by Schilling et al (2012), when he says that livestock is a fundamental form of pastoral capital besides functioning as a means of production.

Parents on the other hand are able to attend school at night like the case noted in Nakoyo mobile school. This is after having carried out their duties during the day time and so attends school when they are available. Flexibility of time therefore is able to accommodate the cultural set up of the Turkana nomadic pastoralist community. It also shows the extent the community is readily appreciating education as an alternative path to invest in for income development.

However, when the girl child grows, the roles and responsibilities also change. As the girl gains more domestic responsibility, their attending school when older slows down. Most of them drop out of school completely. Yet boys on the other hand are able to still attend school without neglecting their roles of grazing animals at the time when they are required though on a flexible mode. As already indicated in the previous conversations, the boy child- will stand a chance of being in school for long unlike the case of the girl child who will have to leave school and get married so that they can bring wealth to their family. Therefore, in terms of gender social group, boys are likely to be in school long enough to acquire education unlike the girls who might end up dropping from school at a very tender age in comparison to the boys.

The cultural practice of paying of dowry in form of herds of livestock, which is the economic good in this community, discourages education for girls. This is because girls are seen as wealth "bringers"- people who bring wealth to the community unlike boys who are seen to be a cost on side of the parents. A parent observed during one of the FGDs;

Girls bring riches, they are riches... but boys are children... let them go to school. They require big herds of livestock for dowry payment. If the boys are able to go to school and get jobs, they will also be able to help the community.

The observation that comes from this interaction is the primacy of the community, which is their economic source of livelihood, the livestock. This observation implies that the girl leaves school once the opportunity arises for her to bring wealth to the family through proposition for marriage. This indicates that boys on the other hand therefore, enjoy preference to girls when it comes to education. This is an indicator of gender difference in terms of unequal opportunity to attend school for the case of girls in comparison to the boys.

This gender difference is consistent with the results of a study on the factors affecting access to basic formal education among the nomadic pastoralists of North Kenya: A case of Samburu (Lanyasunya, 2012) which found out that there were more boys enrolled in primary school than girls. This indicates that there is scope to improve provision of education in the mobile schools.

This study revealed that this community uses livestock economy in most of its cultural practices. The bigger the herd that one owns, the wealthier the community regards you. This is confirmed when we are told that it is due to the dowry being paid in form of livestock, including other ways of settling of disputes of various kinds in the community that are contributory factors to most of the ethnically instigated conflicts (Schilling, et al, 2012). This study also corroborates with Schilling et al (2012) in the findings of his study when he asserts that livestock ownership plays various social and economic roles in pastoral livelihoods such as a source of food in form of milk, meat and blood for household members; cash income for payment of healthcare and other services; symbol of prosperity and prestige and storage of wealth among others.

This study found out therefore that there are varying differences of levels of participation of girls and boys in education among the nomadic pastoralists' community. The girl-child does not seem to have the same opportunity to education as the boy-child does. This is mainly due to their social cultural orientations. There is need for more sensitisation and awareness on the need to encourage their children to go to school. On the other hand, there is also need to focus on policy reforms that would help revert this practice. Gender equality can only be achieved through policies that can challenge some of the cultural practices that create this attitude such as early marriage. On the other hand, public policy on child labour practices should be enforced, so that children are encouraged to attend school.

Age group is also a determiner of the extent to which one is available to attend school. This is due to the family role expected by the community at different time intervals. For instance at mobile school A, parents would only be available at night while the young men who have recently married would come for the midmorning session. This according to the teacher is after they have grazed the animals in the morning. Therefore, most of the very young ones attend school in the morning with their siblings and others during the mid- morning. This indicates that mobile schooling has been able to enhance access to education among the Turkana nomadic pastoralist community despite the social roles of different age groups in the community which would have acted as hindrances. This is due to use of shift approach in mobile schooling, in a community where every member of the family is expected to carry out certain roles. This is affirmed by Ng'asike (2011) when he says that the survival of families in nomadic communities is paramount requiring every member of the household to contribute to the welfare and support of the family. It is along these roles that different social group's access education in mobile schools.

## 4.3.3. Conditions Supporting Various Social Groups Enrol in Mobile Schools

The Turkana nomadic pastoralist group operate in a structured family set up whereby the survival of the family is critical such that each member of the family has a role to play. To them livestock have numerous roles in their lifestyle most importantly as a source of livelihood and socio-cultural functions (Kaimba, 2011). Yet, they move from time to time from their home bases and drive their herds to places with water and pasture. Despite this, this study has found out that mobile schooling has enhanced access to school among the marginalised nomadic pastoralists in the following ways as discussed below.

## **4.3.3.1.** School Related Dynamics Influencing Access to School for Different Social Groups

Mobile schools operate in a unique way as a non-formal kind of education designed to enable

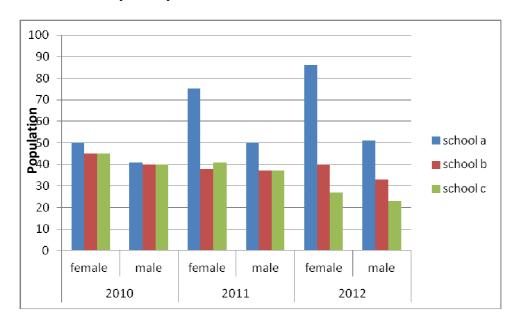
a nomadic pastoralist child in Turkana to participate in education. For all the mobile schools involved in this study, their age range from five years (for school B and C, they were established in 2008) to three years (School A which was established in 2010). The curriculum is condensed once they graduate from the mobile schools which have three levels, they should be able to join class three in a formal primary school. The time they take in this non formal kind of education is shorter as indicated by the data collected from document study that some have already been transited to formal schools considering that their attendance is not full time as the case of their counterparts in formal schools. The time taken to go through the three levels is shorter. Document study, in one of the schools that was established in 2010, showed that five boys were transited to formal schools at the end of year 2011. This is also indicated by the fact that they are handled by one teacher who is to teach all the learners who are at different levels in terms of academic achievements and of different age group. This being a programme geared towards meeting the needs of the intended client, the flexibility involved in terms of where the class sessions are held and how it is delivered, has led to improved access to education for the different social groups in this community based on both gender and age of the learners.

Table 7: Gender distribution of enrolments in the three schools

Year		School	
	School A	School B	School C

	Female		Male		Fema	Female		Male		Female		Male	
	n	%	N	%	n	%	n	%	n	%	N	%	
2010	50	55	41	45	45	53	40	47	45	53	40	47	
2011	75	60	50	40	38	51	37	49	41	53	37	47	
2012	86	62	51	38	40	55	33	45	27	54	23	46	
Total	211	60	142	40	123	53	110	47	113	53	100	47	

Table 7 shows the distribution of the enrolled students in terms of gender in the three schools used in the study from year 2010 to 2012.



**Figure 5:** Gender Distribution of Enrolled Learners

Figure 4 is a further illustration of the information indicated in Table 7. The figure shows the enrolments in the three schools used in the study according to gender from year 2010 to 2012. The overall best performing school in terms of enrolments is School A which had the highest population of enrolled female learners in 2012 (86 girls) and is still enjoying the highest enrolments in terms of the population of the enrolled number of boys (41 boys) for male

learners in the same year. However, the female category is higher than the male one, indicating that access to school varies from one social group to the other. On the other hand, the poorly performing school in the same year according to the study is School C which had the lowest enrolments for both boys whose population totalled to 23 and girls who were 27 in total, but still when compared between the male and female social groups, the female learners are still more than males. The other school which is average had 40 girls enrolled and 30 boys in 2012, still indicating the same trend as the other two that the girls enrolled were more than the boys. This could however be attributed to family roles in this community which keeps the boy child away from school because they have to take animals for grazing, while the girls are able to access school when they are young as they take care of their siblings whom they also bring along to school.

