EFFECTIVENESS OF GOVERNMENT'S INTERVENTION MEASURES ON PASTORALISTS PUPILS' PARTICIPATION IN REGULAR AND MOBILE PRIMARY SCHOOLS IN TURKANA COUNTY, KENYA

BY

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DECLARATION

This Thesis is my original work and has not been presented for award in any University.

Sign é é é é é é é é é é é é é é é Date é é é 20/08/2021 é é é é

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This Thesis has been submitted for examination with our approval as the University supervisors.

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DEDICATION

To my beloved late mother, Mary Akadeli Ejore, for her resilience and determination to take me to school despite the tough nomadic lifestyle and livelihood in search of education for global influence.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADEA	Association of Development of Education in Africa
AfDB	African Development Bank
ALRMP	Arid Lands Resource Management Project
ASAL	Arid and Semi- Arid Lands
CAADP	Comprehensive Africa Agriculture Development Programme
CBS	Central Bureau of Statistics
CDE	County Director of Education
EDSAC	Education Sector Adjustment Credit
EFA	Education for All
FFE	Food for Education
FPE	Free Primary Education
GDPs	Gross Domestic Products
GER	Gross Enrolment Ratio
GMR	Global Monitoring Report
KHRC	Kenya Human Rights Commission
KNEC	Kenya National Examinations Council
LRA	Lordôs Resistance Army
MDGs	Millennium Development Goals
MoEST	Minister for Education, Science and Technology
NACOSTI	National Council of Science, Technology and Innovation
NARC	National Rainbow Coalition
NCST	National Council for Science and Technology
NEPAD	New Partnership on African Development
NFE	Non-Formal Education

NPHC	Nomadic Primary Health Care Organization
SAP	Structural Adjustment Programme
SFP	School Feeding Programme
SPSS	Statistical Package for Social Sciences
TEFA	Turkana Education for All
UNDHR	United Nations Developmental Human Rights
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHTF	United Nations Hunger Task Force
UNICEF	United Nations International Children's Education Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development
WB	World Bank
WCEFA	World Council for Education For All
WFP	World Food Programme

ABSTRACT

The purpose of this study was to establish the effectiveness of government intervention measures on pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County, Kenya. It also sought to compare the levels of effectiveness of these government interventions between the regular and mobile schools. For equity reasons, reaching and providing nomadic pastoralists with education has been one of the most challenging and urgent matters facing educationists and policy makers globally. While there are endeavours seeking to achieve this reality, challenges abound. The study was based on the following three objectives: to determine the effectiveness of school feeding programme on pastoralistsô pupilsô participation in regular and mobile primary schools; to establish the effectiveness of government security on pastoralistsô pupilsô participation in regular and mobile primary schools and to evaluate the effectiveness of free primary education on pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County. The study also formulated and tested four hypotheses in order to test the effectiveness of government intervention measures. Descriptive survey research design and correlation research design were adopted in this study. The sample size was 30% of the entire population, as suggested by Mugenda and Mugenda (2003) that a sample size of 30% is appropriate for descriptive studies. The study had a total target population of 2755. The sample size of 30% of 2755 was 830 drawn from the six categories of the relevant population of pupils, teachers, head teachers, parents, education officers and County Commissioner using cluster, stratified, simple random and purposive sampling. Data was gathered using questionnaires, interview guide and focus group discussion schedule. Quantitative data was analysed descriptively using frequencies tables and percentages while inferential analysis adopted regression models. Qualitative data from interview schedules and focused group discussion was analysed thematically. It was organized into major themes as per the research objectives. The null hypotheses (H_0) were analysed at $\alpha = 0.05$ significance level and 95% confidence level and tested using p-value method. The null hypotheses were rejected since the p-values were less than 0.05. The findings of the study revealed that the school feeding programme, government security and free primary education were effective government intervention measures that could make pastoralists pupils participate in regular and mobile primary schools in Turkana County if well implemented. The study recommended that there was need to increase the quantities of food to 3 meals a day and the nutritive value of meals in order to increase the effectiveness of school feeding program. The study also recommended that armed security should be provided to guard schools, and that foreign students should be properly vetted before joining institutions of learning to increase the effectiveness of government security. It was also recommended that more teachers be recruited, infrastructure built in schools and pastoralists settled to increase participation of pastoralistsô pupils in regular and mobile primary schools. The study further recommended that a research study be conducted to establish the effectiveness of free secondary education on pastoralistsô pupilsô participation in secondary schools in Turkana County, Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The function of education in providing individuals with the required competences to make well-versed choices about their survival and a positive contribution to humanity cannot be overstated. Providing education to all people was authorized and endorsed globally by the Nations of the world as a fundamental individual right (UN-DHR, 1948). This educational-right is an essential requisite that should be realized for everybody. Although there are attempts in place to accomplish this educational-right, it is not without challenges. The nomadic groups are face a myriad of challenges in achieving this reality. Realizing this reality to the nomadic community is a challenge both at a practical and conceptual level (UNICEF, 2008). This fact was further emphasized by Gorham (1978) who contended that the provision of suitable educational skills to pastoralists was an educational puzzle of considerable intricacy, which is characterized by a lack of understanding or participation amongst those who plan and offer services, and the perceptions of would-be users.

The main objective of this report was to check the usefulness of government intervention approaches on pastoralists school-going pupilsô involvement in regular educational centres and mobile learning institutions in Turkana County, Kenya. It also sought to compare the levels of effectiveness of these government interventions between the regular educational centres and mobile learning institutions.

The international commitment to the realization of Education for All (WCEFA, 1990) calls for exceptionally intimate attention on individual vulnerable persons who, for diverse motivations, have previously been barred from the current provisions of educational training and learning. Those that keep moving from place to place

represent a unswervingly marginalized and vulnerable group, and the phenomenon of movement in itself offers several complications to both suppliers, and potential clientele of teaching and learning services (Danaher, 2000). Amongst all migratory groups, the single most side-lined and neglected communities of all is the rustic nomadic-pastoralists.

The involvement designs of nomadic-pastoralists in official educational theory and practice reveal their unique perceptions and experiences that offer serious discernments into the kind of education as a theory, and more importantly as a custom (Dyer, 2006). The learning institution-based system of education does not adequately match with the moveable aspects of nomadic-pastoralists. In rural parts in specific, where production for systems of livelihoods necessitates a suitable equilibrium amongst individuals and environment, education is a significant way of coming out of nomadic-pastoralism (UNICEF, 2008).

Issues concerning educational access besides participation have demanded their space in the global conversation on education since education is taken as a fundamental right for human beings. It is claimed that through education, poor and vulnerable positions are battled and people are given a chance to advance their welfare. The issue of educational access is so critical that the United Kingdom nation has given emphasize to all educational providers to create access to all paramount areas (Migosi *et al.*, 2012). Notwithstanding the prominence and the importance of increasing educational participation, more than 125 million school going teenagers are out of school throughout the world (Tilak, 2005). Many of the school going pupils in Asia and Sub-Saharan Africa are out of schools. Although the issues that hold the children from going to schools are thought-provoking, measures are made throughout all the nations to assure the entry of every single child and involvement in education.

Whereas signs of joblessness to the learned are increasing in majority of African nations, education is nevertheless the only opportunity for ascending higher for the disadvantaged lot (Nkinyangi, 1982). The numbers of people in these nations therefore obligated to shout and demand for educational services hence making their countries to respond by allocating more resources to education (Nkinyangi, 1982). The benefits of Education go past a single person, to the entire household and similarly to the entire country. Guaranteeing education accomplishment may be seen in socio-economic development, enhanced communal amenities and a decrease in law-breaking rate (Migosi *et al*., 2012).

The school going teenagers from nomadic communities are hindered from participating in teaching and learning by various issues including but not limited to sparse distribution (Adan, 2010; Annababette & Porta, 2013; Sifuna, 2005). Due to the sparse population, assembling enough school going children for cost-effectiveness is challenging (Annababette & Porta, 2013). The involvements of government in such communities are considered to have the capacity in challenging the school attendance problem. The school going teenagers from the nomadic-pastoralist societies are additionally perceived as resources due to their major function in economic contributions to their households by their work force from childhood (Carr-Hill, Eshete, Sedel & de Souza, 2005; Ferranti, 2007). The usefulness of children economically for example in raising livestock and as such parents will be unwilling to send children to school (Annababette & Porta, 2013).

Substantial proof of curriculum unsuitability from Nigeria indicate a great hindrance and limitation issue to nomadic community school (Aderinoye, Ojokheta & Olojede, 2007; Okon, 2015). Pastoralistsô populations consequently do not perceive school for what other societies see it for, they understand schooling as a foreign mechanism that

does not add value to pastoralism (Kratli, 2001). Many rural groups do not desire to alter their customary manner of living (Abdirahman, 2016), to the pastoral communities education will separate and ultimately isolated their teenagers from their families and to a great extend the society (Kratil, 2001). Nomads also believe that the school curriculums do not suite their need, that they are not meant to improve the lives of nomads (Ferranti, 2007). This point is echoed by a 2000 Kenya Human Rights Commission (KHRC, 2000) report that revealed that the school curriculum focuses on academic achievements that only suit the needs of urban children (Aidi, 2012).

Evidence suggests that the nomadic communities are keen on the type of education they receive. Suggesting that nomadic populations are against education would be an overstatement. They are in demand of education that is sensitive to their needs, aspiration as is suggested by a study by Ismail (2002) in Sudan and Eritrea, Carr-Hill and Peart (2005) in Nigeria, Bakari (2000) in the United Kingdom and Kratli (2001) in Mongolia.

For equity reasons, reaching and providing nomadic pastoralists with education has been the single most thought-provoking and crucial matter facing educationists, practitioners and policy makers globally. On one hand, nomadic pastoralists are generally at the margins with regards to access, attendance and educational achievement. On the other hand, the unique character of nomadic lifestyle and the socio-cultural practices of nomadic pastoralists are often seen as fighting and conflicting with the aims and the desire of formal education to prolong the existence of the sedentary communities. The result has always been an emotive and often sensitive political debate. Generally, nomadic pastoralists number millions of people globally, traversing areas normally considered as the poorest and most vulnerable of all populations. The substantial number of the nomadic pastoralists is found mainly in

India, Nigeria, Ghana, Cameroon, Botswana, Namibia, Tanzania, Uganda, Kenya and South Africa. Despite concerted global efforts to avail education to nomadic pastoralist communities globally, their manifold needs have remained largely unmet (Aderinoye *et al.*, 2007; Kratli, 2001; Ngugi, 2017; Ngugi, 2013).

A report by the African Development Bank (AfrDB) and United Nations Educational, Scientific and Cultural Organization (UNESCO) (2005) showed that many interventions have been put in place in order to meet the learning needs of nomadic pastoralistsô pupils with formal education but they have, on the whole achieved little tangible results. According to Dyer (2005), governments have explored many options and alternatives of making education accessible to pastoralist communities. One such alternative approach is the use of mobile schools and regular boarding schools. Mobile schools have been experimented in many countries including India, Kenya, Mauritania, Iran, Nigeria, Mongolia, among others. Other than mobile schools from Iran, majority from other countries have performed far below expectation (Dyer, 2005).

In India, for example, mobile schools have been established to cater for children of migrants looking for jobs. Klute (1996) posits that nomadic interactions with the government are often hostile, he opines that the agents of state believe that nomadic-pastoralists are generally militant, hard to bring under control, and more importantly their constant move is further perceived as a kind of disruption to the operations of any modem nation and its coherent government other than search for water and pasture' (Klute, 1996). In India, a undeniable enragement is apparent, pastoralists have not gained from the evolving structures executed through the India state and the society has continued basically ignorant' (Government of India, 1987). No respect is

assured, conversely, to the appropriateness or user-friendliness of those structures, or to any likely justification amongst the nomadic for them to at least access education.

This embedded program of sedentarism epitomizes, amongst the nomadic-pastoralists' opinion, as an effort to modify their fashion of lifestyle, that will likely change their significance in their active participation in teaching and learning programmes. Nevertheless, this does not mean that nomadic-pastoralists do not pursue and seek schooling: the thing they always do. But their valuations of its significance as an instrument through which they can adapt to the fluctuating ecosystem (Swift *et al.*, 1990) and their understandings of the connection amongst schooling and growth may vary dramatically from the postulations created by the service managers and providers (Kratli, 2000). Present-day demands on pastoralism, and the authoritative confronting states of brining nomadic-pastoralists into the creativities that concerned with Education For All require that attentiveness be paid urgently to disentangle on what this idea might actually mean in relation to the learning requirements of nomadic-pastoralists and if such attention is effective.

A study by Ngome (2006) demonstrated that Mobile schools provide a critical alternative link to provision of education services to many communities in the developing world. In Africa, the highest concentration of the Nomadic communities and the resolutions of the Kaduna African Union Conference of 1995 captured the strategies that could be implemented in order to include the nomadic populations in the Universal Primary Education.

A study by De Souza (2007) indicated that African countries such as Nigeria, Kenya and Tanzania agreed to give the nomadic communities the unfettered access to quality basic education. De Souza further indicated that in Nigeria, the government

established the Nomadic Education Program in order to provide nomads with relevant and fundamental basic education and upgrade their life skills and participate effectively in socio-economic and political affairs of the country. In order to attain this goal, the government formulated policies and guidelines in all matters relating to nomadic education in Nigeria as well as developing interventions and initiatives to deliver education to nomads. The government came up with initiatives like radio programs and open distance learning for nomadsô children and youth. The application of radio was a strategy to overcome the blockers of geography, time order and constant movement of the nomads. Despite the modest intervention in radio program for Nigeria nomadic pastoralists, their literacy level remained low and the enrolment and attendance were relatively low.

The Kenya government is committed to providing education to all its people in line with the Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), Education for All (EFA), the Kenyan constitution 2010, the Basic Education Act (2013) and other educational targets. This commitment to providing education to its citizens includes reaching the marginalized communities such as arid and semi-arid areas as well as the pastoralist communities. For instance, the Government of Kenya (2009) identified mobile schools as a fitting initiative in expanding access and participation in education among nomadic. Mobile school provisions, present more exciting possibilities for educational provision in arid and semi-arid lands in Kenya. However, according to Ezeomah (1982) and MoHEST (2009) certain issues need to be addressed through government intervention, to make this mode of education provision more effective.

According to Swift (2010), the government of Kenya came up with excellent interventions such as policy framework, radio programs, boarding schools, mobile

schools and sedentary schools for mobile populations. Besides, the government also introduced Free Primary Education and feeding program in order to increase gross enrolment rate of the settled populations in Kenya (Ohba, 2009). Despite the government interventions to increase enrolment in schools, Swift (2010) demonstrates that the gross enrolment of the nomadic community has remained low in formal education. The national gross enrolment rate (GER) was 107 percent in 2006, rising to 110 in 2008, but among the nomadic communities, the gross enrolment remained below 50 percent.

UNESCO (2010) asserts that The World Bank and the Government of Kenya through Arid Lands Resource Management (ALRM) established mobile schools in Arid and Semi-Arid Lands (ASAL) areas including, Turkana, Wajir, Marsabit, Tana, Samburu and Ijara as a major intervention to make nomadic pastoralists participate in primary education. Sifuna (2005) and Tahir (2006) also demonstrated that some interventions such as introduction of school feeding programs, boarding schools, and provision of learning materials were introduced to increase enrolment and participation of children in schools. Despite such interventions, enrolment remained low as demonstrated in Table 1.1.

Table 1.1: Enrolment of Pupils in Regular and Mobile Primary Schools in Turkana County

	Turkana West			**Loima**			**Turkana Central**		
	Regular	**Mobile**	**Total**	**Regular**	**Mobile**	**Total**	**Regular**	**Mobile**	**Total**
No. of Schools	59	24	83	37	10	47	80	13	93
Boys	26655	2301	18956	10279	615	10894	19546	954	20500
Girls	8330	2207	10537	5940	636	6576	15760	745	16505
Total Enrolment	**34,985**	**4,508**	**29,493**	**16,219**	**1,251**	**17,470**	**35,306**	**1,699**	**37,005**
Average enrolment per school	423	188	355	438	235	372	441	131	398

Source: Turkana County Director of Education Office June 2018

The data in Table 1.1 indicated the enrolment of school going children in Turkana County in 2018. In Turkana County more boys than girl attend school especially in regular schools as compared to the mobile primary schools and gender gaps pose a great challenge especially to the nomadic pastoralistôs children. Most of the girls follow their parents as they migrate and relocate to distance land in such of greener pastures and water for their livestock. The regular schools in Turkana County are mainly concentrated in the main towns where the settled population lived while the mobile schools were in either in kraals of the pastoralistôs communities. Most of these mobile schools are attached to regular primary schools for purpose of reporting their progress reports and receiving free meals and other teaching and learning materials. The government use regular primary schools that are close to the mobile schools or near the pastoralistsô migratory routes to provide teaching services and other learning materials to the mobile primary schools. The regular schools had a higher number of boys than girls as compared to the mobile schools that had more girls than boys.

The County of Turkana being a dry region is confronted with various difficulties that impede the teaching plans particularly amongst the teenagers who attend school. A 2007 evaluation by the Ministry of Education shows that only 16.3 percent in Turkana have ever registered in a learning institution compared to national mean of 76.8 percent. On the net enrolment ratio (NER), the figures were not encouraging; the County was at 36.5 percent with 45.4 percent (boys) and 29.3 percent (girls) (GoK, 2009). This is in relation to the nation-wide NER, which was at 91.6 percent with 94.1 percent boys and 89.0 percent girls. The drop-out rates are Turkana 18.2 percent (boys-16.8 percent and girlsô 19.9 percent) against the national dropout rate, which stood at 3.5 percent (males at 3.2 percent and females at 3.7 percent). There was also

low retention rate with Turkana registering a completion average of 43.9 percent (males at 61.0 percent and females at 25.5 percent).

According to MoEST (2005) report, the Turkana County has the largest number of mobile schools among the ASAL regions yet there is still low access and participation in education by their children. However, certain issues needed to be addressed, such as government interventions, to make this mode of education provision more effective. It is apparent from previous research that mobile primary schools that were established to facilitate access to education of nomadic pastoralistsô children and regular primary schools that serve majority of the settled populations around the world are unable to facilitate access and participation to education for mobile children of the nomadic pastoralist communities around the world. This study, therefore, sought to investigate usefulness of the Kenyan-government intervention approaches on the participation of the pastoralistsô pupils in regular educational centres and mobile learning institutions in Turkana County, Kenya. It also sought to compare the levels of effectiveness of these government interventions between the regular and mobile schools.