In addition, for the three years under study, School A in comparison to the other schools in terms of enhancing access to education for the nomadic pastoralist community is the best in performance. This is because in both gender social groups, the enrolments have been increasing in the three years. For the female social group, the enrolments for years 2010 to 2012, they were 50, 75 and 86 respectively while for the males, they were, 40, 50 and 51 respectively for the same period. On the other hand, for school B and C, they have had downward trend in the three years. To begin with School B, from 2010 to 2012, the female enrolments reflected as follows from data gathered from the document study: 45, 38 and 40 respectively for the three years, while for males they were 40, 37 and 33 respectively. School C on the other hand enrolled 45, 41 and 27 females respectively for the three years whereas it had enrolled 40, 37 and 23 for the males in the same period. This on the other hand may be attributed to other factors such as food since School A is providing food to its learners while the other two have stopped temporarily 'awaiting the new government's directive' (This is

after April, 2013 National elections in Kenya) as one of the teachers put it. This data shows that a number of children who were not able to access school before are now in school. This also indicates that there has been enhanced access to education after introduction of mobile schools among the nomadic pastoralist community to some extent. However, the enrolment trends indicates that instead of growth indicators showing an upward trend, two of the are showing a downward trend. This implies that the enrolments are still relatively low. Despite the effect that lack of food may have been one of the causes.

However, in the formal primary schools where they are transited after attending the mobile schools, the picture is different. This is because boys enrolled in school are more than girls at that level. UNESCO (2010) confirms that while the national net enrolment rates in 2007 stood at 91.6% having grown steadily from 80.4% in 2003, Turkana had 40% in 2007 having risen from 29.3% in 2003. However, the girls' net enrolment rate was 25.5% against 33% boys in 2003 versus 34.8% girls and 45.2% boys in 2007. This indicates that among the enrolled in formal schools, boys are more than girls as they move to higher levels. This was however attributed to the fact that as they grow to maturity, they would get married leaving the boys schooling though still they need the flexible mode of attendance in line with the nomadic lifestyle of the community. These findings are in agreement with what Ezeomah (1983) found out in his study that girls are married off at an early age, mainly between 9 and 13 years. Since in the African set up marriage is considered a duty and a requirement from the society whereby if one doesn't partake they are cursed (Mbiti, 1969), coupled with the bridal wealth payment as a source of wealth in the nomadic pastoralist community, then girls get married as soon as an opportunity presents itself. Therefore, this explains the reason why the percentage of girls enrolled for three years in the mobile schools used in the study in terms of gender is more (School A, 60 %; School B, 55 % and School C, is 52 %) than for

boys (School A, 40 %; School B, 45 % and School C, is 48 %) at this level.

For instructional purposes, mother tongue, Kiswahili and English are the subjects used by the teachers as found out in all the schools involved in the study. These aspects make it easy for the teacher to teach various social groups despite their varying levels in terms of education. Woldab (2012) found out this in his study on Impediments in the Provision of Primary Education for Nomadic Pastoralists Afar Children in Ethiopia, that it is difficult for most of the nomadic pastoralist children to study using a language that is not their mother tongue. This explains that use of mother tongue has also contributed to enhancement of access to education among this marginalised community.

On the other hand for those who attend school, they are able to meet their respective social expectations at different times and seasons, and yet, continue with schooling when not carrying out their social roles. The teachers had this to say:

The girls come to school mostly in the morning accompanied by their younger siblings, yet for the boys most of them attend school later in the day from midmorning after they have grazed the animals early in the morning. But for the parents, they come at night.

In addition, this observation showed that the community is slowly adapting to ways of alternative sources of income and education is gaining importance in their midst. Furthermore, with their mobile lifestyle and the proximity of the school to the village, makes it convenient especially for boys who mainly take animals to graze. However, for the girls who later on marry after becoming of age so that they can bring wealth to their families, they do not continue with schooling.

These findings corroborate with the data gathered through Focus Group Discussions by

learners who indicated when asked on what prevents them from coming to school. Some of the reasons that they gave included looking for the "lost young one of the goat", others did not attend when they were sick and others when they are required to take animals for grazing. What came out of this observation is the cultural aspect that works against education for boys at the early stage of their life and later, that of girls as they grow. This brings about the need to investigate ways of sensitising the community on the need for educating their children especially the girl child without creating a conflict between education and the community's cultural values. Coupled with poverty levels, there is a dire need for a way of enhancing attendance of school for the nomadic Turkana child through looking for ways of managing the drought cycle. So that even as the boys take the animals for grazing, they are able to go on with schooling, on the other hand. These are areas that need to be addressed at policy level so that there can be improved access to education.

## **4.3.3.2.** Social Cultural Dynamics Influencing Participation of Various Social Groups in Education

Although both boys and girls have been able to access education in the mobile schools, there are different trends in terms of the extent of the level of participation in all the schools as already seen in Table 7 beforehand. For those who enrol to school, the extent to which they participate in education varies from one social group to the other. Different social groups have varying drop out trends from school, based on the community's cultural practices. Girls for instance stay in school because they are young. Once they are of age, they are married off to in most cases very elderly men. The use of herds for dowry payment seems to encourage this practice considering that their economy is built around livestock. However, they are married when they are at a very tender age. These cultural practices have affected the participation of girls in education. One of the teachers observed:

In the last three months alone, six children have been married off at the age of 12, 13, and 15. Instead of parents encouraging them to come to school, parents come to tell them to be married off to very old men.

The cultural practice of marrying off of girls at a tender age translates to more wealth to the family, since dowry is paid in form of herds. The result of this is that the length of time that the girls stay in school is affected since they end up dropping out of school to take up their new social roles. The findings of this study therefore agree with Schilling et al (2012). Their study found out that livestock is indeed a symbol of prosperity and prestige hence girls are seen as wealth bringers and cannot therefore continue being in school when they attain the age of getting married, they are pulled out of school to get married.

The above observation can be corroborated with information gathered in one of the interviews with one of the teachers in one of the schools where, the local chief married off his daughter who was doing very well in school and then in what seemed an attempt to console the teacher, he replaced the daughter in school by joining her daughter's class. The local chief is also a school committee member in the same school. This observation shows the weak role of school committees in encouraging children to enrol in schools and the community structures to encourage participation of nomadic pastoralist children in education. This brings the need to have the community leaders sensitised on the importance of education so that they role model to the rest of the community and encourage them to take their children to school.

Another social dynamic influencing access to education is mobility of the village clusters. The study found out that as the community moves in search for water and pastures for the livestock, not all members move including the mobile school. In some cases, the girls are left behind instead of moving with the big herds so that they can take care of their young siblings.

This gives them a better chance to attend school; particularly in cases when the school does not move. This in a way suggests that they stand a better chance than their siblings who happen to be boys. In other instances if parents fall sick, the girls are the once who are left in charge of the rest of the family and so they discontinue with school to take up the new responsibilities.

Economic livelihood issues, in some cases, inhibit access to school for nomadic Turkana pastoralist children. For instance, some children may help with selling of charcoal or firewood so that the family can raise at least some income that would help them get something for food. An in-depth interview with a teacher in one of the schools near Kakuma observed;

This school has done a lot in discouraging and fighting the practice of going to seek employment in the refugee camps for children as well as going to sell firewood and charcoal. This was one of the reasons for establishing this school.

What is implied from this observation is that though the community is nomadic, in some context, their source of livelihood is not livestock keeping only. They in some situations look for other ways of earning a living. Therefore, the main social dynamics that have inhibited access to education are the cultural practices such as for the case of girls being married off at a very tender age. Such practices are motivated by the fact that they revolve around the economy of their livelihood. They bring bridal wealth for the case marriage, while activities such as selling of charcoal, firewood and working as domestic workers are triggered by the need to earn a living by engaging in these socio economic activities.

#### 4.3.3.3. Child Labour Practices outside Nomadic Pastoralism Lifestyle

Other forms of child labour practices were identified by the findings of this study as having

influenced participation of nomadic pastoralist children in education provided by mobile schools. A teacher observed in one of the interviews:

Nobody was able to join the primary school in 2010, instead for the twelve who dropped out made up of 4 girls and 8 boys, some of the boys went to dig gold at Naduat, a village nearby. While all the girls got married.

Although, the community is known for being mainly nomadic pastoralists whose source of livelihood is keeping of livestock, due to loss of livestock in most cases to drought they look for alternative ways of raising income. This is why some of the big boys take up other jobs such as mining of gold. Others have secured jobs such as domestic workers and some as watchmen at the refugee camp (a teacher from one of the mobile school). This indicates how poverty levels have affected schooling negatively. The need for investigations of ways of building the community economically arises at this point. One of the teachers observed:

Some families are only able to have a meal a day. This makes it very difficult for them to concentrate and have interest for learning. Some of the bigger children go to look for a way of raising a source of income.