1.2 Statement of the Problem

From the background of the study above, it is evident that the Kenyan administration and other development associates have created several involvements and determinations to bring formal schooling to the nomadic-pastoralistsô groups as a way of mainstreaming and accelerating their social, political, and economic presence through education. The Kenyan government initiated Free Primary Education, school feeding programme and provision of government security in primary schools in an effort to intensify enrolments and participation of pastoralistsô pupils in regular and mobile primary schools. Notwithstanding these interventions, the participation of

pastoralist pupils in both regular and mobile schools is still wanting. This may indicate that the interventions have not been effectively implemented. Lack of proper implementation of these interventions would result in low attendance, poor retention, insecurity, poor performance, among others. Hence there was need to establish the success of such intervention programmes in regards to pastoralistsô pupilsô participation in regular and mobile primary schools. This is also in understanding of the colossal amount of funds that the government uses to implement these measures and the requirement to check the anticipated output indicators of these interventions.

Conversely, it is likewise imperative to consider that most of the reports and studies done on the participation of the pastoralistsô pupils in learning institutions did not concentrate on participation of the pastoralistsô pupils in regular educational centres and mobile learning institutions. Henceforth the study gap identified by this research. This report consequently wanted to determine the usefulness of government intervention measures on participation of pastoralist pupil in regular educational centres and mobile learning institutions in Turkana County, Kenya.

1.3 Purpose of the Study

The aim of this report was to explore the usefulness of governmentôs intervention measures on the participation of pastoralistsô pupils in regular educational centres and mobile learning centres in Turkana County, Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives:

i. to determine the effectiveness of school feeding program on pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County
ii. to establish the effectiveness of government security on pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County

iii. to establish the effectiveness of free primary education on pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County

1.5 Research Hypotheses

The study sought to test the following hypotheses:

H_0: School feeding programme does not significantly affect pastoralistsô pupilsô participation in the regular and mobile primary schools in Turkana County.

H_0: Government security does not significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County.

H_0: Free Primary Education does not significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County.

H_0: The School Feeding Programme, Government Security and the Free Primary Education combined do not significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County.

1.6 Significance of the Study

The findings and the results of this report might be helpful in enlightening the Non-Governmental Organization, the Turkana County Government and all education stakeholders working in Turkana County and similar areas in Kenya on efficiency of the governmentôs involvements on participation of pastoralistsô pupils in regular educational centres and mobile learning institutions. In particular, they might also inform the policy makers, educational planners, and non-governmental organizations involved in providing education to the nomads to modify and improve their approaches in providing education to the Nomadic pastoralists.

The Ministry of Education may also use the findings to put in place policies and strategies that would address provision of primary school education in nomadic

pastoralistsô communities and more particularly come up with interventions, which have more impact on pupilôs participation in education. These include working with the Ministry of Agriculture and other stakeholders to enhance food security and provision of meals in schools across Turkana County. It can also work with the Ministry of Health to provide guidelines on nutritive qualities of food supplied to schools in the region. Moreover, the Ministry of Education, in collaboration with the Ministry of Transport, will draw insights on how to address challenges relating to supply of food and other resources to schools in the difficult terrains of Turkana.

The findings may contribute to advancement of knowledge on the usefulness of the governmentôs safety interventions in increasing access and participation of pastoralistsô pupils on basic education in order to promote their social and economic progress in human development. These insights will help the Ministry of Security and other security agencies to understand the impact of prevailing security situation in participation, devise the best security measures to address security challenges and work with local communities to enhance security for schools.

The study also provides useful information on the effectiveness of free primary education in Turkana County. This information will help the national and county governments to define financial incentives that can work best to promote educational participation among pastoralists communities. The Ministry of Education and Teachersô Service Commission will also use the information to identify and propose solutions to challenges that teachers and learners experience in mobile and regular schools in Turkana and similar regions. Other stakeholders will also use the findings of this study to provide support for FPE by providing sanitary pads to girls and facilitating the supply of electric and solar power to mobile and regular schools.

Future researchers in education, especially among marginalised groups and in ASAL regions, will benefit from this study. The study will provide a basis for defining the unique educational needs of pastoralist communities and propose effective policy and practical interventions to enhance participation and access to quality education.

1.7 Limitations of the Study

In carrying out this study, the researcher experienced some challenges. For example, the mobile schools were far apart and constantly on the move following the migratory routes of the nomadic pastoralist community in pursuit of pastures and water. It was therefore quite challenging to get the pastoralists communities. However, research assistants who knew the migratory routes from the pastoralists communities were engaged in data collection hence eased the difficulty of data collection and minimized the transport cost. The other limitation was insecurity concerns in the area, which were as a result of cattle rustling and conflicts among pastoralist communities. To counter insecurity issues, the researcher liaised with county administrators to provide security and relied on information from the locals to establish the time when rustling was less rampant. This enabled the research assistants to collect data with ease especially where security posed a challenge to the researcher in carrying out the research on time.

1.8 Delimitation of the Study

This study was carried out in Turkana West, Turkana Central and Loima sub-counties in Turkana County. Data was collected from the target population comprising pupils, teachers, head teachers, education officers, county commissioner and parents. The focus was on the effectiveness of the governmentôs interventions in terms of school feeding programme, Government security and Free Primary Education on participation of the pastoralistsô pupils in regular educational centres and mobile

learning institutions while netting out other factors that may affected participation rates in schools and particularly in pastoralist areas.

1.9 Assumptions of the Study

The study was based on the following assumptions:

i) That the intervention measures introduced by the government were intended for all pastoralistsô pupils either in mobile or regular schools in Turkana County.

ii) That the pastoralistsô pupils were participating in either regular or mobile learning institutions in Turkana County.

iii) The school feeding programme affected the involvement of pastoralistsô pupils in mobile learning centres and in regular educational institutions.

iv) The security provided by the government affected the involvement of pastoralistsô pupils in mobile learning centres and regular educational centres.

v) The free primary education affected involvement of pastoralistsô pupils in mobile and regular primary schools.

vi) The availability of mobile and regular primary schools in Turkana County enhanced participation of pastoralist children in regular and mobile primary schooling.

1.10 Definition of Significant Terms

Effectiveness of government intervention refers to the how well government involvement meets the expected/desired changes that enable and facilitated participation of the pastoralistôs school going teenagers in mobile learning centres and regular educational centres in Turkana County.

Government Intervention measures refer to actions taken by the government to enable the pastoralists teenagers participate in mobile learning centres and regular

educational centres in the area studied. In this study this includes school feeding programme, government security and free primary education.

Mobile school refers to a school established to offer formal education to the pupils of nomadic pastoralists in their normal setting or environment that is ever on the move in search of fresh green pastures for their animals. Most of the mobile schools are attached to a particular public primary school where they received government resources like food, teachers, learning and teaching materials and are designed to suit the needs of the migrant communities which allow learners and teachers to re-locate as need arises.

Pupils' Participation refers to the attendance, enrolment, performance, achievement, and gender balance of the pastoralistsô pupils attending mobile and regular primary schools

Pastoralism refers to a way of keeping livestock that involves moving them from place to place to find water and food. Not having permanent residence.

Regular schools refer to public primary schools that are domicile/abode in one location and established by government in order to offer formal education to pastoralists pupils.

1.11 Organization of the Study

This study was structured into five sections. Chapter One, focused on the background to the study, statement of the problem, objectives of the study, research questions, research hypothesis, significance of the study, assumptions of the study, limitations and delimitations of the study, definition of terms and organization of the study. Chapter Two dealt with review of related literature in relation to the involvement of

the pastoralistsô pupilsô in mobile and regular learning institutions. It also covered, theoretical framework and the conceptual framework.

Chapter Three focused on research methodology used in this study. Chapter Four focused on data analysis, interpretation and presentation while Chapter Five dealt with the summary, conclusions, recommendations of the report and further proposed areas for advanced research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter dealt with the review of the related literature. The reviewed literature focused on the effectiveness of the interventions offered by the government to enhance involvement of the pastoralistsô pupils in mobile and regular learning institutions. The areas, which were reviewed, included an overview of the involvement of the pastoralistsô pupils in primary education, the usefulness of the feeding programme in schools, the security offered by the government and the free primary education on the involvement of pastoralistsô pupils in mobile and regular learning institutiions. The chapter also covered the summary of literature review, theoretical framework and the conceptual framework.

2.2 An Overview of Pastoralists' Pupils' Participation in Primary Education

Dyer (2016) avers that those policies for education of pastoralist communities have tended to focus too much on nomadic nature of these communities. In Kenya, the strategy for addressing the challenges brought to education access among pastoralist communities like the Turkana has been the introduction of mobile schools. According to Dyer, however, more studies are needed to provide contextual analyses of the unique educational needs of nomadic groups. Such an understanding will inform subsequent policies of education. Taking insight, the current study assessed the usefulness of the Kenyan-government approaches on the participation of pastoralistsô pupils in mobile and regular schools in Turkana County.

Suresh and Srinivasan (2019) aver that, in India, nomads do not attach as much value to education as does the government and other citizens who live in regions that are more endowed with natural resources. As such, national strategies to promote equal

access to education in India have not borne much fruit in regions where nomads live. These authors for instance point out that the fixed (regular) school systems are not applicable to nomads who survive by constantly moving around. Similarly, the curriculum, which is designed along the need to promote national goals of development, tends to be irrelevant to the realities of the nomads. So, according to these authors, aside from providing mobile or residential schools, governments should review the curriculum and customise it to the unique needs of the nomads. They recommend revisions such as the integration of pastoralistsô language, provision of simple arithmetic to support their everyday use, provide practical knowledge on their history and geography, and how to harness their difficult environment for better livelihood. The present study was inspired by the need to examine how the unique characteristics of nomadic life in Turkana County have either enhanced or hindered the effectiveness of the interventions of the government aimed at promoting pastoralistsô pupilsô involvement in regular educational centres and mobile learning institutions.

Sharifi (2013) argues that one of the reasons government efforts to educate the nomadic Kuchi groups has been lack of proper understanding of the needs of these groups. According to Sharifi, government educational programmes are often designed and implemented in a top-down framework. This renders the programmes inefficient, with minimal impact and unsustainable. The author recommends the use of a bottom-up approach when designing and implementing educational interventions for nomadic groups. Drawing on Sharifiôs insights, the current study examined issues of effectiveness of government interventions aimed at promoting involvement of the pastoralistsô pupils in mobile and regular learning institutions in Turkana County, Kenya.

According to Zinsstag, Taleb and Craig (2006), the nomadic pastoralists of the Sub-Saharan African, Central Asia, Middle East and India are highly mobile in order to overcome insecurity and dangers in dry and semidry land environments. They are constantly endangered by famine, illnesses, insects and war/cattle rustling, amongst extra disasters. Nomadic pastoralists are geographically and socially marginalized and they live in areas that are agriculturally unsuitable. It would be impossible to live in such areas without livestock that provide them with the basic needs. Sheep, cattle, camel, goats and donkeys are some of the domestic animals kept by nomadic people and which provide them with food, transport, shelter, clothing and more importantly provide the basis of wealth, traditional customs and respect. Considering the unique challenges that nomadic pastoralists face, governments have been forced to establish intervention measures to facilitate their access to quality education. One of such measures has been the introduction of mobile schools implemented along the regular schools. Within these two types of schools, governments try to promote participation by enhancing security, providing meals and shouldering the costs of education for families. It was the aim of this study to assess the effectiveness and usefulness of such interventions on the participation of pastoralistsô pupils in mobile and regular primary learning institutions in Turkana County, Kenya.

UNESCO (2015) also asserted that nomadic pastoralist groups are in many ways live-stock-centred, seasonally mobile, well adapted to harsh terrain and extreme climates, resilient to sickness, are organised along the family or clan and social networks, and tend to be autonomous (and distrustful of) from regional or national authorities. They do, however, make a signiýcant contribution to national gross domestic products (GDPs) by making marginal lands more productive.

On matters of education, Cohen (2005) asserts that nomadic pastoralists and sedentary communities lag behind in accessing education and other public services. Education and poverty eradication programs at the national government negligence of nomadic inhabitants because of their geographic remoteness, poor communications, logistics requirements, uncertain civil status and their perceived low priority. Consequently, mutual distrust between nomadic pastoralists and governmental structures tend to be an obstacle to the usage of existing amenities in towns. Such mistrust could affect the effectiveness of government intervention measures aimed at optimizing pastoralist pupilsô participation in schools. Thus, the present study sought to document the efficacy of such actions in Turkana area.

Ngugi (2016) reports that the manifold needs of Nomadic pastoralistôs children worldwide remain unmet in spite of the global efforts to increase enrolment for several decades now. It has been quite a challenge trying to provide nomadic pastoralist children with prescribed schooling and as such thousands of their them have remained out of school in the education system. According to Kratli (2001), nomadic pastoralists are normally at the margin in terms of enrolment, class attendance and gender balance. UNESCO (2010) also posits that reaching nomadic pastoralists with education has now become a recognized global mandate and concern. The Education for All (EFA) goal for basic education sought to ensure all children, gender notwithstanding, should receive basic training with zero segregation by sex, language, location, socio-economic status or any other reasons. Although there is a significant increase in enrolment reported towards achieving Universal Primary Education (UPE), provision of formal education for hard-to-reach up-country regions has proven difficult all over the world. Multitudes of girls remain out of learning institutions and many more who register never complete their basic

education. Taking a cue from these views, the current report evaluated the usefulness of government intervention measures on the involvement of the pastoralistsô pupils in regular educational centres and mobile learning institutions in Turkana area.

The report done by Ngugi (2016) and Sifuna (2005) the establishment of formal education started in Turkana after the Ominde Commission of 1964 proposed that the government should provide more grants, build boarding schools and mobile schools in Arid and Semi-Arid Lands (ASAL) regions that depended on livestock for their livelihood to increase participation of nomadic pastoralistôs children in education. Kratli and Dyer (2009) reported that regular schools and mobile primary schools started coming up in early 1970s in Turkana County when there was hardly any formal education established in the County.

UNESCO (2010) reported that in 1990s, the World Bank and the Government of Kenya through Arid Lands Resource Management (ALRM) tried to revive the mobile schools in ASAL areas including: Tana, Samburu, Wajir, Marsabit, and Ijara, Turkana, among others. Sifuna (2005) and Tahir (2006) further reported that other alternative programs like the school feeding programs, boarding schools, and provision of stationeries to the marginalized counties were also introduced by the government of Kenya in order to ensure that all children participate in education including the children of Nomadic pastoralist communities. However, it is not clear whether or not the effectiveness of these measures has been evaluated. Therefore, this study evaluated the usefulness of government intervention actions on the involvement of the pastoralistsô pupils in mobile educational centres and regular learning centres in Turkana Kenya.

According to Migosi, Nanok, Ombuki and Metet (2012), the participation of girls in primary school education in Turkana is hindered by socio-cultural related factors such as early marriages, nomadic lifestyles and gender discrimination by parents who deliberately do not want to send their girls to school. Ngugi (2016) has also observed that the nomadic pastoralistsô children have been pushed out of school mainly because of early marriages of the young girls and because of the migratory pattern of the pastoralists communities who prefer to move with their children wherever they go. Migosi *at al.*ôs study is relevant to the current study in that it was conducted in Turkana County, where this same study area conducted. Ngugiôs study also addresses the issue of factors hindering children of nomadic communities from accessing education. However, both Migosi *at al.* and Ngugi, in their studies, do not provide any data on whether or not the government has put in place any measures to mitigate the factors that hinder girlsô participation in schools. Hence, the current report evaluated the usefulness of government intervention measures on the involvement of the pastoralistsô pupils in mobile educational centres and regular learning centres in Turkana County, Kenya. The next sections focus on the various government interventions and their influence on pupilsô participation in schools.

The next sections of the chapter present an empirical review of literature. In reviewing literature related to each of the study objectives, the researcher has attempted to provide a comparative analysis of the impact between the regular and mobile schools. Mobile schools are not separate from the regular schools; they are attached to the regular schools (Siele, Swift & Kratli, 2011). One regular school can host one or more mobile schools. Therefore, government interventions are usually provided through the regular schools and reach mobile schools. However, the unique feature that defines mobile schools is their constant movement. The regular school administrators are

tasked with tracking the varying locations of these mobile schools and then reporting it to the government. The regular school considers various factors when sharing resources received from the government with the mobile. These include its own requirements, the number of mobile schools under its care, the number of students in each of the mobile schools, and the unique challenges presented to the mobile schools by the current environment in which they operate.

2.3 Effectiveness of the School Feeding Programme on Pupils' Participation in Primary Schools

The first objective of the current study was to examine the usefulness of the feeding programme in schools as a measure offered by the government in order to enhance participation of the pastoralistsô pupils in mobile educational centres and regular learning centres in Turkana County. Therefore, this section presents a review of literature on measures of school feeding and how these affect participations of pastoralistsô pupils in mobile and regular schools. These measures include the provision of free meals, the quality and quantities of food provided, issues of food supply, such as the sources and timeliness of food delivery to school, and lastly the provision of cooking fuel and water in schools.

The primary postulation of the feeding programme is that learning and education depend and rely on good diet and nutrition. Nonetheless, in planning and implementation of the feeding programme, a number of alternatives and options are obtainable, subject to the basic education goals of the programme. The feeding programme do comprise of basic snacks and food portions (that frequently include enhanced crusts) to initial pre-lunch mealtimes or lunchtimes as well as portions taken home. Frequently, such programs function in concurrence alongside additional well-being and nourishment initiatives to enhance their achievement and influence. A

variety of classifications of the feeding programme do exist, and connected to the basic goals of the program; improved admission and attendance which reduced gender variation, lessen temporary starvation and so improve educational competence.

2.3.1 Free Meals in Schools and Pupils' Participation

Jensen (2010) holds that school feeding mainly happens at the realm of broad national education sector transformation programmes. The reforms target various critical inputs to the sector, including instructor development, curriculum changes and student evaluation. National secretariats or organizations of education strive to balance between provision of meals in schools and meeting other educational needs. Therefore, these stakeholders always try to base their support on needs assessment informed by the uniqueness of different schools; in the case of this study the regular and mobile schools. In respect to the above, it was curious to gauge how the Kenyan state provides school feeding amidst supplying other media in the Turkana County.

Pediatre (2001) further posits that presence in school and school achievement are greatly bolstered via student meals in school. Many learning centres are previously striving to operate hardly practical structures and to manage the extra work of diet supply. For example, a regular school tasked with the running of a mobile school may experience challenges relating to managing and distributing the teaching and learning resources fairly across both levels of the school. The implication here may be that the mobile school will always experience delays in receiving the resources provided through the regular school. Therefore, this inquiry endeavoured to evaluate the efficacy of school meals strategy on childrenôs involvement in mobile educational centres and regular learning centres in among Turkana pastoralists.