In such a case, being in school would be in conflict with the roles that the children play in their families. It has also implied that child labour practice is common in the community. This shows that the government needs to put measures in place to curb this practice. Dyer (2010) asserts that education and in this case mobile schools can help curb child labour. However, this does not seem to be effective in the case of two of the mobile schools addressed by this study. However, one of the mobile schools near Kakuma, seems to have managed to curb child labour to some extent. The teacher in this school observed:

The genesis of this school was to have the number of children going to the refugee

camp to look for employment reduced. This we have done with a lot of success since very few children drop out of school to go look for work there. But some of the women and a few girls still go there to sell charcoal and firewood.

This indicates that to some extent mobile schools have helped reduce child labour practices among this nomadic pastoralist community. This also shows that schooling can help alter the child labour structure in the community depending on the context, to some extent. This fact also suggests that the community is ready to embrace new forms of raising income and hence even taking up education as an alternative route to investment in income generating alternative, can be embraced by the community hence leading to their being empowered.

## 4.3.4 Challenges Affecting Education Provision through Mobile Schools

Various social groups have been able to access education through mobile schools. Although mobile schools have enhanced access to the marginalized nomadic pastoralist groups in education, those who enroll do not stay in school continuously due to their nomadic lifestyle. Assessment of the conditions that contributes to the challenges that hinder provision of education through mobile schooling as viewed by parents; teachers and learners are discussed in this section. Participants in Focus Group Discussions and key informant interviews singled major problems affecting mobile schools as outlined below.

## 4.3.4.1 Teaching Capacity Challenges

This study found out that the staffing in mobile schools is a challenge. In all the three schools that were involved in the study, one of the main emerging obstacles to educational provision is shortage of teachers. According to the government structure, at the beginning and the initial stages of a school, the school needs one teacher only who must be from the community and lives with them. This indicates that in considerations of a mobile community, this must be a member of the community who moves with them as they move in search of pastures

(UNESCO, 2010). The qualifications of a teacher, are further pegged on the most literate person who is ready to offer voluntary services to the community. From the interviews held with teachers from all the mobile schools, what came out indicated that their highest academic qualification ranged from, KCPE to KCSE certificate, except for one of the schools whereby the teacher has done ECD certificate course. What is noteworthy is the fact that even for this trained teacher, he is already mentoring the teacher to leave behind "when his time to leave comes" as he put it. The variations in the qualification of teachers indicate that there are no set out standard guidelines on this.

In all the three schools taken for this study, all the teachers involved in the study are quoted saying that they did recruitment of learners once they joined their respective schools. This implies that the schools were not running and that is why they had to do recruitment again. Perhaps during this break also, so many students may have dropped out completely, though some may only be away grazing animals as per their culture. In addition, without continuous learning, the chances are that they will have forgotten what they had learnt. This will make them start learning all over again. This results to delay in learning and consequently the completion time period and completion rates are affected by such obstacles. Coupled with the community's mobile lifestyle, the delay causes further interruptions which prolongs the completion time, hence leading to low transition rates. As document study indicates, the completion rates for the schools used in the study indicate that for School A which is the most recent and has only been in existence for the last three years has a completion Rate of 14 percent against the School B which had 19 percent, yet has been in existence for the last five years. This study found out that it is the best performing school since going by this rate, by the time it will be five years old; it will have had many more learners transited to formal primary school. This could be attributed to the fact that the school is still providing food to

the learners and also perhaps due to the fact that the teacher in this school is trained in Early Childhood Education (ECD). The lowest performing school has transited only five percent of its total enrolled learners, yet it has been in existence since year 2008. This could however, be attributed to the fact that provision of food by the government had been stopped temporarily and probably due to the teacher qualifications which is KCPE (Kenya Certificate of Primary Education) certificate. The fact that the school has a water tank also indicates that they are likely to be in one place for as long as the water is available. The teacher in School B has completed KCSE (Kenya Certificate of Secondary Education) certificate level. This explains why the school has that kind of completion rate. This is also the teacher who had been away for some time due to a sick child. On the other hand, the school may still have been affected by the cholera outbreak.

From the interviews with all the teachers, the examination given to certify one as having completed schooling and hence ready to transit to formal school is from individual teacher's own resourcefulness. This confirms that no form of formal certification is provided to them. This also implies that determining criterion for one to transit to formal school is subjective to individual teachers' discretion, considering that their qualifications as teachers vary. This perhaps explains why when they transit to formal schools; they are not able to stay for long before either dropping out or resuming to the mobile school. The researcher is of the opinion that in-service training of teachers and seminars would help facilitate fill this gap of capacity building to some extent.

In terms of gender social groups and the rate of completion, the overall completion rate for boys is higher (22 %) than for girls (20 %) in all the three schools. When triangulated with previous data already discussed earlier on in this chapter, this could be attributed to the cultural practices of the community whereby the girls attend school only when young after

which once their domestic roles increase in tandem with age, then they drop out of school to take up their roles. This leaves the boys who are able to continue with education in the mobile schools after they are done with grazing the livestock as the community requires of them.

**Table 8: School Gross Completion Rates** 

School	Total Completion by Gender						
	Girls		Boys		Total	Average	Gross
						Yearly	Completion
						Enrolled	Rate (%)
	N	%	n	%			
School A	3	3	13	11	16	117	14
School B	12	14	4	8	16	84	19
School C	2	3	2	3	4	73	5
Total	17	20	19	22	36	274	13

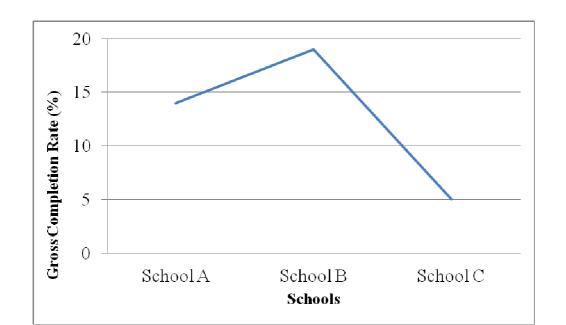


Figure 6: School Gross Completion Rates

The Table 8 shows gross completion rates for the mobile schools under study.

To obtain the compute the Gross Completion Rates:

$$Gross\ competion = \frac{Total\ completed}{Average\ yearlly\ enrolled}\ x\ 100$$

For each teacher who was interviewed, they have taken over the schools from other teachers. However, in one of the schools, in an attempt to maintain continuity, the teacher is already having a support teacher whom he is coaching to take over the school from him. On being probed he asserted that the learners need someone who will know how to handle them. He emphasizes from his experience that it is important for a teacher to know how to teach the kind of learners that they have. This was in reference to school A. It was observed that the the support teacher mainly handles the adults in the evening. Considering he is the second teacher to work in that school, whereas the school is only three and a half years old, indicates that the teacher turnover is high in mobile schools. From the enrolment trends, the school has been growing steadily as indicated by data from the document study. In terms of

qualifications, this is the teacher who has done ECD and is already preparing to leave. However, from document study, the school has been doing well since the enrolments have been increasing gradually year after year. This is evidenced as indicated: in year 2010, total enrolled in this particular school were 90, 125 students in 2011 and 137 in 2012 (data was obtained from document study). Moreover, considering that even the other teachers in the other schools used in the study had taken up the schools from others, yet the schools were established in year 2008, both have had two teachers before the current in a span of five years. This indicates that there is need to do further studies on what really contributes to teachers' turnover if these schools have to run smoothly. Another issue that emerges from the study is the need to have investment in capacity building of the teachers so that they become more motivated to do their work. Increasing the number of teachers per school may also require attention so that when one of the teachers is away, there is another to stand in for them and in that case learning will still be going on at the very least. Therefore, the teachers' morale needs to be increased such that at time for exit formal arrangements are made for handing over to enhance continuity.

The kind of teaching/learning that is taking place is as subjective as some of them are not trained in any way to teach. It also implies that the depth of the teaching itself is relative depending on an individual teacher's discretion even with the presence of a syllabus. The voluntary aspect also may be the cause for the teacher's option of leaving once they find greener pastures since they may also want to earn some income in the least. Therefore, the government needs to set up a section within the Ministry of Education to specifically oversee the running of mobile schools so that close monitoring and evaluation is done. There is also the need to provide to them in-service training to enable them work more effectively. Probably, the teacher turnover also has an effect on the quality of education provided in the

mobile schools hence contributing to low transition rate.

From the findings of this study, it was observed that as time progresses and the enrolments increase, the teacher finds the size of the class and workload overwhelming and may need the services of an assistant teacher. This was present in two of the schools that were studied. In one of them, the teacher has a fourteen year old boy who helps her while she is away sometimes by the water point, teaching the bigger boys whose time for for watering animals has been mastered. In this particular case, the teacher leaves the other younger children in the hands of the boy. The teacher however is quick to emphasize that the assistant teacher only handles teaching of: '....A, B, C,' (In reference to the alphabet one of the basic elements taught in preschool).

As the following responses indicate, the growth of school without commensurate increased teaching force, may be risking compromising the quality of education. In one of the schools where the school register indicated a total of 375 enrolled students, on being probed on how she managed to hold such a large number of learners, she aptly explained:

But they do not come to school all at the same time. Some can be in school for two months then they go up the hills to take care of the camels. In such a case for some I may give them homework which they do and then bring the books later. While in other instances, I know when certain families bring their livestock to the well for watering. Then I go to meet them at that particular, time.

This indicates the variuos approaches that the teachers take to ensure that they teach learners even when they are carrying out their duties. but as one of the teachers in this incident

indicated, having to go teach learners at the well implies that those left behind require to be with another teacher. In this case the teacher leaves them with "the boy who assists" her. On further probe on the boys' qualifications, it is confirmed that he is one of the those learners who after completion of Grade three joined primary school. However, the boy stayed for only afew days and then came back to the former school. Considering this level of qualification and the fact he was the one who used to teach those left behind by their teacher, this study found out that there is need for monitoring and evaluation meachinisms needed in place so that the implementation of the programme does not compromise the quality of learning due to lack of capacity for teaching and also the question of the quality of teaching being affected is critical.

From this information, it is also observed that teachers' services are needed as the school grows and as time goes by due to different levels of learners. Apart from the size of the classes and the number of shifts for the classes, the teachers may at times be unable to teach, leaving the school without anyone responsible to carry on with the classes. In one of the schools, the teacher had her child who seemed unwell. She was quoted saying this as regards her experience:

I had slept in hospital because of him for two months. I would still be in hospital. I came the day before yesterday when I heard that you were coming. But when I am teaching, my mother in-law sits with him. As for when I was away, the former teacher who was here before me comes to step in for me.

Some of these sentiments expressed here show the degree of the need to address the deployment of more teachers in these schools. This is because the teachers are social beings perhaps for some reason may be unable to attend to the school on a daily basis in this setting.

For instance falling sick on the part of the teacher would mean a school may not run. Furthermore, the terms of service are not friendly and this may explain why they keep leaving. For one to give voluntary service, it implies very minimal level of commitment on the part of a teacher in case another alternative source of livelihood arises that is more attractive.

## 4.3.4.2. Learners Related Challenges Affecting Mobile Schooling

Apart from the issues related to the teachers, other issues that are of importance have emerged in relation to the learners' needs that hinder them from their attending school. Food insecurity also affects participation in education as the community has to move in search of pastures and water for their animals. Being a place that persistently experiences drought and famine, then for the children to stay in school, they need to have food. Food as a basic need is still a challenge in Turkana County where majority of people depend entirely on relief food by the government and Non Governmental Organisations. As a result, if children who may be have nothing at home for food or are surviving on one meal a day only come to school and stay without taking anything, effective learning is a challenge. A teacher observed:

Some walk even for seven kilometres to come to school, sending that child back home yet may be the child had not even had breakfast; they cannot concentrate and cannot learn. Actually they cannot come to school unless they are provided with food.

The issue of food as an obstacle to schooling was raised in all the three schools. This is something that the teachers are very keen on that they normally go to the nearby primary schools where they are attached to ask for food. Apparently, all the three mobile schools that this study undertook the research on have a primary school where they are attached and this is where they are expected to transit the learners that complete the mobile school. This brings in

the idea that that more funds should be allocated to the mobile schools for them to be successful in promoting education access to this nomadic pastoralist community in Turkana County. If the school is able to provide education and food, then the enrolled students will be sustained.

Distance to school in some cases is still an issue for some of the learners depending on their age as indicated in the above observation. As indicated earlier, some girls attend school with their young siblings as they are meant to take care of them according to the family roles of this community. Considering the ages of some of the learners, some are very young confirming that they were accompanying their elder sisters. Hence, for long distance, both the bigger girls and their siblings will not be able to attend. Also, when some of the herds are taken high up into the hills, though it is a mobile school, it is difficult to have the whole village including the school moving. In such cases only the young and the strong men and women move, making it difficult for all of them to be in school for some duration. However, when they come back they pick up from where they had left.

Culture and negative attitudes towards education within the community affects participation of nomadic pastoralist children in education. This is attributed to by the competing priorities, with children's time being taken up by family work; either looking after livestock (especially for boys) and household chores such as fetching water and firewood and looking after young children (for girls). This can be countered by sensitising the community more on education.

Another thing that emerged as an obstacle to attending school is sickness. For this community to access health services, they require to go for long distances and in such cases if it is the case of the mother who is unwell or a child who is unwell, then for the girl who attends school will not be able since she would have to take up some domestic responsibilities. This

also implies that the children themselves if unwell would also be away from school for several days as they go to seek for medical services. In one of the learners' FGD, one of them indicated that the things that what keeps her away from school is when she has to go and look for the lost young one of a goat and when the younger sister is sick. Still others observed they do not attend school when they have to fetch water.

This when triangulated with interviews with the teachers, one of the teachers, aptly put it:

Sickness affects school attendance very much. Two months ago when we had cholera outbreak, some people died. Even sometimes children get bitten by snakes or scorpions. But we treat such traditionally before taking them to the hospital which is very far away.

Still one of the teachers had been admitted in hospital with a sick child for two months. This being 70kms to Kakuma indicates the magnitude of the problem of health facilities in the region. This indicates that food, water and health related issues are the main obstacles to attend school as confirmed by this study.

## 4.3.4.3. Education Provision through Inter-Sectorial Linkages

Inter-sectorial linkages such as food and water for both human and animals were mentioned by all the informants as a major problem. Many of the parents in the FGDs shifted their discussions from education to issues of food and water when asked on challenges that hinder their children from attending school. Availability of water was as important as pasture for animals and constituted a major consideration in the choice of where to establish kraals during the dry season. All the schools were running near a water source and the teachers in those schools as was observed in the interviews, would at times look for the bigger boys near the watering sources at certain times of the day when they usually go to water their animal and teach them (This is indicated in Appendix X)



Figure 7: A photograph of village

Figure 7 shows a village where one of the schools used in the study is situated. The above is a photograph of a village where they live. As can be observed, there is hardly any vegetation for the animals to feed on yet this is at one of the schools which was used in the study. Therefore, this indicates that the animals have to be taken a distance further to look for pastures and water. Since the livestock is their main economy and being their only source of livelihood makes it difficult for them to live in an area where water and pasture for their animals have gone extinct. As observed earlier on getting water is a challenge and with little indication of vegetation, this clearly spells that most of the young men have gone to graze the animals further away from this place.

Theroefore, this study found out that the functionality of a school was, to a great extent, dependent on the availability of water and food. In two of the schools involved in this study, they observed that there has been a drop in enrolments due to the fact that the schools are no longer being provided with food by the government. From the findings of this study, food was previously provided to the schools by the government directly but at the time of research, they were expected to be getting from the nearby schools where they are attached which are given once a month. The food that they are given lasts them a week (all the three teachers were specific on this matter). This is reflected in two of the mobile schools; however, since one of the schools manages to get food from other donors such as the Catholic Church, then the school is able to run smoothly from morning through to the night, with the help of a support teacher and a cook as an employee. As can be seen from the table 9, the enrolment trends have been declining over the last three years in two of the schools where regular provision of food has stopped. However, in school A, food is still being sponsored by the church organisation. This can be indicated by the average enrolments per year in this school which is 117, when for the other two schools are 78 for school B and 73 for school A. Table 9 illustrates this.

**Table 9: Average Enrolments per School** 

School		Year			
	2010	2011	2012	Total	Average
School A	90	125	137	352	117

School B	85	75	73	233	78
School C	90	79	50	219	73
Total	265	279	260	804	268

Table 9 shows the distribution of total enrolments per school per year between years 2010 to 2012.