Adelman *et al.* (2008) illustrated on how availing of free meals alleviates the expense of instructing pupils via reverting surplus revenue for families, and subsequently reinforcing the value education. This is described as a revenue outcome of school-centre meals. Where this revenue outcome is high, it might lead families to enrol more and younger children subsequently diminishing mature entrance. Moreover, the ólocality consequenceô arising through the school meals programme might impact the age of enrolment. As such, the choice of families to enrol their kids at an early age by the advent of school meals would produce a communal influence and drive related choices on other families (Adelman *et al*., 2008). As such, this research wanted to ascertain the efficacy of school meals strategy on nomadic pupilsô involvement in mobile educational centres and regular learning centres in Turkana County, Kenya. Specifically, the study focused on how provision of free meals has influenced parentsô enrolment of their children in mobile educational centres and regular learning centres in Turkana County. It was envisaged that the income effect would be stronger for families that enrol children in regular schools than those that enrol them in mobile schools. This is because in most cases parents of children in mobile schools do not have a steady source of household income compared to those of children in regular schools. In fact, it is more likely that parents of mobile schools depend solely on school meals to feed their children. Therefore, the income effect would only apply to the regular and not the mobile schools.

The interest of all states is to address amicably the challenges stemming from globalization, which resulted the drafting of MDGs. In these goals, focus was assigned to ridding poverty and hunger in the first Goal. The sub-aim designed therein was that at the onset of 2015, the number of persons experiencing hunger would be reduced by half of that by 1990 (UNO, 2005a). The UN Hunger Task Force (2004)

delineated 7 strategies to achieve this end, including the roll-out of school feeding that relies on locally obtained foods. The Task Force considers this strategy critical to schooling and food production. In its view, SFPs would promote pupilsô participation, especially among girls, and, as such, enhance the uptake of locally obtained foods. The idea of locally sourced foodstuffs may not apply so much in the case of pastoralist communities who reside mostly in lands that are not arable and depend entirely on animal products. However, in this study, it was presumed that the government provision of free meals in schools would help regular and mobile schools to increase enrolment and boost the income effect on households with children in regular schools. In comparison, for households with children in mobile schools, it was presumed that the provision of free meals would help them to settle longer in one place and move closer to the regular schools. This would minimize the disruptions on teaching and learning caused by the constant movement.

The UN Hunger Task Force (2004) further proposed broad community- and school-based meals initiatives that include regular de-worming, nutrition enhancement, take-home portions, safe cooking systems, clean drinking water, and reinforced overall hygiene. Also incorporated was awareness on HIV/AIDS, hygiene, nutrition and health. These initiatives simultaneously offered an ideal framework for strengthening schools by securing childrenôs health and involving locals (UNO, 2005b). One imagines that the logistical processes of supporting regular schools are much easier than those needed to support mobile schools, since the latter are always on the move. Nevertheless, a UNO evaluation delineates the value of school meals provision for all schools in general; yet, it says nothing of the assessment of the efficacy of SFP. As such, this investigation examined the efficacy of school meals provision strategy in enhancing participation among nomadic pastoralist pupils in Turkana County.

The New Partnership on Africaôs Development (NEPAD) (2005a) adopted the method of the United Nations Hunger Task Force (UNHTF) and focused on a raft of school meals and farming. The NEPAD Secretariat has defined the Comprehensive Africa Agriculture Development Programme (CAADP) to act as a framework for the restoration of farming, growth, steady food provision, and rural extension in Africa. In this context, the third strategy explores specifically the requirement to boost diet output and reduce starvation. It consists of these targets: (1) to reduce poor diet in pupils by nutrition enhancement per single whole meal, and (2) to broaden community push for food outputs and spur on outputs from small scale farming (NEPAD, 2005a). NEPAD provides the initiatives to bolster SFP. Nevertheless, the work says nothing about the unique challenges of promoting agriculture in arid and semi-arid lands where pastoralist communities live. Moreover, it says nothing of the need to assess the efficacy of these school meals initiatives, especially among schools that cater to pastoralist communities. As such, this inquiry explored the efficacy of school meals provisions on pastoralistsô learnersô engagement in primary schooling in Turkana.

New Partnership for African Development (2005b) has defined a measure of enhancement for school meals provisions. It includes the supply of strategic and evenly spread meals that contain even measure of calories and nutrients to 1.000.000 learners in poor and risky areas across the NEPAD member countries. World figures indicate that, from 2000-2002, over 850 million persons, mainly children, were malnourished. Majority come from developing regions, although even in America, over 3 million children faced 'food insecurity with hunger' from 1998-2000 (WFP, 2006a). According to WFP, child malnourishment and/or nutrient shortfalls can negatively impact their physiological, cognitive and social growth. Indicators on

physiological wellbeing may include weight loss, stunting, poor immunity and death. Therefore, the ideal measure of the efficacy of a school meals initiative is the mere provision of meals, but also the quality of the meals the signs of improved health and nutrition in children attending schools. These indicators were considered in the current study.

According to the Global Monitoring Report (GMR) (2013), social defense/protection initiatives might expand schooling chances for kids from unfortunate homes. School meals provision, in which consistent attendee learners are given a daily meal, are alluring social protection initiatives capable of tackling dual development concerns at the same time. These views seem to apply to regular schools only where childrenôs attendance of school is steady. In mobile schools, attendance may be disrupted constantly by the movement of the community from one place to the next in search of food and water. Nevertheless, from the Global Monitoring Report, it seems that the provision of free meals is in fact an attempt to minimize pastoralistsô movement altogether. Therefore, this study also intended to establish if the Kenya government intervention of school feeding programme has led to increase in primary school enrolment in Turkana County.

Commenting on the above-mentioned Global Monitoring Report, the World Bank (2009) notes that social protection programs, such as school feeding, have indicated significant outcomes for the schooling and social welfare of learners from poor homes. For basic education to be more valuable, children should begin at the right age, advance in the system and finish a full package. Experts indicate that 6 years of basic schooling are needed to reach the optimum mastery and proficiency needed for valuable schooling (World Bank, 2009). However, most learners at primary level abandon schooling. In 22 impoverished states, at least 30% of youths have finished

less than 4 years of basic schooling. In 11 Sub-Saharan African states, this percentage goes up to 50 or more. The notion of the appropriate age of entry into school is difficult to delineate in respect to pastoralists communities. For instance, in mobile schools, unlike in regular schools, children can enrol at any age. Additionally, due to constant discontinuity, a child may spend more than the required eight years in a mobile primary school compared to a regular school system. Drawing from these views, the current study examined the contribution of SFP to ensuring that pastoralistsô pupils in mobile educational centres and regular learning centres in Turkana County receive a steady and meaningful primary education.

Mutangadura *et al.* (2003) looked at the years that the children in ASAL communities spend in school. They found that, in 26 states, 20 percent of school drop-outs had less than 2 years' learning whereas in states such as Somalia and Burkina Faso, the percentage goes beyond 50. In some countries, children stayed in school for four years while in many other countries their duration of stay was only two years. These statistics varied more according to school type, so that the duration of stay in school was higher in regular than in mobile schools. The study by Mutangadura *et al.* informed the current investigation by offering data on schooling in ASAL. However, the current work was undertaken in Kenyaôs Turkana County to explore the efficacy of school meals provision on nomadsô childrenôs engagement with schooling in regular and mobile primary centres. School meals provision was thought to positively impact schooling outcomes by bolstering enrolment and retention, limiting absenteeism and dropping out.

Powell and Fazio (2006) aver that, in many countries, school meals provision is among the critical incentives to lure children to embrace education. WFP documented how a young man who finished basic education in Cameroon in which World Food

Program availed free meals to learners had this to say: ñAt home we usually eat millet. But at my primary school we got to eat rice and beans, so all the children in my area wanted to goò (WFP, 2009). SFPs further tend to act as promoters of poor familiesô option to enrol their children. Attendance levels are diminished among learners from such families, and offering meals to such kids can be likened to contributing an extra 10 percent to average family earning (World Bank, 2009). For this reason, school meals provision act as social safety buffers for struggling families. The present study drew insights from the above reviewed works, noting that school feeding programmes constitute important incentives to enhance pastoralistsô pupilsô engagement in regular and mobile schools.

Works, like WFP (2009) and World Bank (2009), affirm that school meals tend to raise enrolment in developing states. Since such countries also contend with emerging issues, it is critical to frequently assess such views using empirical data. Additionally, where interventions have been implemented, it is necessary to conduct regular assessment to determine their effectiveness. As such, this study looked into the efficacy of school meals provision on pastoralistsô learnersô engagement in mobile educational centres and regular learning systems in Turkana County.

According to Hutchinson *et al*. (2006), in transitional states, school meals additionally seek to enhance attendance, intake and spur learnersô choice to spend more time in school. In many countries, such programs are among those aimed at inspiring learners, especially girls, from poor and risky backgrounds, to seek education. In light of these insights, the present inquiry was determined to gauge if SFP in regular and mobile learning centres had spurred on greater enrolment and participation.

According to Rugyendo *et al.* (2011), the Food For Education (FFE) offers nourishments to learners or their kin in return for enrolment and stay in school. It also openly associates with the first 3 Millennium Development Goals (Lawson, 2012). Rugyendo *et al*. (2011) adds that, in Uganda, school feeding assistance is seen against a largest background. Although Uganda had one of the highest economic growth rates over the last decade, 35 percent of the population still lives below the poverty line. Moreover, over 1.58 million people in the Northern and Northeast areas of Uganda live in internal refugee areas with hardly any access to a decent means of living. At the same time, at least 42 percent of the households in Uganda support a person orphaned by HIV/AIDS, malnutrition, diseases or conflicts. Among the beneficiaries of the FFE are pastoralist communities who also experience food shortage as result of living in drought prone areas. Rugyendo *et al.*ôs report was done in Uganda whereas the present one was undertaken in Kenya to assess the efficacy of school meals provision on nomadic-pastoralistsô pupilsô partaking in mobile educational centres and regular learning centres in Turkana County.

Rugyendo *et al.* (2011) further observe that FFE programmes hold out the promise of simultaneous programmes towards two of the Millennium Development Goals: combating hunger and achieving UPE. Such programmes link education to the public provision of food, providing an additional incentive for students to attend school and for their parents or other caregivers to enable the pupil to do so. Research shows that FFE programmes do have an effect in increasing school participation, fostering learning, and supplementing inadequate diets. Studies of school breakfast programmes in several places suggest that such programmes lead to better attendance, higher levels of nutrition, increased attendance in schools, cut down dropout rate, and useful results on learning performance. This report also wanted to institute if such

programmes had influence on nomadic-pastoralistsô pupilsô involvement in mobile educational centres and regular learning centres in Turkana area.

Feeding Rwanda (2012) reports that Rwanda and UNICEF delineated school meals provision as a positive option to tackle chronic child malnourishment. Moreover, such meals are likely to yield good schooling outcomes, in terms of presence and ability to master content. The Rwandan state, working with WFP, provides school meals in regions that experience food insecurity. WFP slowly withdrew its aid and gave full capacity and authority of SFP to the Rwandan state by 2012. The plan was reviewed in 2011 and WFP upped the children that received meals by 30 percent. The reviewed work was done in Rwanda whereas this research was undertaken in Turkana, Kenya, to gauge the efficacy of SFP on pastoralistsô childrenôs engagement in schooling. The Rwandan study also provides insight on the need to constantly evaluate the school feeding program to ascertain its sustainability, especially when external support has ceased. The present study was interested in determining the sustainability of SFP in supporting pastoralistsô pupilsô participation in basic education.

In Kenya, Kariuki (2013), in a study, found that Makueni District had been offering daytime food to any learning institution with substantial aid assistance from WFP; communities also supply some of the meals when they can. The goal was to give the learners assurance of food security. Indeed, as noted by Kariuki, good achievement is linked to a steady school meals supply. Noting that Makueni is an ASAL region, the current study equally wanted to determine if such meals initiatives were impactful in Turkana County where the state avails food to try to enrol more children. Although the two counties are considered ASAL, the Makueni school feeding approach may not be viable in Turkana where much of the land is not arable. Kariukiôs study does not

delineate between the impact of SFP mobile and regular schools, which was done in the current study.

Works like those of UNICEF (2006), WFP (2009) and World Bank (2009) affirm that school meals do increase participation in developing states. Nonetheless, since such states also tackle emerging issues, it is critical to frequently test such hypotheses using empirical data. As such, this investigation explored the efficacy of school meals provision on Turkana pastoralistsô children enrolment and stay in primary schools.

2.3.2 Nutritive Value of Food in School Feeding Programmes

Education is compromised when learners are deprived of schooling because of poor nourishment. School meals encourage enrolment and retention. An estimated 23 million children in the sub-Saharan Africa attend school in a state of malnutrition, a situation that has far-reaching consequences for their education (UNDP, 2005). Malnourished learners cannot learn as much as do those who well-fed. As such, malnutrition stunts mental growth, leading to poor educational outcomes (WFP, 2007). Such a situation of human underdevelopment is an injustice and illegality. Properly developed meals provision strategies that incorporate nutritional additives can accrue various benefits, thus limiting the impact of malnutrition on learning outcomes (UNICEF, 2006). These postulations present an ideal case in respect to the quality of food that children should receive in school as part of SFP. However, it is important to incorporate contextual factors when determining what constitutes nutritive food. For instance, in the case of Turkana, children walk long distances to school across difficult and dry terrains. How would an ideal SFP address these childrenôs nutritive needs? The present study measured the effectiveness of SFP based on such considerations.

Taylor (2009) observes that nomadic communities live in places marked by lengthy dry spells. He emphasizes that learners suffering from poor growth due to malnourishment tend to lag behind in academic progression, beginning with late entrance and absenteeism, conduct problems, and learning output. As such, they tend to abandon learning prematurely or repeat stages. Providing the needed micronutrient and related measures for learners will boost their achievement. Strengthening health and nutrition of learners contributes to increased enrolment and performance. Taylor offers suggestions on the value of school meals provision. Nevertheless, he mentions nothing on the efficacy of particular school meals provision in ASALs. As such, this investigation evaluated how the school feeding strategy rolled out in Turkana, Kenya, had influenced children's engagement in mobile educational centres and regular learning centres.

Wolpert and Wheeler (2008), in research undertaken in England, found that schooling outcomes were bolstered amongst pupils supplied with Omega-3 fatty acids. Those who registered better scores on examinations gauging oral acumen, knowledge competency, and recall after 6 months and 1 year were interrelated with those of the control group who were not supplied with the enriched meal. The reviewed study was undertaken in England, which is completely different in terms of social and economic as compared to Turkana County. Consequently, the results from Wolpert and Wheeler's inquiry were barely insightful in clarifying the issue investigated in the current study. The contemporary research required to understand the nature of school meals provision given to learners in basic educational centres in Turkana and to explore the efficacy of such provision in respect to involvement.

2.3.3 Supply Related Issues

This sub-section examines literature on issues relating to the supply of food to schools. Specifically, it explores the main sources of food supplied to schools, the quantities of food supplied in relation to school needs, and the timeliness in supply of food.

On the issue of quantities of food and food rationing, a critical concern in school meals provision studies was found out that in vulnerable families, the portion served to kids could be reduced since they receive meals in school, a practice also known as 'substitution' (WFP, 2006b). For example, a review of school meals strategy in Malawi indicated that 77 percent of learners said they received smaller servings at home whenever they received school meals. Caregivers corroborated this, so that 82 percent of them affirmed that substitution occurred. Where there was extra food, it was used to feed the rest of the family members, especially children (Mutangadura *et al*., 2003). The notion of substitution presumes that all homes have some limited supply of food. In the case of Turkana, this may apply to households with children in regular schools. However, those with children in mobile schools may rely solely on school meals for their children. Moreover, the reviewed study was conducted in Malawi and it endeavoured to ascertain if the meals offered to schools by the state was enough and of the required value. As such, this research evaluated the efficacy of SFP on nomadic pupilsô engagement in mobile educational centres and regular learning centres in Turkana Kenya.

According to Greenhalgh *et al*. (2007), well-designed SFPs can be targeted reasonably accurately, albeit seldom efficiently, as the most progressive form of financial aid. In abjectly poor areas, in which education is never prioritised, SFP may not reach the most disadvantaged sections, despite the fact that in such regions

substitute safety net options are diminished greatly. As such, regionally targeted growth of the meal program can provide the most preferred option for healthy upscaling of interventions. Generally, there is evidence to show SFPs boost school participation, cognitive development, and academic outcomes, especially if boosted by micronutrient content. Policy assessment also shows that the efficiency and sustainability of SFPs depends on deeply integrating strategies within education practice. As such, the value of SFP is shaped by its production of desirable educational outcomes. Greenhalgh *et al*. offer important information on how to adopt SFPs. Nevertheless, they fail to define strategies for evaluating if those SFPs are yielding needed outcomes. Consequently, this report sought to bridge the gap in respect to schools in Turkana County.

In a study in Wajir, Kenya, Wangu (2013) found that lack of water for cleaning and processing of meals was a major hindrance to education in mobile schools. She noted that wherever mobile schools settled, pupils, teachers and the parents were always forced to spend longer durations searching for water. This disrupted educational activities. Associated with this challenge was also child labour. Wangu found that children often spent long times in household chores, such as fetching firewood, grazing, caring for siblings, all of which disrupted learning. Wanguôs study only focused on mobile schools while the current study focused on both mobile and regular schools.

2.4 Effectiveness of Government Security on the Pastoralists' Pupils' Participation in Primary Education

This current study also evaluated the efficacy of state security appraoches on nomadic pupilsô engagement in mobile educational centres and regular learning centres in

Turkana County. Therefore, this section undertakes a review of literature on government security measures and their effect on learnersô partaking in education.

2.4.1 Security Situation around Schools and Pupils' Participation

Security is critical to education in ASALs because most of these regions experience insecurity stemming from cattle rustling, invasions and violence that affect schools. Many regions in the African sub-Sahara experience conflicts that affect schools. Education related conflicts have also attracted increased interest among state agencies, especially when it becomes necessary to intervene to quell unrest among students (OôMalley, 2007). Additional studies have also examined erotic violence in educational centres as a form of education-related insecurity (Leach & Humphrey, 2007; Mirembe & Davies, 2001). In the Middle East, scholarly works have examined the effect of conflicts on teachers and students (OôMalley, 2007).

In war-prone regions, OôMalley (2007) observes, ñschools, places that should be safe for children, have increasingly become the prime target of attacks by armed partiesò. The overhead scholarly works might not apply much to Turkana since the researches were undertaken beyond the Kenyan borders. Nevertheless, the reports provided insight in conceiving key issues concerning the relationship between security and learning. How does security affect learnersô involvement in mobile educational centres and regular learning centres in Turkana? What measures has the state instituted to address security concerns that affect education? How fruitful have these measures been? Are there differences in the seriousness of security concerns and success of governmentôs security measures between the regular and mobile institutions? This study endeavoured to address these critical issues by investigating the efficacy of state security measures on nomadic pupilsô engagement in education in Turkana County.

According UNESCO (2013), 148 schools were damaged or destroyed within two months of fighting in Gaza. Three attacks on UN-managed educational organizations slayed forty-five, amongst those slaughtered were seventeen students. In Nigeria, the Boko Haram provoked international anger in April 2014 when they stormed a secondary school and kidnapped almost 300 learners who are all girls. In Syria, with the conflict now in its fourth year, almost 20 percent of schools can no longer be used because they have been damaged or destroyed, or because they are being used as emergency accommodation for the displaced. These views attest to the fact that conflict affects schooling. The nature of conflicts in Turkana, the site of this study, may not be to the scale of those mentioned by UNESCO. However, the report provides key points to highlight when discussing the impact of insecurity on childrenôs schooling.

Among the nomadic communities, UNESCO (2013) observes that conflict caused by competition for livestock food and water is prevalent. This along with cattle rustling heightens insecurity in these regions. The current study sought to determine the degree to which state security interventions have influenced learnersô participation in education. UNESCOôs evaluation focused on the Middle East where issues of insecurity is more serious than those experienced in Turkana region. As such, it was vital to ground UNESCOôs propositions in a region like Turkana to determine the efficacy of state security provision on nomadic learnersô participation in education.

In Africa, insecurity in resource-scarce regions is prevalent and is a huge barrier to education. Obura (2008) noted that armed and equipped insurrections be it instigated by party-political disagreements or financial issues across the globe are among the highest obstacles to offering appropriate education in Africa. Armed and equipped insurrections especially in Africa, are linked to the proliferation of illicit guns. These

arms are ky instruments I livestock and other resource-related conflicts, which negatively impact education in affected regions. Nations that have faced this type of conflict include the Democratic Republic of Congo, Sierra Leone, Southern Sudan, Uganda, Kenya, and Somalia among others. Since Turkana County is an ASAL area in Kenya, this research explored the efficacy of state security measures on Turkana pupilsô engagement in education in the County.

The United Nations (2011) posits that conflict destroys schools and displaces communities and thus reduces educational chances in war-stricken regions. This view applies more to regular schools that have in place infrastructure set up to support educational activities. In most cases, mobile schools do not have such structures; much of the learning happens under trees or in makeshift camps. Fear and uncertainty from conflicts forces parents to retain children at home.

Jean (2006) suggests that the biggest problem affecting basic education in Africaôs sub-Sahara is poor entry and completion levels. In Uganda, the uprising of rebels in northern regions and the subsequent militant response by of state troops greatly impacted access to schooling. The ensuing chaos destroyed schools, displaced communities, kidnapping of learners for sex slavery and trafficking and recruitment of child soldiers. The fear inflicted on young learners by the Lordôs Resistance Army (LRA) rebels, for instance, kept many away from educational centres in the area (UNICEF, 2011). The re-examined works above indicate the influence of insecurity on participation in education. Nevertheless, UNICEF does not define precisely how the issue of insecurity can be undone to ensure education access and participation. It does not also indicate any differences in the effect of insecurity on various school types, like the mobile and regular ones. As such, it was prudent to put UNCEFôs views to an empirical test by exploring the influence of the Kenyan-government

security measures on Turkana pupilsô engagement in mobile learning centres and regular educational centres.

2.4.2 Type of Security Measures/Agents and Pupils' Participation

Sifuna (2005) indicated that there was need to articulate vibrant guidelines and include nomadic-pastoralist communities in designing as well as integrate essentials of their prevailing indigenous schooling traditions. This had been tried out by many governments in attempt to provide educational interventions among the marginalized and excluded groups. This study thus endeavoured to find out the consequence of such state security measures on learnersô involvement in education amongst the nomadic groups. Sifuna proposed the benefit of incorporating the existing customary schooling structures, but he failed defining how this incorporation would be realized and how its usefulness could be measured. He does not also show how such traditional education institutions enhance security for mobile and regular schools. Subsequently, this research was undertaken to evaluate the effectiveness of state security measures on Turkana pupilsô involvement in regular educational centres and mobile learning centres.

Lulua (2008) states that, in Uganda, the government rolled out a programme called the Safe School Contract (SCC), which aims to reinforce the roles of teachers, pupils and parents in ensuring security in school. The SCCs work by bringing together schools, communities and students in monitoring, reporting and preventing insecurity in and around learning institutions. According to Lulua, by 2008, a total of 200 schools had been inducted into the SCC programmes. At the time, the SCCs were proving to be effective in providing safety in schools. This is a testament to the fact that collaborative measures in school security work. One lesson to draw from Luluaôs study is the need to integrate contextual strategies in security measures for schools

and communities. As he demonstrates, such integration brings about the effectiveness of security measures. Since Luluaôs study was conducted in Uganda, the present-day report surveyed the usefulness of similar measures of school safety instituted by the Kenya government in Turkana County.

Since insecurity in ASAL is caused mainly by economic challenges, the Kenya government has over the years instituted many measures to boost economic growth and stability in regions like Turkana. For instance, in 2000, the government came up with a poverty reduction strategy for ASAL (GOK, 2000). The strategy targeted five areas to support security and progress in ASAL regions of Kenya. These included economic growth, governance and security, local income generation, improving living standards, and eliminating marginalization. Similarly, in 2003, the government launched an economic recovery strategy aimed at revamping various aspects of life in ASAL (GOK, 2003). The focus of the strategy was to provide a framework for improving access to health, education services and basic infrastructure in the Northern region of Kenya. The present report wanted to examine the usefulness of those methods related to security and education in promoting pastoralistsô pupilsô involvement in regular educational centres and mobile learning centres in Turkana County. It is not evident that the above measures by the GOK were delineated according to the types of schools found in ASAL, a gap that the present study sought to fill.

According to Omari (2011), security in Turkana County is particularly challenging because of the remote nature of the region and poor infrastructure. Coupled with these challenges, the County has a poverty index of over 94 percent and its residents are always on constant move. Omari also notes that the region experienced

marginalization in both the colonial and post-colonial governments. Drawing insight from Omariôs views, the current study examined the unique security challenges faced by the regular educational centres and mobile learning centres in Turkana County. The research also examined how these issues around Turkana influenced the effectiveness of government interventions on security for regular and mobile schools.

Gisesa (2014) argues that the recent discovery of oil in Turkana was expected to improve the living standards of the region through a restructuring of social amenities. However, as he points out, oil discoveries have not augured well with social progress anywhere. Therefore, Gisesa projects that the oil discovery will pose unique challenges to security in the region. Gisesaôs speculation was tested in the present study by examining the impact of insecurity on schooling in Turkana County. Therefore, informed by Gisesaôs views, the present work sought to explore the efficacy of security interventions from the state on nomadic-pastoralistsô pupilsô engagement in regular educational centres and mobile learning centres.

A study by Agade (2015) found that the use of Kenya Police Reservists (KPR) in Turkana is wrought with many complex challenges. Nevertheless, KPR are considered effective in providing security because they are drawn from the community. They thus have mastery of the terrain and the nature of security threats that the Turkana people face. Agade notes that KPR have been more useful in providing security for mobile schools while regular schools have benefited from the regular police posts and patrols across Turkana land. However, overall, there is a poor policy framework for the implementation of KPR security measure. For instance, there is lack of accountability on the persons involved in KPR, the records of their activities and the support system they ought to receive both from the national and

county governments. This problem stems from lack of appropriate definition on the monitoring and supervision system for KPRs. This explains why KPR arms have been associated with crimes like cattle rustling in Turkana County. These views helped the present study to evaluate the usefulness of the Kenyan-government security interventions on Turkana learnersô engagement in regular educational centres and mobile learning centres.

2.4.3 Police Posts and Patrols around Schools and Pupils' Participation

Arrington (2006) argues that securing schools demands for collaborative efforts between the community, school fraternity and law enforcement agencies. Arrington adds that for law enforcement to be effective in securing schools, they require the support of the community and, especially, students. Law enforcement work by conducting regular patrols and acting on reports from the community on threats to schools from both internal and external forces. Arringtonôs views raise some key questions that were pertinent to this study: to what extent do police officers work with communities in Turkana, especially in light of the nomadic nature of the communities? To what extent has the mobile nature of some schools in Turkana impaired with the policeôs ability to patrol the region effectively? As such, the present study examined the effectiveness of police posts and patrols in promoting schoolsô security and subsequently enhancing learnersô participation in school in Turkana County.

Atkinson (2002) posits that involving law enforcement in securing schools must be supported by a clear policy framework. In this policy, Atkinson adds, law enforcement should take the lead in defining the strategies, roles of different groups and the processes that go into school safety. Atkinson ignores the role of the local communities in defining security strategies, a gap that the present study explored. The

present study was particularly concerned with establishing if there was a delineation of the unique security needs of regular and mobile schools and how government security interventions have addressed those needs. It is in light of these arguments that the present study examined the exact role that police officers play in securing schools in Turkana County to enhance pupilsô participation.

2.5 Effectiveness of Free Primary Education on Pastoralists' Pupils' Participation in Primary Education

The study also assessed the effectiveness of free primary education intervention on pastoralistsô learnersô engagement with schooling in the mobile educational centres and regular learning centres in Turkana, Kenya. Therefore, this section conducts a review of literature on measures of free primary education. These include free tuition, teacher recruitment, provision of teaching and learning materials, and other support programmes for FPE such as provision of sanitary pads to female learners and supply of electricity to schools.

2.5.1 Free Tuition and Participation

It is generally believed that compulsory and free primary schooling (FPE) is obligated and indebted to address the desires of many disadvantaged children of the community. In 2000, at Dakar, Senegal, governments and agencies committed themselves to ensure every child has an access to and thorough unrestricted and obligatory basic schooling of excellent worth (World Education Forum, 2000). The fact in many African states can be benchmarked to showcase the benefit of removing fees for primary education centres. In Uganda, for instance, basic-primary institution reported the enrolment that went up from 3.59 to 6.89 million from 1996 to 2001 after FPE was launched (World Bank, 2003, p. 60). At the same time, in Tanzania, following the introduction of FPE in 2002, óan additional 1.6 million youngsters commenced

schoolingô (Oxfam International, 2005, p. 17). Moreover, Save the Children UK (2002, p. 5) reported that in Malawi, ótthe elimination of (basic-primary school) fees in 1994 experienced a magnificent increase in enrolment by 50 per cent virtually in one dayô. The above reviewed reports excel in documenting that free education has been introduced in different parts of the world. However, they fail to mention whether or not countries that have introduced free education have realized their intended objectives. Therefore, it was important in this study to establish the effectiveness of free primary education on pastoralistsô learnersô partaking in mobile educational centre and regular learning centres in Turkana County.

In Kenya, the involvement of nomadic-pastoralist and additional vulnerable and neglected communities in basic schooling was worsened in the late 1980s by the Kenyan-governmentôs effort to execute the World Bankôs Structural Adjustment Programme through the Education Sector Adjustment Credit system (EDSAC). Amongst the issues suggested by EDSAC was the cutting-down of the budgeted amount to justifiable levels (Government of Kenya & UNICEF, 1992). These guidelines required that parents/guardians and school groups were now obligated to fund the capital growth and the charges of basic education. The state chief role was supporting the teachersô salaries. The cost-sharing rule significantly intensified the charges of schooling in the nation. It was projected that each parent/guardian would pay or spend Kshs. 2300 for every child going to school yearly within the countryside environment and double the charges for those in urban setting. (Okore, 1981). These facts appeared to insinuate that fairness and parity in Kenyan basic education system remained distant; they also explained the falling participation rates and disparities in enrolment among the various communities. To what extent then has the introduction

of FPE enhanced nomadic youngsters' involvement in the mobile educational centres and regular learning centres in Turkana County?

In accordance with to Ministry of Education (MOE) and the Central Bureau of Statistics (CBS), the gross enrolment ratio (GER) in basic schooling involvement moved to the uppermost level of 95 percentage in 1989. Afterwards, it started declining gradually in the area of involvement, dropping to 79 percentage by 1995 (Abagi, 1997; National Council for NGOs, 1997). In relative expressions, involvements in reality especially in the ASAL regions were very low compared to high-potential farming regions. From these considerations, one expects that the introduction of FPE has helped to reverse the declining trends of educational participation in these ASAL regions. This explains why it was prudent to establish the effectiveness of free primary education on Turkana childrenôs involvement in regular and mobile primary education.

Throughout the 2002 common elections, the National Rainbow Coalition (NARC) political-party pledged in its election manifesto to offer free primary schooling. Subsequent to her victory, the Minister for Education, Science and Technology (MoEST) started offering FPE in fulfilment of the promise on date 6 January 2003. Costs for instruction in basic schooling were eradicated, as the Kenyan-government and other stakeholders sought to cover the fee of fundamental educational resources, remunerations for key administrative staff and co-curricular events. The Kenyan-government and other development agents and associates were to recompense Ksh1020 for every primary learner annually. The FPE never mandated parents and societies to erect new infrastructure, although they were expected to improve and utilise existing ones, including social and religious structures (MoEST, 2003). What happened to communities that did not have such permanent structures like the

nomadic pastoralists in Turkana? In fact, unlike the regular schools, mobile schools often operate with no physical infrastructure in place to support learning. This question was pertinent to this study, which wanted to ascertain the usefulness of free primary education on nomadic-pastoralistsô learnersô involvement in mobile and regular educational centres in Turkana Kenya.

Prior to the ruling partyôs announcement, primary learning institutions in Kenya had risen steadily from slightly over 14,800 in 1990 to above 18,900 in 2001/2, representing a 27.2 percent increase (MoEST, 2003). Enrolment had likewise gone up from 5.4 million to 6.3 million, a 17.1 percent increase throughout the same duration. The proportion of the female genderôs full participation similarly rose throughout the same time to 49.3 percent, denoting that gender fairness in enrolment had almost been realised. Nonetheless, primary learning centresô NERs depicted a highly concerning scenario in the North-eastern region, mainly occupied by nomadic-pastoralist groups, where male gender constituted 16.5 percent and female. gender 9.8 percent, with an average of 13.4 percent for the province. After the NARC intercession of early 2003, it was approximated that the NER went up from about 6.3 million to 7.6 million by end of that year, a 22.3 percent rise countrywide. Similarly, it projected that additional three million teen-agers were not admitted in school. Notwithstanding the numerous logistical complications hindering positive execution of the FPE, the guidelines signalled commendable, as it envisioned to maintain youngsters from deprived/vulnerable background socially and economically, particularly girls, from declining to join in primary schooling or reduced attendance due to failure to pay fees and other school levies. Largely, the guideline involvement could demonstrate conclusive in the energies to realize UPE and EFA.

According to Sifuna (2013), the execution of free primary schooling appeared to have had more influence on male-genderôs admission as compared to that of female-gender. Evaluating different individual Counties, the admission improved in Narok 30.2 percentage for schoolboys, for schoolgirls was just a meagre 3 percentage. In Marsabit, the change was 20.1 percentage for schoolboys and 3.6 percentage for schoolgirls. In Wajir, the change was 7.6 percentage for schoolboys, 2.6 percentage for schoolgirls. Meaningful growths were similarly recorded in the counties of Mandera, Turkana, Tana River, and Samburu, in which schoolboysô admission improved by over 30 percentage, whereas that for schoolgirls increased to around 5 percentage. Generally, free primary education had outstanding influence on the enrolment for all the experimented nomadic-pastoralist counties, accumulative about 28 percentage on average, well beyond the national average of 22.3 percentage, with schoolboys taking a bigger part in the increment. This infers that school charges were the main barrier to school access and participation amongst nomadic-pastoralist communities (Sifuna, 2003). In the case of Turkana, it is observed that the situation worsens for girls who are given less priority than the boys when it comes to payment of school fees. With the eradication of charges, more and more nomadic-pastoralist parents/guardians were concerned in taking their children to school. Differing to the commonly held views that pastoralist communities do have less interest in schooling for their children than parents in largely agricultural groups. Sifunaôs views reinforce the need to measure the effectiveness of free primary education on Turkana pastoralistsô childrenôsô involvement in the mobile educational centres and regular learning centres.

The issue of gender in compared to access to basic education among nomadic pastoralists communities has also been examined by Oxfam (2005). Oxfam points out

that pastoralist following the introduction of FPE in Kenya in 2003, the country had a 104 percent enrolment rate. However, in pastoralist communities, the enrolment level was a paltry 25%. Nationally, pastoralist girls represented 17% of the gross enrolment rate. Oxfam concludes that tuition was not the only obstacle to education in pastoralist communities. They attribute the low level of girlsô GER in pastoralist regions to other hidden costs, such as uniform, lunches and lack of sanitary facilities for girls in schools.

Enrolment figures alone should not be used to offer adequate evidence on access and involvement rates of youngsters in the primary schooling system. Attrition/wearing off rates, which comprise dropouts, offers a much brighter image of the circumstances. Evidence on attrition/wearing rates at the basic school level is quite flimsy, since quite a few learning institutions keep accurate reports of their pupilsô progress. The situation may be worse for mobile schools that do not have a regular pattern of attendance to record in the first place. According to the Ministry of Education, Science and Technology, the dropout rate is projected at around 5.4 percent, which, on the whole, seems to be exceptionally low, bearing in mind the low nation-wide completion rate, said to be around 45 percent (Republic of Kenya, 2004).

According to Ohgba (2009), the Kenyan-government began free primary education in 2003 and Free Day secondary education in 2008 to enhance access and involvement in schooling. FPE programme benefitted all children in Kenya regardless of geographical region. However, this study specifically interrogated the effectiveness of FPE on nomadic-pastoralistsô youths' engagement in the mobile educational centres and regular learning centres in Turkana County.

2.5.2 Teacher Recruitment and Participation

The rollout of FPE has been viewed to have a negative effect in some quarters. For instance, Boy (2006) observes that the FPE program is to blame for poor academic standards in public primary schools in Kenya. Nevertheless, Vreede (2003) observes that the issue of elevated pupil-instructor ratio is not exclusive to Kenya, as Uganda also suffered from the same challenges when it rolled out FPE in 1997. UNESCO (2005) examined a selection of 162 government-owned basic education centres in Kenya and established that the mean pupil-instructor ratio was 58:1 against the recommended average of 40:1. UNESCO found that FPE project had greatly impressed upon instructors so that certain instructors in up-country schools taught 100 learners whereas others in metropolitan areas taught 120 learners per class (Bold *et al*., 2009; ROK, 2005). Therefore, there was hardly any instructor-learner interaction and instructors preferred to attend to bright pupils at the expense of slow ones. Conventionally, instructors in private learning centres teach fewer learners at once (UNESCO, 2005). This explains why most of these institutions register better academic outcomes than their public counterparts. In relation to Turkana County, pupil-teacher ratio may be higher in regular than in mobile schools. In such scenarios, teachers may be forced to use blended teaching across the different classes. Nevertheless, in mobile schools, teachers may still struggle to attend to the unique needs of every learner due to fluctuations in attendance. Based on these observations, the current report was designed to explore the influence of FPE on nomadic-pastoralistsô learnersô engagement in the mobile educational centres and regular learning centres in Turkana County.