# 4.3.4.4 .Ways of Countering the Obstacles to Provision of Mobile Schools in Turkana County.

If access to education for the nomadic pastoralist societies is to be achieved, then the education system needs more flexibility in terms of its provision to the marginalized groups. The nomadic pastoralist community recognizes that education is important as a way of investing in options of income. In order for mobile schooling to run smoothly in provision of education to nomadic pastoralist groups in Turkana, the following were raised as ways of ensuring that the child is in school. This was in form of a question asking on a summary statement of what can be done to keep a nomadic pastoralist child in school. All the teachers and parents in the FGDs brought up the issue of food, water and security as basic necessity that should be provided so as to keep a nomadic child in school.

One of the teachers aptly put it when asked on what is needed to keep a nomadic pastoralist Turkana child in school. The teacher summarised them as "food, water, security and a hospital." Another teacher also added that discouraging of early marriages for the girl child was needed.

To confirm this, still in an interview with one of the teachers, she observed:

Attendance is good especially when there is enough food and water. But when they

have to move very far, we have fewer children attending because especially the big boys have gone with the big animals. The government should also give food so that the young can attend school.

The success of the schools in enhancing participation of nomadic pastoralists in education is therefore, linkage with provision of other basic needs such as food. In FGD with the parents, the observation was that provision of medical services and water near mobiles schools was important. Suggestions on the need to educate parents on negative effects of not taking their children to school, the need to have a law prohibiting child labour and on early marriages for girls were raised.

From the above observations, the study found out that the ways of enhancing participation in school for the nomadic pastoralist community's child is through the hand of the government in providing other basic needs to the child in school such as food and medical services. Once such obstacles are removed, they would be encouraged to stay in school. However considering that the main reason given for the drop in enrolments is due to lack of food which is a basic need, there is need for the government to look for short terms ways of supporting them with food but have a long term plan of empowering the community so that they are able to sustain themselves in terms of food and hence ease the burden of linking provision of education with food.

The other recommendation that was brought out was the need to have other parents urged to take their children to school by being taught on the advantages of doing so. This suggestion implies that creating awareness should be enhanced since it is already there hence not adequate. As already indicated in this study, with adequate sensitisation on importance of sending their children to school, there will be improved attendance.

The issue of a boarding facility was also raised by the parents and some of the teachers since they felt that distance was still a challenge to some of the children in the mobile schools. One of the teachers in an interview suggested:

The distance is sometimes too far and we do not move with the young and strong men and women who take the animals far away into the hills. If the government provided two rooms for boarding facility, I would volunteer myself to stay with them, and only get one person to cook for them.

This comment however suggests a settled and not a mobile school which is intended to take care of the nomadic pastoralist child who is supposedly moving with the livestock and the rest of the family as he moves. It also questions on sustainability of mobile schools considering that this is being advocated by the teachers and the parents. The researcher however suggests that having boarding schools should not imply the disregard of the mobile schools for the pivotal role they play in providing educational access to the nomadic pastoralist child who may miss out due to their nomadic lifestyle.

Some of the parents also felt that there is need to have a law on child labour and on girl child so that early marriages are stopped. Considering the girl is married off as early as at the age of 11, and most of them are married to wealthy old men, some of the community members are already indicating dislike of such practices. This may be attributed to the awareness and sensitisation that has been done and the fact that some of the community members are seeing the benefits of taking them to school through others whose children went to school. Therefore, more role modelling is needed so that the community can be encouraged to take their children to school.

#### 4.4. Conclusion

Provision of education through mobile schools to nomadic pastoralists' community does not automatically qualify it as an intervention to enhance participation in education. The findings of this study indicate that the level of participation in education for the nomadic Turkana pastoralist child is still low. However, the mobile schools as found in the schools used in this study have contributed to improved access to education. Many nomadic pastoralists' children in Turkana County can be able to access education. This was indicated through the enrolled numbers in the mobile schools used in the study considering that to start a mobile school required a minimum of 25 learners only as already discussed earlier on.

The main contributory factors that have enhanced enrolments in mobile schooling include: the proximity of the school to the village facilitates the learners' attending school after they are through with their social roles. In addition, the schools' flexible nature in terms of time and place where the classes are held such that the learners are able to attend school both in shift and the use of multi-grade teaching approach by the teachers has also promoted enrolments in mobile schools. Furthermore, the study also found out that other factors such as the issue of the schools being run by members of the targeted community through a management committee constituted from the community also enhanced enrolments. Further still, the issue of the teachers being from the community has also contributed to improved enrolments by enabling inclusion of use of local language for instruction. This translates to a sense of security and ownership that comes with their culture being reflected in the education provided in the mobile schools.

This study however found out that the enrolments and access to school vary for different social groups which are defined by one's gender and age of the learners. Since the school is within the village and is mobile by nature, both boys and girls are able to attend school, after

they carry out their family roles. However, access to education among the girls is more than the boys at this early stage of their school life. That could be explained by the fact that at this age, boys would be starting to go further away as they looked after the cattle. Girls are likely to have more free time at this stage. However, majority of them are withdrawn from school as they mature to take up greater responsibility at home.

The low levels of participation in education are however attributed to a number of challenges as found out in this study. There are several challenges affecting the mobile schools hence contributing to this situation. To begin with the nomadic lifestyle still affects access to education since the search for food and water for livestock and domestic use makes some children especially the boys go very far away from the village. With one teacher per school indicating a shortfall, effective service delivery through mobile schools is challenged. Girls on the other hand are hindered to attend school as they take up domestic roles such as taking care of the sick or the rest of the family when their mothers are away. This indicates that girls' participation in education is problematic because of cultural and societal expectation. In addition, insecurity is also an obstacle to learning as schools do not run at such times. However, since this study is based on the view that education is regarded as a way of building human capital and empowering people to participate in economic development, then whether a parent gives only one or two or three of his children and is left with the others helping at home or with the livestock, this would still be considered as a step towards improvement in terms empowerment.

To curb some of these challenges, there is need for the Government to look for ways of empowering the community economically so that they can be able to participate in economic development. The Government should also ensure not only provision of education, but also have interlink with provision of other basic needs provisions such as food and water.

Moreover more awareness and sensitisation on the need to take their children to school and discouraging of early marriages and child labour are critical. There is need to improve teaching capacity both in numbers and quality to facilitate shift and multi-grade learning. Finally, there is need for Government to come up with means of ensuring the provision of other social amenities such as water, health services and food that are needed by the community which contribute to improved enrolments in the mobile schools.

Therefore, this study concludes that mobile schools have been able to enhance participation and are appropriate for the nomadic pastoralist group of Turkana County. However, for them to be more effective in enhancing this, there is need for improvements through appropriate policy implementation framework approach. In particular, instituting of monitoring and evaluation system in place is important. In addition, improved capacity and quality of teachers and carrying out sensitization and awareness campaign to encourage schooling among the nomadic pastoralist community are essential for the success of this intervention.

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter provides a summary of the study and research findings from which conclusions and recommendations have been made on ways of improving access to education for the marginalised nomadic pastoralist Turkana child.

## 5.2. Summary of the Major Findings

The major conclusions from this qualitative study are summarised in this section in relation to the research objectives which were addressed in this study. It shows how the study relates to the literature on education provision among the marginalised groups and how the government has attempted to address this service gap. It has also looked at conditions that have necessitated the policy to be put in place by the government of Kenya, of providing education among the nomadic pastoralists through mobile schooling has been implemented. This has been addressed in line with the objective of the study which was to establish the extent to which nomadic pastoralist children have participated in education. The main aim of the study was to propose ways of enhancing the participation level of the nomadic pastoralist Turkana children in education through mobile schools, a non-formal kind of education. This was in turn influenced by the assumptions of Human capital and policy implementation theories which underpin this study.

The research questions attempted to provide an answer to the following question of what conditions have enhanced enrolments in mobile schools in Turkana County and whether those conditions have resulted in differences in enrolment behaviour among social groups in mobile schools in Turkana County. It also sought to establish the extent to which the social groups of the enrolled students influence how they are supported to complete their studies in

mobile schools in Turkana County and conditions that determine the obstacles that hinder accessing of mobile schools in Turkana County. Lastly, the study aimed at establishing the suggestions by the participants on ways of enhancing enrolments in mobile schools.

Chapter two is an overview of literature review in the study area whereas chapter three is an overview of research methodology that has been used in the study. This is a multiple case study on three government sponsored mobile schools in Turkana County. They were selected on the basis of maximum variation sampling. The extremely well performing school in terms of high enrolments and has been in existence for more than 5 years. It also looked at school population size. The third one on the other hand was selected on the basis of being in the middle of the continuum. The data was gathered through Focus Group Discussion guides, indepth interview guides, and observation checklist and document analysis guide.