Otieno (2009) provides a descriptive account and analysis of the implementation of FPE program by the government of Kenya to increase the enrolment rates towards

national and international goals of basic education for all. The citizens responded happily by enrolling massively. However, as the supply of facilities and the number of teachers were not prepared in advance, there is a big problem of extremely large class size resulting in overcrowding especially in the rural areas, high pupil/teacher ratio and eventually, a difficult teaching and learning environment. Additionally, during the implementation of the program, the government had frozen the recruitment of teachers for purposes that are not explained; this crippled the FPE program from the beginning as the number of children was increasing. Otieno, therefore, claims that this may not have been the best time to implement this policy. This view by Otieno is not necessarily true since FPE has gained considerably good results in regions that had good facilities and teachers. The argument that Otieno should have made was perhaps that improvement of facilities and teacher numbers should have preceded the implementation of FPE. Besides, since FPE has already been implemented, it is best to simply examine its effectiveness in order to identify and address the inherent gaps. Moreover, the question of availability of physical resources to support FPE is untenable as far as mobile schools are concerned. Therefore, this report wanted to institute the usefulness of free primary education on nomadic childrenôs involvement in the mobile educational centres and regular learning centres in the County of Turkana.

2.5.3 Instructional Resources and Participation

In Kenya, the intervention approaches by the state to offer additional educational chances through FPE to the nomadic-pastoralist areas and additional disadvantaged persons did not appear to have had much influence on access and involvement (Republic of Kenya, 2003). The free primary schooling programme was affected with various challenges right from its commencement. Firstly, there was no appropriate

preparation for its commencement, particularly with respect to offering the necessary structures as well as educational and instructional resources for the majority of kids projected to join. To handle the challenges of a high inflow of youngsters to school, specifically in high-potential agricultural counties, school boards enforced a óbuilding feeô per child to put up additional classrooms. There were also other financial impositions, such as an óactivity equipment levyô, all intended to offset the school fees being paid before the presidential directive. These were dissimilar across districts, although majorly they proved much costly compared to the tuition payments being levied before the declaration. Although the payment of some of the charges was mandatory, many others were raised through *Harambee* (community self-help) basis. In respect to Turkana, the question of building fee would most likely apply to regular schools than mobile schools. Therefore, this study examined whether or not regular and mobile schools levied extra fees on parents of pastoralistsô pupils.

Other than these finances, guardians were frequently needed to complement the school equipment with schoolbooks, exercise books, and other related teaching and learning resources. All these finances made education much more costly than it needed before the state intervention and hence managed to ignore several poor communities, chiefly the nomadic-pastoralist groups, whose involvement and efforts had been intended to assist. The administration had to recognize that ñsuch increasingly compulsory contributions contravened the intention of the Government to provide greater access to primary schoolingò (RoK, 1978). It was similarly noticed that the pronouncement of free basic schooling did not help in bridging the gap amongst those counties with the highest and lowest school attending. RoK noted that: ñAlthough the abolition of school fees enabled Government to achieve considerable progress towards attaining universal primary education, the policy initiative was,

however, less successful in narrowing the gap between the districts with highest and lowest attendanceò. This statement indicates that certain regions of Kenya are yet to reap the benefits of free primary education. As such, this research sought to determine the efficacy of FPE on nomadic-pastoralistsô pupilsô involvement in the mobile educational centres and regular learning centres in Turkana County.

2.5.4 Sanitary Pads and Girls' Participation

Arochi (2018) conducted a study on influence of provision of sanitary pads on academic achievement of adolescent girls in basic education in Kakamega County. The report found that majority of the girls never reported to school when they experienced menstruation due to lack of sanitary pads. The results also showed that lack of sanitary pads increased the sense of shame and low self-esteem associated with menstruation among girls. Therefore, the association of menstruation with body shame was the main reason girls never went to school. This study underscores the importance of provision of sanitary pads on girlsô participation in school. The current study examined the differences in provision of sanitary pads for girls in the mobile educational centres and regular learning centres. The investigation assumed that by reason of their constant relocation, mobile schools would experience challenges receiving supplies of pads from providers than regular schools. As such, the present study examined the contribution of provision of sanitary pads to girlsô involvement in the mobile educational centres and regular learning centres in Turkana County.

A report by Otieno (2007) reported that availing of sanitary towels along with sensitising adolescent girls on sex education tend to increase their participation in school. According to Otieno, girls who do not receive sanitary pads also resort to unhealthy ways of managing their menstruation, which exposes them to more health risks. The study further established that NGOs are the major providers of sanitary

towels to girls in school. It was also of interest to the present study to identify the key providers of sanitary pads to girls in the mobile and regular schools in Turkana County. He therefore recommends that the government should do more to provide sanitary pads to girls to enhance their participation in school. In light of these findings, the present study examined how provision of sanitary pads within the lager framework of FPE had contributed to enhanced participation among girls in the mobile educational centres and regular learning centres in Turkana County.

Ali, Cordero, Khan and Folz (2019) aver that it is not enough to provide sanitary pads to nomadic girls as part of enhancing their participation in school. To these authors, the provision of sanitary pads should be within the larger framework of sexual and reproductive care and education for these girls. They nonetheless cite many factors that could hinder efforts to provide sex and reproductive education in pastoralists communities. Key among these are cultural beliefs, especially about women and sexuality among some of the communities. Another hindrance could stem from the social and political challenges associated with campaigns against female genital mutilation. In light of these views, the current study examined the factors that have mediated the effectiveness of government interventions aimed at promoting pastoralistsô learnersô involvement in regular and mobile schools in Kenyaôs Turkana County.

2.5.5 Electricity supply to Schools and Participation

According to the United Nations Department of Economic and Social Affairs (UNDESA) (2014), electrification of schools should go hand-in-hand with strategies to promote participation in education. This is because the provision of electricity to schools has many benefits associated with participation and performance. For instance, electricity supply increases the study hours for learners. Electric power also

facilitates the implementation of ICT in school to enhance learning. However, provision of electricity falls within the mandate of government because of the costs involved in the installation and maintenance of electric power in schools (UNDESA, 2014). In Turkana County, regular schools benefit more from electric connectivity while mobile schools rely mostly on solar power. These variations in power supply may generate gaps in overall school efficiency, an issue that the present study was interested in documenting. Considering these views, the present study examined the effect of provision of electricity in schools on nomadic childrenôs engagement in basic learning institutions in Turkana County.

Blimpo and Cosgrove-Davies (2019) examined the general state of electricity supply in the sub-Saharan Africa and its impact on social amenities, including education access. Their findings showed that there is more demand for electricity than its supply in Africa. Constraints around demand, use and supply include cost of installation and maintenance and issues of unreliability of connectivity. Educational institutions require electricity to support teaching and learning activities. Therefore, the constraints of costs and unreliability also affect schooling. Therefore, these authors conclude that it is not enough for governments to simply supply electricity to its communities and social institutions. Governments must also strive to mitigate the challenges of costs and connectivity of electricity. The question of cost of power supply also affects schools in Turkana County. Solar energy tends to be cheaper than electricity. Therefore, solar lamps may be more beneficial to schools in Turkana. In light of these views, the present study examined the state of connectivity of electricity to schools, within the framework of FPE, and its impact on pastoralistsô learnersô involvement in primary schooling in Turkana County.

2.6 Summary of Related Literature

The reviewed literature has evidenced that participation of pastoralists in primary education is low in most developing countries. To increase the level of participation in these regions, governments and other education stakeholders have put in place several interventions. The impact of government measures to the participation of pastoralist in primary education is evidenced by the rate of enrolment and retention of pupils in primary schools.

Evidence from the literature review suggests that government interventions have had positive impact on participation in schools. While there are studies that have evaluated the impact of government interventions of pastoralist education, there seems to be a dearth of studies that have focused on the effectiveness of such interventions on nomadic-pastoralistsô pupilsô involvement in basic schooling, much less, in Turkana County. Even those that have addressed these interventions, have singly focused on one intervention at a time. None of the studies have looked at the effectiveness of an integrated approach. Besides, none of the studies have attempted a comparative analysis of the effectiveness of these interventions between the regular and mobile schools.

Majority of the previous studies are descriptive taking a quantitative approach mostly. The current study utilized a descriptive survey research design, relying on both quantitative and qualitative approaches, to enable generation of rich findings that can add knowledge to the previous findings.

Studies done on school feeding programme showed that it has contributed significantly on pupilsô participation especially in arid and semi-arid areas. Most studies provided important units of analysis such as provision of free meals (Jensen,

2010; Pediatre, 2001; Mutangadura *et al.,* 2003), the quality and quantities of food provided (UNDP, 2005; Taylor, 2009; Wolpert & Wheeler, 2008), and issues of food supply, such as the sources and timeliness of food delivery to school (Mutangadura *et al*., 2003; Greenhalgh *et al*., 2007). Taylor (2009) did a study on overall studentsô performance due availability of dietary food. Wolpert and Wheeler (2008) equally reported that school output went up amongst a group of students that was availed with Omega-3 supplements. Lawson (2012) and Rugyendo *et al*. (2011) did a study on Food For Education (FFE) in Uganda and found that FFE programmes do have an effect in increasing school participation, fostering learning, and complementing insufficient intakes. In Rwanda, school feeding was found to lead to positive learning outcomes, like increased attendance and mastery of content. Kariuki (2013) found that performance has been credited to a sustainable school feeding programme.

However, it was noted that most of the publications and reports provide a general overview of the objectives and effects of SFP. These works also make recommendations to enhance SFP, but the recommendations need to be tested empirically. Moreover, these works do not draw on specific studies relating to the unique challenges of education in ASAL. Therefore, the present study sought to enrich such works by undertaking an evaluation of the effectiveness of SFP on pastoralistsô pupilsô participation in Turkana County, Kenya.

Further, studies were done on contribution of government security towards pupilsô participation. The reviewed studies revealed that insecurity has a negative effect on school participation everywhere (OôMalley, 2007; Mirembe & Davies, 2001; UNESCO, 2013; Obura, 2008). OôMalley (2007) found that in Middle Eastern countries such as Iran and Palestine focus has been on attacks on educators as well as how wars can stop children from getting an education. Obura (2008) indicated that

insecurity in ASAL regions is widespread and a big limitation to education. It was also noted that the most effective security measures are those that integrate local community strategies (Sifuna, 2005; Lulua, 2008; GOK, 2000; Omari, 2011; Gisesa, 2014; Agade, 2015). Lastly, studies revealed that police posts and patrols are crucial in assuring parents, students and teachers of peaceful educational experiences (Arrington, 2006). These studies give a general overview on the effect of insecurity on schooling. Overall, as far as Turkana is concerned, studies revealed that mobile educational centres are further exposed to security threats as opposed to those in regular learning centres. However, none of the studies conducted in Turkana compared the security interventions and their effectiveness across the mobile educational centres and regular learning centres. This report addressed the gap by establishing the efficacy of state security approaches on nomadic-pastoralistsô learnersô involvement in the mobile educational centres and regular learning centres in Turkana County.

Limited studies were done on contribution of government security towards pupilsô participation. OôMalley (2007) found that in Middle Eastern countries such as Iran and Palestine focus has been on attacks on educators as well as how wars can stop children from getting an education. Obura (2008) indicated that Uncertainty in ASAL regions is prevalent and a big barrier to education. This report sought to bridge the gap by establishing the effectiveness of government security on nomadic-pastoralist pupilôs involvement in basic schooling in Turkana County.

While there are studies on free primary education in general, there is a dearth of studies that examined the effectiveness of free primary education to the participation of pastoralists in primary education, which was the focus of this study. With respect to free primary education, a review of literature revealed that FPE was introduced to

eliminate tuition and has extended to secondary level education in many developing countries (World Bank, 2003; Okore, 1981; MoEST, 2003; Sifuna, 2003). The greatest negative impact noted from FPE was the impact on pupil-teacher ratio (UNESCO, 2005; Bold *et al.*, 2009; ROK, 2005; Otieno, 2009) and available instructional resources (Republic of Kenya, 2003). The studies also showed that FPE has been linked to other measures targeted at enhancing participation, such as provision of sanitary pads (Arochi, 2018; Otieno, 2007) and source of energy such as electricity and solar power (UNDESA, 2014; Blimpo & Cosgrove-Davies, 2019). Most of the works give a concise historical analysis of the origins and development of FPE. Research shows that free primary education has been implemented in many countries especially the developing and the sub-Saharan Africa region. The studies however fall short in discussing how its implementation has impacted participation of pupils especially in ASAL. Very few studies present current empirical data on effectiveness of FPE in different contexts. Even fewer studies have examined the effectiveness of FPE in places like Turkana. None of the studies has explored differences in FPE effectiveness across regular and mobile schools. As such, the current study was necessitated by the need to provide a current and real impact of FPE for the mobile educational centres and regular learning centres in Turkana County, Kenya.

Overall, the major gap in the studies reviewed was the lack of comparison of effectiveness of government interventions across school types; in the case of this study, the regular and mobile schools.

2.7 Theoretical Framework

This study was guided by the Policy Implementation Theory by McDonnell and Elmore (1987). The Policy Implementation Theory 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 Policy Implementation Theory has outlined the components that are needed to enable effective policy outcomes.

The Policy Implementation Theory stemmed from desire to find ña more specific model of the determinants of implementation outcomes and critical policy effects, while retaining those variables entrenched in the political and organizational context that have produced pay-offsò (McDonnell & Elmore, 1987). The aim of McDonnell and Elmore was to find ways of shaping policy outcomes so that when enacted, they have long-term policy effects. They came up with the idea of policy frameworks or mechanisms that translates basic policy targets into substantial activities.

Although, the government of Kenya has made efforts to provide education to the Turkana nomadic pastoralists through mobile schools, its realization needs attention. The fruitful enactment of such a policy is therefore pivotal. Establishing their level of effectiveness through the lenses of these policy instruments is critical and necessitates this study. For an enhanced access to education among the excluded nomadic pastoralists, a policy needed to be in place that caters for their needs. The integration of mobile schools with regular schools is one such policy. 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 organizational 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 categorised as policy instruments. Provision of education through mobile schools not only involves the government, but also Non- Governmental Organization (NGO) and church organizations.

The proponents of this theory 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 and Goldin (2007) seem to agree with them when stating that ñinstruments 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 aimsò (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 that is recognized 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 may solely be achieved via 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 participantôs 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 schoolsô 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 pastoralistsô 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 organizations 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 Organizationsô ones.

On the other hand, transfer of authority introduces the other policy element of inducement. The role played by the church organizations 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 pastoralistsô 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, which are that the school should be located in a municipality targeting ñpureò pastoralists instead of ñstaticò groups; the school should not have less than 25 children; it should be in places that have great distances between primary schools; and, it should be established in areas with low enrolment and low transition to secondary schoolsò (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. 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. Furthermore, the minimum population for the school is also a determiner of the establishment and in this case, it should exceed 24 children.

The Kenya government has tried to bolster provision of schooling to this marginalized group by establishing mobile schools. Therefore, this study employed the policy instruments tools as stipulated in McDonnell and Elmore (1987, 1991) theory of policy implementation. It was hoped that the theory was appropriate in enhancing the establishing of conditions that have influenced involvement of nomadic-pastoralist children in schooling. By doing so, it was hoped that this would help in removal of 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.

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 1970s. 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 standard of involvement of the nomadic-pastoralistsô Turkana children in schooling, through a flexible mode of education after the failure of the formal scheme of schooling.

Therefore, the mobile school is meant to be an approach that is flexible and adaptable to the nomadic lifestyle of the marginalized 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 marginalized group despite their previous diminished ranks of partaking in schooling.

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 empower them to join wholly in socio-economic development. This is in line with what the proponents of Policy Implementation Theory stipulate.

The 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 methods of enhancing its enactment may 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 sensitized 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 the Policy Implementation Theory to establish if these components are in place in as far as mobile schooling is concerned.

In this study, it was envisaged that participation of learners in mobile and regular schools in Turkana County is dependent on government interventions through both the human capital and policy. These factors are: School feeding programme, provision of security and free primary education. Therefore, the policy implementation theory helped to define the issues of processes, procedures and systems involved in rolling out interventions to support pupilsô access to education in Turkana County. The

current study was concerned particularly with the question of implementation of government interventions. These interventions begin as policies formulated by the Ministry of Education in consultation with other educational stakeholders. Therefore, the theory of implementation helped the study to examine the effectiveness of implementation of government school feeding programme policies, security policies and free primary education policies in enhancing pastoralist pupilsô participation.

2.8 Conceptual Framework

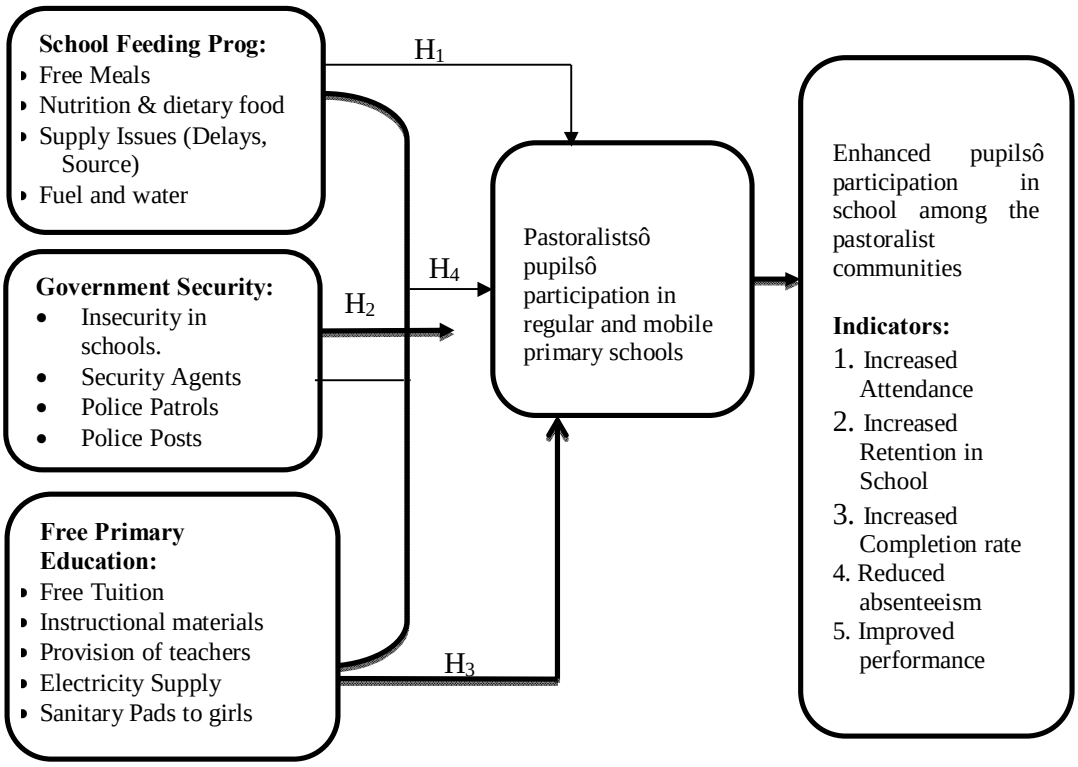

Figure 2.1: Relationship of variables on government interventions and pastoralists' pupils' participation in regular and mobile primary schools

Figure 2.1 above presents a diagrammatic presentation of the relationship of variables affecting nomadic-pastoralistsô pupilsô involvement in the mobile educational centres and regular learning centres as conceptualised in this study. A conceptual framework is a presentation on how the dependent and independent variants are interlinked. It, therefore, specifies the working definition of a variable and enables a simple explanation of the flow of theoretical framework used by the study (Mugenda & Mugenda, 2003).

The conceptual framework for this study is as illustrated in Figure 2.1. As depicted, the independent variables were school feeding programme, government security and FPE while the dependent variable was nomadic-pastoralistsô pupilsô involvement in school within the mobile educational centres and regular learning centres.

The research examined the effectiveness of SFP as a state intervention on nomadic-pastoralistsô learnersô involvement in the mobile educational centres and regular learning centres in Turkana County. Under the SFP interventions, the study assessed how the provision of free meals to learners in school affected their participation. It also examined the quality of the food provided in school, in terms of its nutritive value. Another important aspect of SFP assessed in the study related to food supply. Specifically, the study examined how factors such as delays in supply and the quantity of food supplied affected pupilsô participation. Moreover, the study explored the main sources of the food supplied to schools. Lastly, under SFP, the study looked into how the supply of fuel and water required for processing meals for learners in school affected participation.

The study also evaluated the usefulness of state security efforts on nomadic learners involvement in the mobile educational centres and regular learning centres in Turkana County. Within this research objective, the study evaluated the general state of security in and around schools by exploring if schools had experienced any attacks. The study also assessed the effectiveness of the type of security measures instituted by the government, including the security agents provided, the frequency of police patrols and the establishment of police posts around schools.

The study also assessed the effectiveness of free primary education intervention on pastoralistsô learnersô involvement in the mobile educational centres and regular learning centres in Turkana County. Within the FPE interventions, the study analysed the impact of provision of free tuition on participation. It also explored how the FPE had affected teacher-pupils ratio and whether or not the government had provided more teachers to schools. Moreover, the study examined the governmentôs provision of teaching and learning materials to schools. Other important aspects examined in

this study, which were considered necessary in supporting FPE interventions, included the provision of sanitary pads to female learners in school and supply of electricity to facilitate teaching and learning in schools.

Therefore, in this study, effective implementation of SFP, government security and FPE was envisaged to result in enhanced participation in education by pastoralist pupils. In this case, participation was measured using such indicators as increased, consistent and regular attendance, increased retention in school, increased completion rates, reduced absenteeism, and improved academic performance of nomadic-pastoralist pupils in the mobile educational centres and regular learning centres.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is detailed with the research methodology that was used in carrying out the research. It contains the study design, target population, sample size and sampling techniques, data collation procedures, data analysis and data presentation. The chapter also addressed the ethical issues that were considered for this study.

3.2 Study Design

This study used descriptive survey research design and also correlation research design. The adoption of these research designs were informed by the fact that both descriptive and inferential data analyses and hypothesis testing were required in the study. Descriptive research design is a research design interested in describing the characteristics of the population or phenomena in percentages, frequencies, mean score and standard deviation while the correlation research design is interested in determining the dependence of the dependent variables on the independent variable as well as testing hypothesis. According to Creswell (2008) and Kothari (2008) research design is a blue print that guides the researcher to restructure the collection, analysis and interpretation of data for a study. In this case, the researcher collected data on the existing condition where the government offered food in schools, offered security and provide Free Primary education and then analyse such data with the aim of establishing the extent to which such interventions are affecting the nomadic childrenôs involvement in the mobile educational centres and regular learning centres.

The investigation generated both qualitative and quantitative data using interviews, focus group discussions and questionnaires concurrently. This is in line with Johnson and Turner (2003) who asserted that mixing research methods combine quantitative

and qualitative research techniques, methods, approaches, concepts or language in a single study or set of related studies. It is an approach which uses tactics of investigation that entail collation of data either at the same time or sequentially to better grasp the study issue. Creswell (2003) affirms that data collection also involves gathering both numeric information (e.g. on instruments) as well as text information (e.g. on Focus Group Discussion), meaning the ultimate data consists of both numerical and discourse material. According to Piano (2010) when quantitative and qualitative data are combined in mixed research, then a more comprehensive understanding of a problem would be arrived at and the development of a complementary picture for comparing and validating results was achieved. A descriptive survey design and correlation research design were therefore deemed fit for this study since an event of government interventions in providing food, security and Free Primary education had already taken place.

3.3 Target Population

The target population is a set of elements larger and different from the sample size and in which the researcher wishes to generalize the findings of the study. According to Mans (2015), a study target population is the totality of persons, events, units, organizations or other sampled units which concern the key research issue. The target population for this study was 2755 elements drawn from all pupils, teachers, Head Teachers, parents, Sub-County Directors of Education, primary schools in the 3 sub-counties of Loima, Turkana Central, Turkana Central and key informants Turkana in Turkana County (County Commissioner and County Director of Education). Turkana West sub-county has 87 regular and mobile public schools, 250 teachers, 84 parents and 416 pupils, 84 head teachers and 1 Assistant Director of Education. In Loima Sub-County, there were 67 public schools, 200 teachers, 84 parents, 333 pupils, 67

head teachers and 1 Assistant Director of Education. Turkana Central Sub-County has 100 public schools, 300 teachers, 100 parents, 500 pupils, 100 head teachers and 1 Assistant Director of education. Turkana County has one county commissioner and one County Director of Education. The distribution of target population is as presented in Table 3.1 below.

Table 3.1: Target Population in Regular and Mobile Primary Schools in the Three Sub-Counties in Turkana County

	Turkana West		Loima		Turkana Central		Total
	Regular	**Mobile**	**Regular**	**Mobile**	**Regular**	**Mobile**	**R&M**
No. of Schools	66	17	50	17	60	40	250
Head Teachers	66	17	50	17	60	40	250
Teachers	200	83	150	83	180	153	750
Pupils	334	100	250	100	300	200	1250
Parents	66	17	50	17	60	40	250
Education officer	1		1		1		3
County Director of Education			1				1
County Commissioner			1				1

Source: Turkana County Director of Education Office (2018) Total Population: 2755

3.4 Sampling Techniques and Sample Size

This report applied simple random sampling and purposive sampling. A simple random selection is unbiased technique where each item has an identical chance of inclusion in the sample. For this study, simple random selection was utilised to sample schools, pupils, teachers, head teachers and parents of the government-owned primary education centres in every sub-county. Mugenda & Mugenda (2003) observes that 30% of the target population is a good representation thus out of the 2755 targeted population 830 respondents was considered as the total sample size of all pupils, teachers, parents, head teachers though purposive sampling was utilized to choice the Assistant County Directors of Education, County Director of Education

and County Commissioner. According to Palys (2008), purposive sampling technique permitted the investigator to select respondents that will provide the required information with respect to the objectives of the study. The researcher defined the criteria and finally looked for the respondents that met the criteria. In this study three sub-county education officers, one County Director of Education and one County Commissioner were purposefully sampled because of their crucial management roles.

Table 3.2: Sample Size in the Three Sub-Counties in Turkana County

	Turkana West		Loima		Turkana Central		Sub-Totals		TOTAL
	Mob.	Reg.	Mob.	Reg.	Mob.	Reg.	Mob.	Reg.	
No. of Schools	5	20	5	15	12	18	22	53	75
Head Teachers	5	20	5	15	12	18	22	53	75
Teachers	25	60	25	45	46	54	96	159	225
Pupils	30	100	30	75	60	90	120	265	375
Parents	5	20	5	15	12	18	22	53	75
Education officer	1		1		1		3		3
County Director of Education			1				1		1
County Commissioner			1				1		1

In this study, the researcher sampled a sample size of 830. In Turkana County, all the mobile schools have been attached to a particular regular school which is near that area and managed by the head teacher of that school.

A total of 5 standard 7 pupils, 1 head teacher, 3 teachers, and 1 parent were sampled in every primary school in each sub-county. Standard seven pupils were sampled because they had stayed in the school for longer time than the pupils of other classes and could answer the questionnaires with ease. The pupils in standard eight who were busy with exam preparations, thus were not considered to participate in this study.

In Turkana West Sub-County, 5 mobile and 20 regular primary schools were sampled. Of these, a sample of 5 and 20 school heads from the mobile and regular primary schools, respectively, 15 instructors from mobile schools and 60 from regular schools, 5 parents from mobile and 20 from regular schools, and 25 learners from mobile and 100 from regular public primary schools, as well as 1 Assistant County Director of Education.

In Loima, the study sampled 5 mobile and 15 regular schools, 5 heads of mobile and 15 heads of regular schools, 15 instructors from mobile and 45 teachers from regular schools, 5 parents from mobile and 15 from parents regular schools, 25 learners from mobile and 75 others from regular schools, and 1 Assistant County Director of Education.

In Turkana Central, 30 public primary schools, comprising 18 regular and 12 mobile were selected. From these, 12 heads were selected from mobile and 18 from regular schools. Additionally, 36 instructors from mobile and 54 from regular schools were picked. Moreover, 12 parents from mobile and 18 from regular schools were picked. Regarding learners, 60 were picked from mobile schools and 90 from regular schools. Lastly, 1 Assistant County Director of Education was selected.

In all the three sub-purposive selection method was employed to choose the Assistant County Directors of Education, County Director of Education and the County Commissioner.

3.5 Research Instruments

This study utilised questionnaires, and interview schedules as instruments used to collate data. Mugenda and Mugenda (2003) observed that questionnaires allow the inquirer to justify the aim of the investigation and to interpret the items that may not

be clear. Mulusa (1990) has defined a questionnaire as an inscribed group of queries to which the subject replies in text. For this study, the questionnaires had both open and closed ended questions. The structured questions were used in an effort to facilitate respondents to respond with ease; while the unstructured questions were used to encourage the respondent to provide deep and complete information. The questionnaires were employed to collate information from the pupils, teachers, and principals in all the selected learning centres. There were three types of questionnaires, namely Pupilsô, Teachersô and Head Teachersô Questionnaires. All the questionnaires were divided into five sections, except the Head teachersô questionnaire which had a fifth section. Section A sought data on the demographic characteristics of the respondents. Section B sought data on the efficacy of the SFP as a government intervention. Section C collected data on the effectiveness of government provision of security as an intervention. Section D sought data on the effectiveness of FPE interventions and Section E of the Head teachersô questionnaire collected data on nomadic-pastoralistsô learnersô involvement in the mobile educational centres and regular learning centres.

Interview schedules were used to obtain information from Assistant County Directors of Education in the three Sub-counties and the key informants, who included County Director of Education and the County Commissioner. Patton (2002) posits that the value of the data gathered via this technique was mainly reliant on the interviewerôs competences and demeanour. In-depth interviews also encouraged capturing of respondentsô perceptions in their own words and were a very desirable strategy in qualitative data collection. There were six detailed items in the interview schedule which gathered data on all the research questions.

According to Bryman (2008), the focus group discussion is a type of interview, where participants interact, argues and make joint contribution on the topic of discussion other than making individualized contributions. In focus group discussion, a small group of participants under the guidance of a moderator discuss the topic of interest among themselves. In order to gather sufficient information from the parents, the researcher used interview schedule guide through focus group discussion which was structured into twelve items which enabled the researcher to ask questions, provoke discussion and probe more details and in-depth information from the responses given. The items also gathered data on all the research objectives. The respondents were parents from public primary schools who discussed on effectiveness of state mitigation approaches on nomadic-pastoralistsô learnersô involvement in the mobile educational centres and regular learning centres in Turkana County.

3.6 Pilot Study

In this study, the questionnaires were first piloted before it was used in data collection. Emory and Cooper (1995) explained that pilot testing is a mini version of a full-scale study in which a research instrument is used to collect data in order to test its reliability before the main study is undertaken while (Hilton, 2015) argued that pilot testing helps in ensuring that questions in the instrument work as intended and are understood by those who are supposed to respond to them. This study relied on cognitive interviewing theory in which Willis (2005) stated that pilot testing research instrument focuses on the survey questions rather than the respondent by theoretically ensuring that the questions are effectively understood through comprehension, retrieval, response formulation and judgement. Although De Maio, Rothgeb and Hess (1995) had earlier suggested the use of up to 20 questionnaires during pilot-testing. Based on this argument, the researcher increased the number of pre-tested

questionnaires from 20 to 30 pieces in order to ensure reliability of the research instrument because Cronbach (1951) argued that inter-item consistency of the instrument is ensured by increasing the number of pretested questionnaires. A pilot study was carried out in three public primary schools, one regular and two mobile schools, which did not take part in the main study. These schools were not included in the main study. The purpose of pilot study was to ensure that items used in the data collection were valid and reliable. The researcher pre-tested all the tools and the data collected did not form part of the actual study since subjects in the actual sample should not be used for pre-testing.

3.6.1 Validity of Research Instruments

Validity is the indicator of how much a test gauges what it is designed to gauge (Borg & Gall, 2003). Content validity of a gauging tool is the indicator of how much it avails sufficient coverage of the inquiry questions (Mugenda & Mugenda, 2003). In this study, the content validity of the questionnaire, focus group schedule and interview schedule was undertaken by seeking further expert opinion through guidance from the university supervisors. To ensure validity in this research study, the researcher tried to minimize random error by preparing items that addressed the specific objectives of the study using a language that was comprehensible to the participants. The University supervisors examined the tools and gave comments. The researcher used the comments they recommended to make adjustments on the data collection instruments and hence ensure validity.

3.6.2 Reliability of Instruments

Mugenda and Mugenda (2003) affirmed that reliability is the indicator of how much an inquiry tool generates unfailing outcomes after recurrent use. It is the consistency and stability of an instrument and its ability to produce the same results every time it

is applied. An instrument is stable if it provides consistent results when repeated measurements are taken by the same person while using the same instrument. To determine consistency, test re-test method was employed in this study. Test re-test is a systematic determination of the consistency and agreement among two or more measurements of the same tools under the same conditions. Test re-test helps us to understand how dependable our measurement tools are likely to be if they are put into a wider use in research. Sekaran and Bougie (2010) observed that stability is established through among other means, test-retest reliability criterion.

In this study, test re-test was desired because the pupils, teachers and head teachers understood the importance of the study and therefore did not mind being interviewed twice. Questionnaires and interview schedules were therefore administered a second time 2 weeks after the initial data collection exercise to 30 purposively selected respondents. The study used test re-test approach to gauge the dependability of the tools. As such, the developed questionnaires and interview schedules were administered twice to the same cohort of respondents in the pilot study in a time lapse of two weeks. 12 participants from mobile schools, comprising 2 head teachers, 6 pupils and 4 teachers, took part in the pilot study. The participants from regular schools were 18, comprising 2 head teachers, 8 pupils (4 from each school), and 8 teachers (4 for each school). In the pilot study, the questionnaires were administered to the pupils and teachers while the interviews were undertaken with the school heads. Lind, Marchal and Wathen (2008) stated that correlation coefficient r acquires a value between -1 and +1 and the closer the value is to +1 the more consistent the instrument is while the closer it is to -1, the more inconsistent the instrument is. Kothari (2009) further argued that a correlation coefficient r suggests the strength and degree of relationship between scores obtained in the first test compared to those of the re-test

and went on to recommend that correlation coefficient above 0.50 means the research instrument is consistent while a correlation coefficient less than 0.50 implies that the instrument is less consistent. Analysis and interpretation of pilot studyôs data was done to establish whether the instruments could be depended on for the study. The correlation coefficient from the analysed pilot study data obtained through the questionnaire was 0.6, which was in the adopted range of +1 to -1 and closer to +1 a prove that the instruments were more consistent thus deemed reliable. For the data obtained through interviews, thematic analysis was used to ascertain whether or not the tool collected the data required to address the research objectives. The findings demonstrated that the interview schedule was reliable.

3.7 Data Collection Procedures

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. This study collected only the primary sources of data through questionnaires, interview schedule and focus group discussion. A permit that authorized data collection was applied for and obtained from the National Council for Science Technology and Innovation (NACOSTI). A copy of the permit was given to the Director of Education, Turkana County and the Sub-County Education officers of Turkana Central, Loima and Turkana West. The investigator then scheduled meetings with the principals of the selected education centres and informed them of the aims of the investigation. The researcher personally made a familiarization visit to the sampled schools on the appointed days and dates to deliver and administer the questionnaires to the instructors and learners.

The researcher recruited and trained thirty universities and college students as research assistants (ten from each sub-county) to administer questionnaires to the respondents and to handle any queries and uncertainties raised by the participants. The research assistants mainly helped to administer questionnaires to the pupils and teachers while the researcher administered questionnaires in person to all the head teachers. The researcher also administered the interview schedules to key informants and conducted the Focus Group Discussions to clarify any questions not clear to the respondents. After the actual fieldwork, all the research instruments and reports were assembled for data cleaning, coding and subsequent data analysis.

3.8 Data Analysis Techniques

Data analysis entails the examination of the raw information collated in an investigation and drawing of meanings from it. Both quantitative and qualitative data analysis techniques were adopted in the study. Donald and Delno (2006) stated that data analysis refers to examining what has been collected in a survey and making inferences and decisions. Quantitative data analysis involved gathering numeric data from measurements that were used in making inferences while qualitative data analysis involved gathering narratives that offered a wide-view to the breadth and depth of participants. Quantitative approaches were adopted in which frequencies and percentages were used to analyse quantitative data while linear regression; and multi-regression analysis were used to make inferences and generalizations on hypotheses. The null hypothesis (H_0), analyzed at $\alpha = 0.05$ significance level and tested using p-value method. The study used the following criterion; the null hypothesis was rejected if p-value was less than 0.05 or alternative hypothesis was not rejected.

Quantitative data was analysed descriptively by use of frequencies, and percentages and it was presented using frequency tables. To test the efficacy of state interventions,

linear regression and multiple regressions were employed. Qualitative data from interviews and FDGs were arranged thematically as per the report objects. The findings were then presented thematically using detailed description and direct citations. Hypotheses were tested by use of regression analysis at 5 percent level of significance and 95 percent level of confidence. Regression analysis was utlized to establish the comparative effectiveness of state intervention measures to nomadic-pastoralistsô pupilsô involvement in the mobile educational centres and regular learning centres.