Chapter 4 presents assertions which were obtained from data gathered through FGDs, indepth interviews, observation and document study. This gave room for getting information rich insights into the mobile schools phenomenon. This chapter has further given findings, conclusions and recommendations.

#### **5.2.1.** Conditions that have Enhanced Enrolments in Mobile Schools

The first research question sought to find out the conditions that have enhanced enrolments in the mobile schools. It was found out that in all the three schools used in the study, the total number of students enrolled per school were too many for a single teacher to handle considering the timings of sessions in terms of place and time. This was due to the improved enrolments in schools. Creating of awareness by the government authorities, church organisations and non-governmental organisations is one of the factors that have contributed to this. The proximity of school to the village makes it manageable for the community to carry out their roles as and when time allows them to attend school.

Since the community is the one that runs the school through appointed committees, it gives them a sense of ownership and hence they are obliged to have it running. The teacher is also from the same village and is also mobile. The government provides funding of instructional materials and paying of the teacher. This makes it possible for the school to run smoothly considering the erratic climatic conditions of this region which makes the poverty level to be high ,hence difficult for them to support their education.

## 5.2.2. Participation of Various Social Groups in Education.

The enrolments in the three schools have increased over time due to awareness. As a result of this awareness and sensitization, some parents are already viewing education as an alternative footing for economic development. The findings of this study further indicate that the parents are encouraged to have their children in school since the presence of these schools does not seem to interfere with their family roles. Therefore, flexibility of mobile schools is both in terms of the options of not having all the children in school at once and in terms of both place and time. These have contributed to the enhancement of educational access to education among the nomadic pastoralist community. In addition, the ownership of the school by the community and teachers having been recruited from the target village has enhanced access to schools among these communities.

## 5.2.3. Conditions that Influence Differences in Enrolment Behaviour among Different Social Groups

Provision of education among the Turkana nomadic pastoralists is different among the various social groups. These groups are based on gender of the learner and one's social roles. Girls in this community have different roles that they play at different age of their lives that influence their availability to attend school. They would be available to attend school when young but as they get older and have more domestic responsibility such as taking care of their

young siblings or reach marriageable age, they attend school less. On the other hand, boys are required to take care of the livestock; hence, they attend school after having grazed the animals. This is because the schools are close to the village and hence they can learn as well as carry out their family roles.

The decision however, of who is to attend school and who should not depends on the parents and this culture leaves it with the father. Although the school is mobile, not all children are able to attend school depending on the distance of the school from the village based on the age of the child.

## **5.2.4 Challenges Affecting Education Provision through Mobile Schools**

There are social-economic related conditions that act as obstacles to provision through mobile schools. One of the main obstacles to provision of education to the nomadic pastoralist is their mobile lifestyle as they move in search of water and food for both human consumption and for the livestock. This means that their attendance is not consistent. Food insecurity therefore, also affects participation in education as the community has to move in search of pastures and water for their animals.

The findings from this study found out that security has acted as a major hindrance to education provision among the nomadic Pastoralist of Turkana County. Schools cannot operate without security in the area of operation making it a challenge to achieve the envisioned targets in educational policies. The government has a role to play to combat insecurity.

Teacher capacity is also an obstacle influencing provision of education through mobile schools. The teachers are few to handle the many shifts held in a day and use of multi grade teaching for people who may not be adequately trained teachers may have an influence in

both quality and enhancement of educational access through mobile schools.

Cultural practices within the community affect participation of nomadic pastoralist children in education. This is attributed to by the competing priorities such that children's time is taken up by family work by either looking after livestock (especially for boys) and carrying out household chores such as fetching water and firewood and looking after young children (for girls). Early marriages also discourage access to education as the girls are withdrawn from school at tender age to be married off so that their families can acquire wealth through dowry payment.

Another thing that emerged as an obstacle to attending school is sickness. For this community to access health services, they require to go for long distances which may mean that one would be away from school for several days as they go to seek for medical services.

## 5.2.5. Suggestions on Ways of Countering the Challenges

This study found out the following obstacles as hindering the provision of education through mobile schooling include provision of food, water and health services along with education services. The teacher capacity should also be increased in terms of quantity and quality. Increased awareness and role models from among the community should be used to discourage some of the cultural practices such as early marriages for the girls and child labour practices.

#### 5.3 Conclusions

Based on the findings of the study, the following conclusions were made. First and foremost, this study established that although mobile schools have enhanced enrolments in education, the level of participation is still very low. However, the conditions that have enhanced enrolments include: awareness created by various institutions and individuals, flexibility of

the school by community, locally recruited teachers who use local language, English and Kiswahili in giving instructions and the linkages of education provision with other basic needs such as food and water.

The study also came up with the findings that the conditions that have enhanced enrolments of social groups are based on cultural practices such as keeping of livestock. In addition, the family roles played by learners as individual members of the family based on one's gender and age affects the participation of different social groups in education. In general, child labour practices are also a common occurrence. Therefore, the inference is that realisation of attainment of gender equity in education provision among nomadic pastoralist communities is challenging.

Attendance in the three mobile schools involved in this study, indicated that the enrolments still fluctuate seasonally despite the fact they are meant to be mobile schools hence peripatetic by nature. This is however due to the distance between schools and home and the village set up coupled with poor teacher capacity. Therefore, there is need to include improved quality and relevance in provision of education for nomadic pastoralist children by building teacher capacity.

Insecurity is a threat to the success of promoting access to education among the nomadic pastoralists. Food security and health issues influence the level of participation of the marginalised nomadic pastoralist community group. Hence explaining the reason for seasonal fluctuations in terms of school attendance and consequently low enrolments at different times.

The challenges that hinder provision of mobile schooling can be countered through raising awareness on the importance of taking children to school; the provision of education together

with other basic needs such as food for the community. In addition to constant monitoring and evaluation of how learning is conducted in the mobile schools.

Therefore, this study concludes that mobile schools as an intervention and approach are a solution in terms of enhancing access to education among the nomadic pastoralist groups. In spite of this, the enrolments are still relatively low. Therefore, there is need for improvement in areas of implementation as a policy such that monitoring and evaluation structure should be in place so as to provide regular feedback as the programme progresses. This would also facilitate the tackling of obstacles as they arise, such as, teacher related issues on both quality and quantity. The study further concludes that, the viability of the mobile school would be enhanced if there is provision of other social amenities which may in a way raise the cost per head, of education of a nomadic pastoralist child. This creates the need for government to therefore look for partnership with other sectors such as Agriculture and Livestock so as to make this intervention viable.

## **5.4 Recommendations**

This study found out that the mobile school as an approach to fill the service gap of providing access to education among the nomadic pastoralist community has proved to be successful to some extent. However, the enrolments are still below average since not all children have been able to access education in a mobile school. This means that there is need to adjust the approach used for education provision to this nomadic pastoralist group. Based on the findings of the study and with the objective of enhancing participation of nomadic pastoralist children in education through the mobile school intervention, the researcher makes the following recommendations.

To begin with, there is need to focus efforts on raising the enrolment levels of pastoralists' children in the mobile schools. There is need to create more awareness and sensitize to

parents the importance of encouraging their children to attend school. In addition, the building of teacher capacity should be enhanced not only in terms of quantity but also in quality especially in multi-grade teaching which is needed in mobile schools. The government through the Ministry of Education should support this through in-servicing of teachers. Therefore, this will help reduce the high teacher turnover which in most cases contributes to temporal closure of schools. The issue of teacher motivation should also be addressed by the Ministry of Education so that mobile schools can be sustained. By so doing, this will help secure the gains of mobile schools intervention vis-a-vis enhanced students' enrolments.

In order to provide education oportunities to all the different social groups among the nomadic pastoralist groups, certain measures are needed. Some cultural practices need to be disouraged such as early marriages for the girls and child labour practices especially for the boys. Such practices have continued to contribute to the low levels of participation of children from this nomadic pastoralist group in education.

Providing mobile schools alone is not enough to enhace participation of children in education. instead, there is need for multifaceted approach for mobile schools to succeed. This means that without food and water, it is not possible for the mobile schools to run successfully. There is need for the government therefore, to come up with ways of collaborating education sector with other sectors of the economy in order to empower the community economically. This should be geared towards enabling them support themselves in as far as food and water are concerned. Once this is achieved, it will help curb insecurity which is also an obstacle to mobile schooling provision as it revolves around cattle rustling, yet, livestock is their economic livelihood.