3.9 Ethical Considerations

Gajjar (2013) posit that researchers whose subjects are people or animals must consider the conduct of their research, and give attention to the ethical issues associated with carrying out their research. Roberts (2015) state that researchers should always remember that while they are doing research, they are in actual fact entering private spaces of their participants. He further argues that the relationship between the researcher and the respondents during an interview needs to be considered in terms of the values of the researcher and the cultural aspects. This study dealt with people as respondents. In this study, a research permit was obtained from the National Council for Science technology and Innovation and a copy of the same given to the CDE Turkana County. All respondent in this research were not coerced into participating in the research as the researcher requested the respondent to participate voluntarily. Blumberg *et al.* (2005) observed that consent to participate in research was not a straightforward matter; hence in this study informed consent was applied.

Participants were given enough information pertaining to the study before the administration of the research instrument. The possible benefits and value of the study

was also explained to the participants. It was made clear to the respondents that the research would be used only for academic purposes and their participation in it was absolutely voluntary.

The participants were further given assurance of full discretion and privacy. No personal identifiable information was assigned a code number or name indicated anywhere. The researcher also strived to maintain truthfulness in reporting data results by ensuring that there was no fabrication, falsehood, or any misrepresentation of data. Finally, objectivity was applied in this study and the researcherôs own opinion and bias were minimized through re-check where the same members who participated were subjected to the same process to see whether they reported the same data without major variations.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

This chapter dealt with the data analysis. Specifically, it focused on data analysis and interpretation. The data analysis hinged on the objectives and the hypotheses of the study.

4.2 Instruments' Return Rate

Instruments return rate is the proportion of the research instruments that have been returned after they have been issued to the respondents. In this case, questionnaires were administered to the respondents. An analysis of the response rate to ascertain the total number of respondents who actually took part in the study is as presented in Table 4.1a.

Table 4.1a: Respondents' Response Rate

Category of Respondents	No issued / Sample size			Number returned		Total returned	Response rate%
	Mob.	Reg.	Total issued	Regular schools	Mobile schools	Frequency (f)	%
Head teachers	22	53	75	49	22	71	94
Teachers	96	159	225	111	96	207	81
Pupils	120	265	375	253	120	373	97

The data contained in Table 4.1a showed and presented that most of the sampled teachers, pupils and head teachers filled the questionnaires in the study. However, out of 75 principals who were sampled to participate in the study and 94 percent of them participated. For the teachers and pupils, 81 percent and 97 percent of them participated. This was possible because the researcher administered the questionnaires and waited for them to be filled up and then picked them immediately. The assistance of the school principals and the teachers in getting to introduce the researcher also helped about 97 percent participation rate for the pupils.

The overall level of feedback from the head teachers, teachers and pupils was considered satisfactory and typical since it conforms to recommendations by Mugenda and Mugenda (2003) that in any survey research a feedback level of 50 percent is satisfactory for management and interpretation, a rate of 60 percent is good while that of above 70 percent is outstanding. In this case based on Mugenda and Mugenda recommendation, the response rate was outstanding for the head teachers, teachers and pupils.

The response rate for the County Commissioner, the County Director of Education and Sub-County Education Officers, who were interviewed were as shown in Table 4.1b.

Table 4.2b: Interview schedule Response Rate

Category of Respondent	**Sample Size**	**Interviewed**	**Response/Participation Rate (%)**
County Commissioner	1	1	100%
County Director	1	1	100%
Education officers	3	2	66.7%
Total	**5**	**4**	**80.0%**

Data enclosed in Table 4b shows that the target of 100% was fulfilled among the interviewed senior government officials, namely the County Commissioner and the County Director of Education. However, of the targeted 3 Sub-County Education Officers, only 2(66.7 percent) were available for interview at the time of the study. Therefore, the overall response rate for all the sampled interviewees was 80%, which was considered sufficient to provide reliable feedback to fulfil the objectives of the study.

The response rate for parents, who were subjected to focus group discussion in the study, was as shown in Table 4.1c.

Table 4.3c: Focus Group Discussion Response Rate

Parents	Sample Size of Parents from Regular and Mobile Schools			Parents who Participated in FGD			Response Rate
	RS	MS	Total	RS	MS	Total	%
Turkana West	20	5	25	13	5	18	72.0
Loima	15	5	20	10	4	14	70.0
Turkana Central	18	12	30	10	10	20	66.7
Totals	**53**	**22**	**75**	**33**	**19**	**52**	**69.3**

As shown in Table 4.1c, in Turkana West, the study had sampled 20 parents from the regular schools to take participate in the FGDs, but only 13 (65 percent) participated. From the mobile schools, 5 parents had been selected from Turkana West, all (100 percent) of whom participated in the FGDs. Therefore, the parentsô overall response rate from Turkana West was at 72 percent, which was acceptable for the research. In Loima Sub-County, 15 parents from the regular schools had been sampled to participate in the FGDs, but only 10 (66.7 percent) took part. From the mobile schools in Loima, 5 parents had been selected to take part in the FGDs and 4 (80 percent) participated. These figures brought the overall participation rate of parents from Loima Sub-County to 70 percent, which was also accepted in the study. Lastly, in Turkana Central Sub-County, 18 parents had been sampled to participate in the FGDs and only 10 (55.6 percent) took part. From the mobile schools in Turkana Central, 12 had been chosen and only 10 (83.3 percent) participated in the FGDs. Therefore, the overall participation rate for parents from Turkana Central Sub-County was 67 percent, which was considered capable of providing reliable data for the study. Overall, the response rate for all the parents in Turkana County was 69.3 percent, which was deemed sufficient to provide reliable data for the study.

4.3 Demographic Information of Respondents

Demographic data of respondents comprised, gender, age, academic qualification, teaching experience, distance covered by pupils to school. The respective data were analysed as under.

The data on gender of respondents was key for the study. This aimed at ensuring that views from both genders were sought. In this respect, the respondents were requested to show their gender in the questionnaire. The answers were as summed up in Table 4.2a below.

Table 4.4a: Gender of Respondents

Gender	Pupils				Teachers				Head Teachers			
	Regular		Mobile		Regular		Mobile		Regular		Mobile	
F(%)	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
Male	131	52	57	48	75	68	37	39	15	31	15	68
Female	122	48	63	52	36	32	59	61	34	69	7	32
Total	**253**	**100**	**120**	**100**	**111**	**100**	**96**	**100**	**49**	**100**	**22**	**100**

Table 4.2a shows that 131(52%) pupil participants from regular schools were male while 122(48%) were female. From the mobile schools, 57(48%) pupil respondents were male and 63(52%) were female. From these findings, it is evident that there were more male than female pupil participants in this study, although the margin of difference was minimal. The findings also revealed that male pupils were predominant in regular schools compared to the situation in mobile schools where female pupils constituted the majority. This could be attributed to pastoralistsô parentsô culture of moving with their girls alongside their animals as they look for food. The findings concur with Mutegi (2015) who established that in pastoralist communitiesô parents prefer to move with their girls for security reasons. This explains why more girls are enrolled in mobile schools than boys.

Among the teacher participants, 75(68 percent) were male from regular schools while the rest, 36(32 percent), were female. The teacher participants from mobile schools constituted 37(39 percent) males and 59(61 percent) females. These statistics showed that the number of male teachers was higher in regular schools was higher than that in mobile schools. Conversely, in regular schools, there were more female than male teachers. Moreover, there were also more male than female teachers in the study area.

Table 4.2a above further shows that the distribution of head teachers by gender revealed that 15(31 percent) head teacher respondents from regular schools were males while 34(69 percent) were females. Of the head teachers from mobile schools, 15(68 percent) were males while 7(32 percent) were females. Unlike the gender distribution statistics for the pupils and teachers, there were more female than male head teachers in the area under study.

Table 4.2b shows the results for gender distribution for interview schedule respondents.

Table 4.2b: Gender of the Interview Schedule Respondents

Category of Respondent	Male	Female
County Commissioner	1	0
County Director	1	0
Education officers	2	0

The results in Table 4.2b show that none of the key informants interviewed were female. This showed that all those who held the offices of County Commissioner, County Director of Education and Sub-County Education Officers in Turkana County were all males.

Table 4.2c contains the study results on the gender distribution of parents who contributed in the focus group discussion.

Table 4.2c: Gender of Parents who participated in Focus Group Discussion

Parents' Gender	Parents who Participated in FGD					
	RS		MS		Total	
	M	F	M	F	M	F
Turkana West	3	10	1	4	4	14
Loima	2	8	0	4	2	12
Turkana Central	6	4	4	6	10	10
Total	**11**	**22**	**5**	**14**	**16**	**36**

The results in Table 4.2c show that in Turkana West Sub-County, 3(23.0 percent) male parents and 10(77.0 percent) female parents from the regular schools participated in the study. Therefore, female parents dominated the participants from Turkana West Sub-County. From the mobile schools, there was an identical number of male and female, 4(50.0 percent) in each case, who took part in the study. Therefore, the ratio of male to female parents from mobile schools in Turkana West was 1:1.

In Loima Sub-County, 2(20.0 percent) male parents and 8(80.0 percent) female parents participated in the regular schools. Again, it emerged that female parents were more than the male parents in the regular schools from Loima Sub-County. In the mobile schools, none of the male parents while 4(100.0 percent) females took part in the FGDs.

In Turkana Central Sub-County, 6(60.0 percent) male parents and 4(40.0 percent) female parents from the regular schools participated in the study. Therefore, Turkana Central was the only Sub-County in which more male parents from the regular school parents took part in the study. In the mobile schools, the numbers were reversed, so that 4(40.0 percent) of the parents were male while 6(60.0 percent) were female. Therefore, there were more female than male parent participants in mobile schools.

In the entire County, a total of 16(30.8 percent) male parents and 36(69.2 percent) female parents participated in the study. Therefore, of all the parents, females were the majority. A number of factors could explain this disparity in gender. For instance, in pastoralist communities, males are often away from home tending to the animals. Moreover, some of the families could have lost male parents to cattle rustling related conflicts.

The report likewise sought to ascertain the age of the respondents. The responses on age were as presented in Table 4.3 below.

Table 4.5: Age of Pupil Respondents

Age bracket	Regular	Mobile	Total
6-10 years	1(0.3%)	1(0.8%)	2(0.5%)
11-15years	188(74.3%)	67(55.8%)	255(68.4%)
16-20 years	62(24.5%)	49(40.8%)	111(29.8%)
20 years and above	2(0.8%)	3(2.5%)	5(1.3%)
Total	**253(100%)**	**120(100%)**	**373(100%)**

The results in Table 4.3 showed that among the pupils, 1(0.3 percent) was aged 6-10 years in regular schools and another 1(0.8 percent) was aged 6-10 years in mobile schools. This showed that younger learners (6-10 years old) were few in both categories of schools. Majority of the learners were aged 11-15 years, as shown by 188(74.3 percent) in regular learning centres and 67(55.8 percent) in mobile educational centres. Many of the learners were also in the age range of 16-20 years, as shown by 62(24.5 percent) and 49(40.8 percentage) in regular and mobile schools, respectively. A few other pupils were older (aged 20 years and above), as indicated by 2(0.8 percentage) in regular schools and 3(2.5 percent) in mobile schools.

The results also indicated that 30 percent of the pupils were age 16 to 20 years. This implies that there are many pupils who are overage and yet in primary schools as evidenced by 5 percent of the pupils who are over 20 years old. However, pupils of

age 6 to 10 constituted the minority at 2 percent. This shows that in pastoralist communities, children report to school late in years hence affecting their schooling where they complete when they are above the possible 13 years at class eight. This was also in line with the parentsô responses who stated that they only allow children to go to school when they are about nine to ten years since they are required to walk long distances to attend *kraal* or mobile schools and regular schools.

The distribution of pupils by age and school category indicated that generally, within the age category those of over 16 years are in mobile schools. This suggests that they move with the animals as they attend schools. Those of less than 16 years majority of them 78 percent are in regular schools. The results show a peculiar scenario where children of age 16-20 are were still in primary school. This suggests that the free primary education enabled aged children to enrol for the programme.

The distribution of teachers and head teachersô age by the category of the school is as presented in Table 4.4.

Table 4.6: Ages of Teachers and Head Teachers

Age Ranges	Teachers				Head Teachers			
	Regular		Mobile		Regular		Mobile	
	f	%	f	%	f	%	f	%
Below 25 years	1	25	3	75	0	0	0	0
26-35 years	39	51	38	49	8	89	1	11
36-45 years	38	57	29	43	17	52	16	49
46-55 years	30	55	25	45	24	83	5	17
55 years and above	3	75	1	25	0	0	0	0
Total	111	54	96	46	49	69	22	31

Data contained in Table 4.4 indicated that very few teachers were aged below 25 years, majority of whom (75 percent) being in mobile schools while the rest (25 percent) were in regular schools. However, most of teachers were aged above 25 years, most of whom were in regular schools. This implied that youthful teachers are able to move alongside the nomadic pastoralist offering education to their children

while the elderly, above 25 are mostly in regular schools. For instance, over half (51 percent) of the teachers aged 36-45 years were in regular schools compared to the 49 percent who were in mobile schools. Moreover, 55% of the teachers aged 46-55 years were also found in regular schools and the rest 45% were in mobile schools. Among those teachers aged 55 years and above, 75 percent were in regular schools while only 25 percent were in mobile schools.

The above statistics on teachersô ages were also replicated by those of principals. For example, as shown in Table 4.4 above, 83 percent of head teachers aged 46-55 years were in regular schools and 17 percent were in mobile schools. Similarly, 89 percent of younger (26-35 years old) head teachers were in regular schools compared to only 11 percent in the same age cohort in mobile schools. Moreover, 52% of the head teachers in the age bracket 36-45 years were in regular schools. These statistics implied that teachers and head teachers of diverse age categories participated in the study and, since most of them were aged above 36 years, they must have had sufficiently long teaching experience to understand and speak to issues pertinent to the objectives of this study.

The report also tried to ascertain the duration that the pupil who responded had been in school. This aimed at ensuring that responses were sought from the most experienced pupils in line with years of stay at school and the least experiences based on short length of stay at school. This is as illustrated in Table 4.5.

Table 4.7: Distribution of Pupils by their Duration of Stay in the School

Duration of stay in school	Regular Schools		Mobile Schools		Total	
	f	%	f	%	f	%
Less than 1 year	3	12	23	26	26	100
2-5 years	38	29	92	71	130	100
6-10 years	189	98	4	2	193	100
10 years and above	23	96	1	4	24	100
Total	253	100	120	100	373	100

The information enclosed in Table 4.5 shows that most (98 percentage) of the learners in regular educational centres had been in school for at least 6-10 years. The results indicated that pupils were more settled in regular schools than in mobile schools. In comparison, most (71 percent) pupils in mobile schools had been in school for fewer (2-5) years. These figures showed that, possibly, school attendance in mobile schools was much less frequent compared to regular schools.

It was interesting to realize that a significantly high (96 percent) of pupils in, especially, regular schools reported that they had been in school for 10 years and above. This implied that some of the learners had repeated classes more times since the number of years a pupil is expected to be in school is ideally 8. Ideally, under the previous education system of 8-4-4 (in which this study was conducted) pupils are expected to progress to secondary school after doing 8 years of primary schooling. Nonetheless, it was noted that very few (24 percent) of pupils in mobile schools had been in school for more than 10 years.

The rest of the findings revealed that 88 percent of the pupils in mobile schools and 12 percent in regular schools had been in school for less than one year. This implied that mobile schools host pupils for a short period as they are on migratory route with their animals.

The study further sought to establish the education level of teachers and head teachers with the aim of establishing whether distribution of teachers by level of education vary by the category of school. This is as summarized in Table 4.6.

Table 4.8: Education Level for Teachers and Head Teachers

Education Level	Teachers				Head Teachers			
	Regular		Mobile		Regular		Mobile	
	f	%	f	%	f	%	f	%
College (Mid-level)	78	70	75	78	25	51	17	42
University	33	30	21	22	24	49	5	23
Total	**111**	**54**	**96**	**46**	**49**	**69**	**22**	**31**

Table 4.6 shows that in regular primary school majority of teachers have attained college level of education as attested by 70 percent of the teachers while in mobile school majority of teachers attained college level of education also as show by 78 percent. From the regular schools, 30 percent of the teachers have attained a university education while 22 percent of the mobile primary schools have a university degree. Majority of the head teachers in regular primary schools have attained mid-level college education as attested by 51 percent while 77 percent of the mobile school instructors have mid-level education. On the university education, 49 percent of the head teachers in regular had university education while 23 percent of the heads of mobile schools had university education. This implies that schools have adhered to the TSC policy of employing teachers with a minimum of a college certificate.

Additionally, the study sought to establish the distance covered by pupils to school. According to Mutegi (2005, 2015) there is a relationship between distance of school from household and studentsô participation in education. Based on this assertion, this study sought to establish how far primary schools in the County are located from household. Consequently, the participants were requested to indicate the distance from school to their household. This is as summarized in Table 4.7.

Table 4.9: Distance they Covered by Pupils to School

Distance to school	Regular Schools		Mobile Schools		Total	
	f	%	f	%	f	%
Less than 1 km	16	94.1	1	5.9	17	100
1-5kms	84	60.9	54	39.1	138	100
6-10kms	110	70.5	46	29.5	156	100
10 and above kms	43	69.4	19	30.6	62	100
Total	**253**	**67.8**	**120**	**32.2**	**373**	**100**

Regarding the distance from home to school, the study established that 54 percent of pupils travel for 15 kilometres to school and 38 percent travel for 6 to 10 years. This implies that even with introduction of mobile schools to ease access to school, pupils still cover long distance to attend schools. However, for those in regular schools a majority 43 percent travel for 6 to 10 kilometres and 33 percent travel for 1 to 5 kilometres to school. The study clearly shows that pupils in mobile school travel long distance to schools compared to those in regular schools.

The study also wanted to determine the number of years that the teachers and head teachers had been in the teaching profession. This aimed at establishing whether the responses given are based on varying experiences. The cross tabulation between teachers and head teachers years of teaching profession and school category was done. The outputs were as tabulated in Table 4.8.