Lastly, the findings of this study indicate that there is need for the government to put structures in place for constant monitoring of mobile schools. This will ensure that some of the obstacles can be addressed as they arise to ensure the success of this innovation. For instance the need for staffing as the schools grow should be addressed, together with other instructional resource requirements such as books and writing material.

#### 5.5 Recommendations for Further Research

From the findings of this study and bulding on this research, it is suggested that more studies be carried out in the following areas:

To start with, further research is needed to build on the outcome of this study, by addressing issues of relevance and quality of education provision in mobile schools. This is because this study did not establish ways of improving education participation in this respect as far as participation is concerned.

In addition, although this study was carried out in Turkana County, there is need to replicate the study in other ASAL regions but emphasize quantitative data gathering techniques such as questionnaires and analysis to find out their level of participation in education. Such an approach would create a more strategic approach in education provision through mobile schools.

Given that this study has suggested a multi faceted approach of education provision alongside with provision of other amenities to the community, effectiveness of these in relation to education provision should be investigated. Such studies would help in strengthening education provision to children of nomadic pastoralists.

In conclusion, the current study has shown that with minimal enrolments in mobile schools, the retention and completion rates are still low. This in effect has contributed to the low levels of participation. It is therefore evident that the implementation framework of mobile schools needs to be addressed especially given the culturally hostile environment. This minimal participation levels also spells the need to do further research in area of policy implementation in the face of a culturally hostile environment. Change in the approach of education provision in mobile schools to namadic pastoralists' children can help alleviate the low participation levels.

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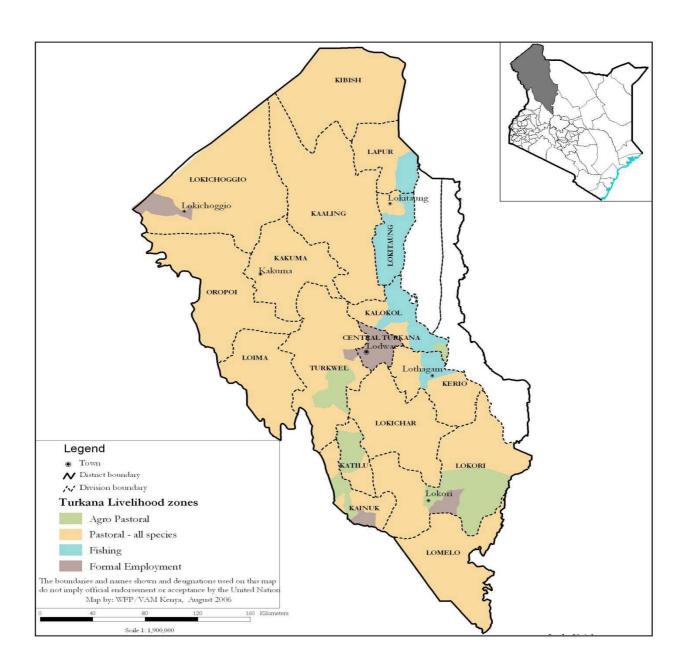
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#### **APPENDICES**

Appendix 1: Map of the Area of Study

# Location of Turkana in Kenya



Source: Turkana County Livelihood Zones

# **Appendix II: In-Depth Interview Guide**

IN-DEPTH INTERVIEW GUIDE FOR TEAHE	RS
INTRODUCTION: My name is I am a re	esearcher from The Catholic University of
Eastern Africa. We are undertaking a study of	on Participation of nomadic pastoralists'
children in Non-Formal Education: A case of	of mobile schooling in Turkana County in
order to come up with ways of enhancing acces	s to education. Please spare an hour or so, to
answer questions in which we will discuss the	involvement of your institution in providing
and promoting access to education among the ch	ildren of nomadic pastoralists' community.
SECTION A: BIOGRAPHICAL INFORMAT	FION
1. What is your name?	
2. To which of the following age groups do you	u belong?
a) 20-30	
b) 31-41	
c) 42-52	
3. To which of the following Educational level	s do you belong?
a) Early Childhood Development b) Primar	ry Education c) Secondary Education
4. How long have you worked in this school? _	
<b>Opening Question:</b>	
5. Give a brief history of the institution	
Brief notes	Quotes

Who	are the sponsors of	this mobile scho	ool?		
	are the sponsors of notes	this mobile scho	Quotes		
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			
		this mobile scho			

(Physical facilities & Teachers, students)

J	Brief notes	Quotes
Ī		
L	XXI . 1 1 1 1	1 6 1 1 1 1 1 1
•	What changes have been there in terms of th	e number of children who are able to access
	education?	
	cddcation:	
	Enrolments, are there preferences?	
	Brief notes	Quotes
		Quotes
	Brief notes	
	Brief notes	
	Brief notes	

	What standards are used to qualify learners a primary school?	
	Brief notes	Quotes
11.	What qualification concerns are considered f	For recruitment as a teacher?
	Brief notes	Quotes

12	. What school policy and practice measures ar the mobile schools? Brief notes	e in place to enhance the smooth running of  Quotes
13	. In what ways is the community involved in	
	Brief notes	Quotes

14.	What are some of the obstacles hampering p	rovision of education through this initiative?
Γ-	D : C	
	Brief notes	Quotes
ı		
115. \$	Suggest ways in which they can be countere	d?
	Suggest ways in which they can be countere Brief notes	d? Quotes

_		
1.	T	
16.	In a statement suggest one thing that is need	led to keep a Turkana child in school.
		<del></del>

# **Appendix I11: Focus Group Questioning Route**

FOCUS GROUP DISCUSSION GUIDE FOR LEARNERS

Focus Group No
Date of Focus Group
Time of Focus Group
Tape No
Location of Focus Group
Name and Description of Participants
Moderator's Name
Moderator's Phone Number
Assistant Moderator's Name
Assistant Moderator's Phone Number
INTRODUCTION:
Welcome for coming to this meeting. My name is Margaret N. Njagi currently undertaking research at The Catholic University of Eastern Africa. I am undertaking a study to assess the participation of you children in education through mobile schools in Turkana County. We also would like to identify obstacles facing you in this County with regards to accessing and staying on in mobile schools through to graduation. This information will enable the government where possible adjust its strategies in making education available to nomadic pastoralist. Your experiences will be of great benefit to this study as you are the ones who attend school.
Opening Question:
Tell us your name, age, when you joined school and whether you have a sister or brother who is also in school.

**Theme I.** To establish the conditions through which mobile schools have enhanced enrolments.

Brief summary/Key Points	Notable Quotes
(a) What/ who encouraged you to join school?	
(b) How does it feel like to be in school?	
(c) What do you love most about school?	

(d) Which subjects do you like and why?	
(e) Which subjects are you taught in	
school that you don't like? Why?	

(f) What do you hope to do when you complete school?	
(g) What kind of work do you help your parents with before and after school?	

Theme II. To find out the challenges that hinder children to access mobile schools.

Brief summary/Key Points	Notable Quotes

(a) What are some of the problems	
that affect your attending school?	
that affect your attending school:	
(b) When coming to school?	
(c) When at school?	
(c) when at school:	

(d) When at home?	

Focus Group No
Date of Focus Group
Time of Focus Group
Tape No
Location of Focus Group
Name and Description of Participants
Moderator's Name
Moderator's Name Moderator's Phone Number
Assistant Moderator's Name
Assistant Moderator's Phone Number
INTRODUCTION:
Thank you all for coming to participate in this focus group discussion. My name is Margaret N. Njagi currently undertaking research at The Catholic University of Eastern Africa. I am undertaking a study to assess the level of participation of nomadic pastoralists' children in education through mobile schools in Turkana County. Also of importance to this study is to identify challenges faced by the children in this County in accessing and staying on in mobile schools through to graduation. This information will enable the government where possible adjust its strategies in making education available to nomadic pastoralists. Your invaluable experiences will be of great benefit to this study as you are the important pillars of the society.
Opening Question:
Tell us who you are and where you come from and how many children you have in school

# Theme I. Participation of nomadic pastoralist children in education

1. Tell me what made you send your child to school?

<b>Brief Summary/Key Points</b>	Notable Quotes	

2. How familiar are you with what your children learn at the mobile school?

Brief Summary/Key Points	Notable Quotes	

3. How did you get to know about this mobile school?

<b>Brief Summary/Key Points</b>	Notable Quotes

4. Are many children able to join this mobile	school?
Brief Summary/Key Points	Notable Quotes
5. What do people feel about education provide	
Brief Summary/Key Points	Notable Quotes

If yes or no, why?		

6. In your opinion, what does the nomadic child need to be taught?

Brief Summary/Key Points	Notable Quotes	

Theme II: Conditions that have enhanced enrolments in mobile schools

7. What encourages parents to take their children to school?

<b>Brief Summary/Key Points</b>	Notable Quotes
(a) To see your child read and write?	
(a) To see your clind read and write:	
<b>(b)</b> Mobility of the school in relation to	
daily lifestyle	
8. What kind of support do you play as a	parent with a child in the mobile school for

8. What kind of support do you play as a parent with a child in the mobile school for education of your child?

Brief Summary/Key Points	Notable Quotes
(PROBE IF NOT MENTIONED):	
(a) Materially	
(b) What other needs do you support	
them with?	

(c) Specific time for learning	

9. What kind of support does the government/sponsor play in provision of education in mobile schools?

Brief Summary/Key Points	Notable Quotes
(PROBE IF NOT MENTIONED):	
(a) Materially	
(b) What other support does it provide?	

Theme II. Ways the enrolled are encouraged to stay in school till completion

10. What can be done to encourage more children to join mobile schools?

Brief Summary/Key Points	Notable Quotes
(PROBE IF NOT MENTIONED):	
By parents?	

By teachers?	
By the Government?	

## Theme III. Challenges in providing education to the nomadic children

11. What are the obstacles that hinder children from accessing education in mobile schools?

<b>Brief Summary/Key Points</b>	Notable Quotes
(PROBE IF NOT MENTIONED):	
(a) Customs/beliefs-related issues	
(b) Issues related to what they are taught?	
(a) Factors related to source of income	
(c) Factors related to source of income	
for the family	

12. If you were put in charge of a mobile school in Turkana County, what would you do differently?

Brief Summary/Key Points	Notable Quotes

(PROBE IF NOT MENTIONED):	
(PRODE IF NOT MENTIONED).	
(a) Through parents	
(b) Through the Government	
(b) Through the Government	
( ) TT	
(c) Through the pupils.	
1	

# **Appendix V: Checklist for Participation**

## CHECKLIST FOR PARTICIPATION OF NOMADIC PASTORALISTS' CHILDREN

1.	Name of the Center	 Year of its
	establishment	

2. Enrollment, drop out, and transference of learners by Year and sex at the center (2010-2012).

Year	Total Population		Transfer to formal school		Drop outs	
	Male (M)	Female (F)	Male (M)	Female (F)	Male (M)	Female (F)
	(1V1)	1')	(IVI)	(1')	(1 <b>V1</b> )	(1)
2010						
2011						
2012						

3. Subjects taught at the center and the availability of the teaching /learning materials.

	Turkana	Kiswahili	English	Science	Social	Christian	Others(if
					Studies	Religious	any)
						Education	
Subjects taught							
Availability of							
text books and							
teaching/learning							
material							

4. Weekly Schedule of the teaching programme (Monday-Friday). Indicate the session times you have in this centre

No.	Parts of day	
1	Early morning	
2	Late morning	
3	Afternoon	
4	Night	

5. Duration of one period/one day learning time\_\_\_\_\_ hours

#### **Appendix VI: Bio- Data Form**

# FOCUS GROUP REGISTRATION FORM Focus Group Number\_\_\_\_\_ BIOGRAPHICAL INFORMATION Name\_\_\_\_\_ 1. Marital status: a) married

2. Age Distribution

c) single

b) widowed

- a) 15-25
- b) 26-35
- c) 36-45
- d) 46-55
- e) Over 56
- 3. Number of children ever attended school
  - a) 1-2
  - b) 3-4
  - c) Over 5

**Appendix VII: Consent Letter** 

CONSENT LETTER FOR PARENTS OF THE PUPILS

May, 2013.

Dear Parent:

My name is Margaret Njeri Ngugi Njagi and I am a researcher from The Catholic University of Eastern Africa. We would like to include your child, along with his or her classmates, in a research project on participation of nomadic pastoralists' children in education through mobile schools in Turkana County. We do not anticipate any risk. Your child's participation in this project is completely voluntary. In addition to your permission, your child will also be asked if he or she would like to take part in this project. Only those children who want to participate will do so, and any child may stop taking part at any time. The choice to participate or not will not impact your child's status at school. Any information that is

In the space at the bottom of this letter, please indicate whether you do or do not want your child to participate in this project. Ask your child to bring one copy of this completed form to his or her teacher by (30th April, 2013. If you have any questions about this research project, please feel free to contact me on Phone No.

obtained during this research project will be used for the research work purposes only.

C	:	n	_	_		_1	v.	
C	1	n	С	e	r		IV.	

Student

I DO for	/ I DO NOT (check one) give permission (Name of child) to participate in the research project described above.
Parent's Date	signature

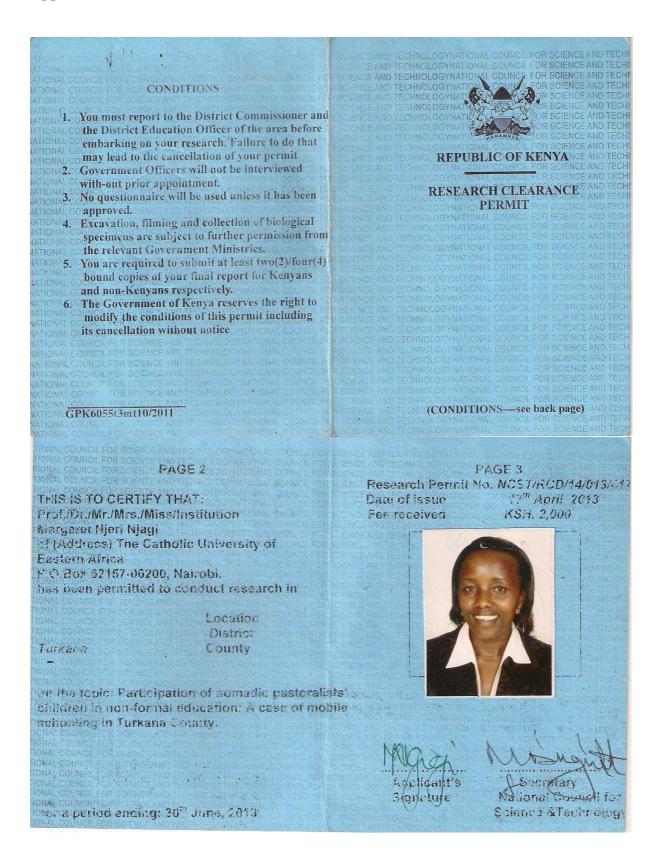
Appendix VIII: Observation Guide
OBSERVATION GUIDE FOR MOBILE SCHOOLS
NAME OF SCHOOL:

## INSTRUCTIONS TO THE RESEARH ASSISTANT:

Please indicate the availability of the following items

Facility	Remarks	Reflective Notes
Classroom facility		
Chalkboard		
Exercise books for learners		
Learners' writing material		
Time table		
Water source		
Provision of food		
Learners of different age set		

#### **Appendix IX: Research Permit**



#### REPUBLIC OF KENYA



# NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550 Mobile: 0713 788 787, 0735 404 245 Fax: 254-020-2213215 When replying please quote secretary@ncst.go.ke

P.O. Box 30623-00100 NAIROBI-KENYA Website: www.ncst.go.ke

Our Ref:

NCST/RCD/14/013/417

17<sup>th</sup> April, 2013

Date:

Margaret Njeri Njagi The Catholic University of Eastern Africa P.O.Box 62157-00200 Nairobi.

#### RE: RESEARCH AUTHORIZATION

Following your application dated 4<sup>th</sup> April, 2013 for authority to carry out research on "Participation of nomadic pastoralists' children in non-formal education: A case of mobile schooling in Turkana County," I am pleased to inform you that you have been authorized to undertake research in Turkana County for a period ending 30<sup>th</sup> June, 2013.

You are advised to report to the District Commissioners and the District Education Officers, Turkana County before embarking on the research project.

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

DR M.K. RUGUTT, PhD, HSC. DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioners
The District Education Officers
Turkana County.

# **Appendix X: Photos**



A school at a water point



Toilets in one of the schools