Table 4.8: Teaching Experience of both Head Teachers and Teachers

Education Level	Head Teachers						Teachers					
	Regular		Mobile		Total		Regular		Mobile		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Less than 5 years	2	66.7	1	33.3	3	100	23	48.9	24	51.1	47	100
5-10 years	10	66.7	5	33.3	15	100	36	50.7	35	49.3	71	100
11-15 years	13	59.1	9	40.9	22	100	20	66.7	10	33.3	30	100
16-20 years	19	79.2	5	20.8	24	100	13	52.0	12	48.0	25	100
More than 20 years	5	71.4	2	28.6	7	100	19	55.9	15	44.1	34	100
Total	**49**	**69**	**22**	**31**	**71**	**100**	**111**	**53.6**	**96**	**46.4**	**207**	**100**

Data contained in Table 4.8 shows that majority (66.7 percentage) of the instructors from regular centres had taught for 11-15 years. A significant proportion (50.7

percentage) of the instructors in regular educational centres had also taught for 5-10 years. In comparison, majority (51.1 percentage) of the teachers in mobile educational centres had taught for less than five years. Another 49.3 percent had taught for at least 5-10 years. This indicated that teacher retention was higher in regular schools than in mobile schools. However, there were 48percent of teachers from mobile schools that had taught for 16-20 years and another 44.1 percent that had taught for more than 20 years. This was indicative of the fact that, perhaps, certain measures or conditions of work, had encouraged some teachers to continue working with mobile schools. Still, these numbers did not match up to those of regular schools, which showed that over half (52 percent and 55.9 percent) had taught for 16-20 years and for more than 20 years, respectively.

The figures for teaching duration for head teachers seemed to replicate those of the teachers. Specifically, the study results revealed that majority (79.2 percent) of the head teachers had taught for 16-20 years and 71.4 percent had taught for more than 20 years. This showed that most of the head teachers had a wide span of teaching experience. Interestingly, a significantly high number (66.7 percent in each case) of head teachers had taught for less than five years and for 5-10 years, respectively. Over half of the head teachers (59.1 percent) had taught for a period between 11 and 15 years. In terms of comparison, the results also indicate that the head teachers who have taught for more than 20 years are found in regular schools. This implies as they near retirement, they prefer to work in regular schools over mobile schools, perhaps, to avoid movements from one place to another.

Having analysed the demographic data of the respondents, the study then focused on the research results on the objectives of the study. The following sections focused on data analysis based on the objectives of the study.

4.4 Data Analysis on the Effectiveness of School Feeding Programme on Pastoralists' Pupils' Participation in Primary Education

The first objective of the report tried to ascertain the effect of School Feeding Programme (SFP) on nomadic-pastoralistsô learnersô involvement in schooling in Turkana County, Kenya. According to Mulwa and Mutegi (2010), feeding programme plays a key role of access to primary education by pupils especially in arid and semi-arid areas. In line with Mulwa and Mutegi (2010) who examined the relationship of the meals provision and pupilsôretention rate in primary schools, this study sought to ascertain the role of SFP on participation. To this effect, the participants were requested to state the effect of government interventions such as SFP on pupil participation on education.

The pupils, teachers and the head teachers gave their views on specified assertions relating to SFP and learnersô involvement in basic schooling in Turkana County. Their responses were as presented in Table 4.9.

Table 4.9: Pupils' Views on School Feeding Programme

Distance to school	Regular Schools		Mobile Schools		Total	
	Yes F(%)	No F(%)	Yes F(%)	No F(%)	F	%
Free meals are offered in this school	253(100)	0(0)	120(100)	0(0)	373	100
Sometimes this school receives food long after it has opened	253(100)	0(0)	120(100)	0(0)	373	100
Food received in this school does not sustain the school to the very end of term	253(100)	0(0)	120(100)	0(0)	373	100
The meals offered in this school are not nutritious and dietary	253(100)	0(0)	120(100)	0(0)	373	100
When there is no food in school some pupils donôt go to school	251(99)	2(1)	120(100)	0(0)	373	100
This school normally send pupils to collect water and firewood	249(98)	4(2)	114(95)	6(5)	373	100
When food is in school some pupils remain in school even after the school has closed	226(89)	27(11)	101(84)	19(14)	373	100

The results in Table 4.9 indicates that learners in the mobile educational centres and regular learning centres affirmed that free food were given in their institutions. This was confirmed by all 100-percentage reply of the learners, suggesting that SFP is 100 percentage adopted in schools.

The learners similarly mentioned that most times their learning centre got food long after it had opened meaning that although the food was offered, disbursements delayed. This finding agreed with the view that the food received did not maintain the learning centre throughout the term. This was also affirmed by 100 percent reply of learners from both the mobile educational centres and regular learning centres.

The findings showed that the food provided was of poor nutritional quality. This was confirmed by 100 percent feedback by learners who disagreed that the food supplied was nutritious and dietary.

On the assertions relating to if SFP has affected retaining rates in the learning centre, 99 percent of learners from regular and 100% from mobile educational centre strongly affirmed that when there were no meals in learning centre several learners did not appear in the learning centre. This suggests that a SFP is a motivator of learnersô attendance.

The instructors in regular learning centres were requested to provide their views on the influence of learning centre meals on involvement. Their responses were as summarised in Table 4.10.

Table 4.10: Teachers' Views on the Feeding Programme in Regular and Mobile Schools

RS-*Regular Schools (n=111),* ***MS-****Mobile Schools (n=96)*

Statement	Schools	SD	D	A	SA
The school provides meals to all pupils on a daily basis	RS	0.3	0.2	35.1	60.4
	MS	-	-	24.0	76.0
The meals provided are dietary and nutritious	RS	89.2	10.8	-	-
	MS	80.2	19.8	-	-
We witness reduced cases of attendance when meals are not offered	RS	-	-	10.8	89.2
	MS	-	-	11.5	88.5
The school solely rely on the government and well-wishers for food donations	RS	-	-	5.4	94.6
	MS	-	-	7.3	92.7
Sometimes we send pupils to collect firewood and water	RS	3.6	8.1	43.2	45.0
	MS	5.2	9.4	32.3	53.1
Sometimes pupils remain in school even after the school has closed down when food is in school.	RS	1.8	-	15.3	82.9
	MS	1.0	-	11.5	87.5

The results in Table 4.10 revealed the instructorsô views on the state of school meals programme in the mobile educational centres and regular learning centres from a strongly disagree to strongly agree. Most, 60.4 percentage, of instructors from regular centres agreed strongly that the learning centre offered food to all learners every day.

Another 35.1 percentage of the instructors similarly were in agreement with this assertion. In the mobile educational centre, higher number, 76.0 percent, strongly agreed while 24.0 percent agreed with the statement. This showed that majority of mobile learning centres than regular educational centres offered food to their learners every day. Very few teachers in the regular schools strongly disagreed, 0.3 percent, and disagreed, 0.2 percent, with this assertion while none of the instructors in the mobile learning centres agreed with the statement. These findings suggested that most of the regular schools and all of the mobile learning centres in Turkana County provided food to learners every day.

Nevertheless, most, 89.2 percent, of instructors from the regular educational centres strongly declined that the food availed were dietetic and nutritive. This statement also had 10.8 percent who disagreed. In the mobile schools, 80.2 percent strongly disagreed and 19.8 percent disagreed that the meals provided were nutritious. These findings suggested that the meals availed in all the institutions were not dietary and nutritious. As such, despite all the state-owned learning centres in the study area had done well to avail food daily, the meals did not give the learners the needed nourishment. These results also disagreed with the view by Wolpert and Wheeler (2008) that SFPs need to be used as avenues to give Omega-3 fatty acids to pupils to boost their development.

The findings in Table 4.10 further show that majority, 89.2 percent, of the regular school instructors strongly affirmed that when food was availed in schools, pupil absenteeism was decreased. This view also had 10.8 percent of the instructors who agreed. From the mobile learning centres, 88.5 percent of the instructors strongly affirmed and 11.5 percent simply affirmed that when food was not availed cases of

absenteeism increased. Therefore, it was inferred that when food is availed in both the regular and mobile schools the cases of absenteeism were diminished.

The instructors from the regular learning centres further affirmed strongly, 94.6 percent, and agreed, 5.4 percent, that the learning centre exclusively mainly on the state and development partners for food contributions. This statement had a relatively lower percentage of teachers, 92.7 percent, who strongly agreed in mobile learning centres. However, in relation to the regular schools, more, 7.3 percent, teachers in the mobile learning centres agreed with the assertion. These statistics showed that in all the schools in Turkana County relied solely on the state and other development partners for food aids.

The findings in Table 4.10 also indicate that, the views of many, 45.0 percent and 43.2 percent, of the regular learning centres instructors who strongly affirmed and agreed, correspondingly, occasionally they directed learners to fetch wood fuel and water. More mobile learning centres than regular educational centres directed learners to gather wood and water, as was attested to by 53.1 percent who strongly agreed. However, fewer, 32.3 percent, teachers in the mobile schools agreed with the assertion compared with regular schools. However, a few of the regular schools, as shown by 8.1 percent of the teachers who disagreed and 3.6 percent who strongly disagreed, never sent learners to fetch firewood and water. Similar to the responses in the case of the regular schools, some, 9.4 percent and 5.2 percent, of the teachers in mobile schools also disagreed and strongly disagreed that often their schools sent the learners to fetch firewood and water. These results indicated that many of the regular schoolsô learners were sent out to gather firewood and water. This practice deprived the learners time for education activities resulting in non-completion of syllabus and poor academic outcomes.

Lastly, the results indicated that most of the instructors from the regular learning centres, 82.9 percent, strongly affirmed that often learners stayed back in school even after closing hours when meals were provided. This statement also had another 15.3 percent of the instructors who agreed. Only 1.8 percent of the teachers disagreed strongly with the statement. In the mobile schools, almost the same number as those of the regular schools strongly agreed, 87.5 percent while 11.5 percent affirmed with this assertion. Consequently, it was concluded that in majority of the schools, often learners stayed back in after closing hours whenever meals were availed.

From these findings, it was evident that regular schools availed food to learners to a large extent. Moreover, the meals had enhanced school attendance among pupils. In fact, some of the pupils stayed back in school, even during the holidays, just because they could find meals in school. These findings confirmed those of Rugyendo *et al.* (2011) who found that the Food For Education in Uganda offered nourishments to learners or their kin in return for enrolment and stay in school. Unfortunately, the meals provided in schools were, in most cases, not nutritious. This result was contrary to the view by Taylor (2009) that since nomadic groups witness lengthy dry spells often, their children exhibit diminished growth, are prone to anaemia, starvation or malnutrition, all of which impair with their educational participation and academic performance. The findings of the present study were not in line with the suggestion by Feeding Rwanda (2012) that school feeding is an effective means to tackle the protracted challenge of poor nutrition among nomadic children. Consequently, providing the needed fortifications within SFPs in schools can boost the learnersô achievement.

The research additionally probed the instructors on the mechanisms needed to guarantee the efficacy SFPs in their institutions. Their replies were as depicted in Table 4.11.

Table 4.11: Teachers' Views on Measures for Effective Feeding Programme

Measures	Regular schools		Mobile schools	
	f	%	f	%
Provide balanced diet daily	33	29.7	23	24.0
Provide at least two meals daily	93	83.8	71	74.0
Introduce free milk/meat to schools	68	61.3	53	55.2
Parents should be included in feeding programmes	66	59.5	52	54.2
Valid n	**111**		**96**	

The findings depicted in Table 4.11 above demonstrate that, in the view of some instructors, mutually regular, 29.7 percent, and mobile, 24.0 percent, institutions ought to avail dietary meals each day. This strategy was proposed by more instructors in regular learning centres than in mobile learning centres.

Majority, 83.8 percent, of the instructors from the regular learning centres also indicated that their schools wanted to avail meals twice a day. This view was mentioned by many, 74.0 percent, instructors from the mobile learning centres. As such, this strategy was important in both school types. This suggested that, to the instructors, raising the quantity of meals precedes improvement of the worth (e.g. nutritive value) of the meals.

Additionally, 61.3 percentage of the instructors from the regular and 55.2 percent from the mobile institutions suggested the need to avail free milk or meat to learners. This proposal was intended to boost the nutritive value of the school meals.

Lastly, most instructors proposed that parents needed to be involved in school meals initiatives. This suggestion was affirmed by 59.5 percent of the instructors from regular institutions and 54.2 percent of the instructors from the mobile schools. It is possible the instructors sensed that guardians grasped best the dietary requirements of their youngsters. As such, engaging guardians in learning centre meals initiatives would well ensure the value of the food availed.

Based on the above findings, it was deduced that a most of the instructors believed that adding milk and meat into the school meals would boost the SFPs. This affirmed the earlier finding that the meals availed fell below the nutritional standards. The addition of milk and meat would thus enhance the nutritional quality of the meals. The instructors also suggested the need to avail three meals daily. This would guarantee that learners are supplied with meals throughout the day and subsequently boost their stay in school. The findings also indicated that sufficient food portions need to be availed to make certain that learners feel food secure and hence concentrate in their studies. The instructors also proposed the need to avail relief food to families as well. This would guarantee that pastoralistsô children are food secure at all times.

The results tabulated above suggest that, to most of the instructors, availing of nutritious meals is a determinant of the success of the SFPs as a promoter of schooling. Another determinant of the SFPôs efficacy was increasing amounts of food supplied to support number of meals per day. Additionally, the success of the SFP was said to depend on expansion of meals quality through various dietary fortifications. It was further indicated that including parents in strategizing of SFPs can bolster the success of the interventions.

The school heads also gave their views concerning statements on SFP and learnersô involvement in education. Their views were as depicted in Table 4.12.

Table 4.10: Head Teachers' Responses on the Feeding Programme in Regular and Mobile Schools

__RS__-Regular Schools (n=49), __MS__-Mobile Schools (n=22)

Statement	Schools	SD %	D %	A %	SA %
This school is a beneficiary of the School Feeding programme	RS	-	-	2.0	98.0
	MS	-	-	-	100
The meals provided are dietary and nutritious	RS	77.6	20.4	-	2.0
	MS	77.3	22.7	-	-
When meals are provided attendance is high in all classes	RS				
	MS	-	-	9.1	90.9
When meals are not offered, we witness reduced cases of attendance	RS	2.0	-	12.2	85.7
	MS	-	-	22.7	77.3
The school solely rely on the government and well-wishers for food donations	RS	2.0	-	8.2	89.8
	MS	-	-	-	100
Sometimes we send pupils to collect firewood and water	RS	4.1	53.1	24.5	18.4
	MS	13.6	50.0	27.3	9.1
Sometimes pupils remain in school even after the school has closed down when food is in school.	RS	4.1	12.2	34.7	49.0
	MS	4.5	13.6	31.8	50.0

Table 4.12 indicates that almost all, 98.0 percent, of the school heads from regular schools agreed strongly and 2.0 percent affirmed that their institutions implemented the SFP. In the mobile schools, all the school heads, 100.0 percent, affirmed that their institutions undertook SFP. This result confirmed that all the regular and mobile schools in the study area were recipients of the SFP. The results also reiterated those from the learners and the instructors, that all the schools were recipients of the government-initiated SFP.

The study outcomes in Table 4.12 further underline that most, 77.6 percentage, of the school heads from the regular learning centres affirmed strongly that the food availed were dietetic and nutritive. Another 20.4 percent of them disagreed with this assertion. Almost the same number of the heads from the mobile learning centres strongly affirmed, strongly disagreed, 77.3 percent, and disagreed, 22.7 percent, with

the claim. An insignificantly low number, 2.0 percent, of school heads in regular learning centre strongly affirmed with this assertion. Hence, from the results, it was inferred that the meals availed in all the schools in the study area were not dietary. Considering the respondents from the regular schools, as well as the pupils and teachers from both categories of schools affirmed that the food provided was not nutritious portended a serious lack of commitment to providing healthy food to schools in Turkana County as an ASAL area.

As tabulated above, majority, 89.8 percentage, of the headmasters from the regular learning centres strongly affirmed that their institutions mainly depended on the state and development partners for food. Another 8.2 percentage of the heads also agreed with this assertion. To this statement, all the 100.0 percentage of the school heads from the mobile learning centres strongly agreed. Therefore, it was deduced all the schools depended on the state and partners for food. Only 2.0 percentage of the headmasters from the regular strongly opposed with the statement, meaning there could have been some regular schools that had other sources of food supplies.

The results also demonstrated that majority, 85.7 percent, of school heads agreed strongly that they had seen diminished instances of attendance when food was not availed. Another 12.2 percentage of the head teachers agreed with this statement. In the mobile learning centre, the all of the head teachers affirmed (9.1 percent agreeing and 90.9 strongly agreeing) that when food was not offered, they witnessed reduced cases of attendance. Similarly, a majority of the mobile school heads strongly agreed, 90.9 percent and agreed, 9.1 percent, that when meals were availed attendance was increased across classes. In the regular schools, this statement had 81.6 percent of the head teachers strongly agreeing and 16.3 agreeing. Thus, from these results it was

deduced that most regular and mobile learning centres would witness increased participation when food was offered. However, in almost all the schools, attendance was high in all classes when meals were provided. These findings concurred with those from the instructors from both types of schools. They attest that SFP enhance educational intake and attendance. This was in line with the views of WFP (2009) and World Bank (2009) that in many transitional communities SFPs have resulted in increased uptake of education.

Most, 49.0 percent, regular school heads agreed strongly that often pupils stayed back after schooling hours if food was present. Another 34.7 percent of the regular school head teachers were in agreement with this assertion as well. In the mobile learning centres, the statement attracted varied responses since majority agreed, 31.8 percent, and strongly agreed, 50.0 percent, while only 4.5 percent strongly disagreed and 13.6 percent disagreed. This suggested that some learners had been driven to take part in schooling mainly by the availability of steady meals, which they lacked at home. Subsequently, it was evident that SFP promoted pastoralistsô learnersô educational participation. However, considering the mixed responses in both schools, perhaps, some families were capable of providing meals to their children.

Nevertheless, most of the regular schoolsô headmasters declined that at times they sent learners to fetch wood and water, as indicated by 53.1 percent. An almost similar number of the mobile school head teachers, 50.0 percent, also disagreed with this statement. Another 4.1 percent of the head teachers from the regular learning centre strongly disagreed with this statement while in the mobile learning centre, the number of those who strongly disagreed was higher at 13.6 percent. This implied that in most regular and mobile schools, academic activities were disrupted by learners having to go and fetch these items. A good number, 24.5 percent and 18.4 percent, of the school

heads, nonetheless, affirmed and agreed strongly with this assertion. This highlighted that the inequalities in the provision of water and fuel to these institutions had caused disparities in participation. It was unclear if the school heads ensured the learners were in the company of security personnel when running out for such errands. These findings also underscored the need to avail alternative fuel and water sources to schools.

The heads of schools were further requested to mention some mechanisms for enhancing effective SFPs. Their views were as tabulated below.

Table 4.13: Head Teachers' Views on Measures for Effective Feeding Programme

Measures	Regular school		Mobile school	
	f	%	f	%
Dietary food given in schools	10	20.4%	10	45.5%
Enough food ratio to pupils	10	20.4%	12	54.5%
Introduce milk /meat in schools	12	24.5%	15	68.2%
Provide three meals daily	12	24.5%	12	54.5%
Provide parents with food/feeding programme	5	10.2%	5	22.7%
Valid n	**49**		**22**	

Many, 20.4 percentage, of the school heads from regular learning centres urged for supply of nutritive meals. Moreover, 45.5 percentage of the head teachers from mobile learning centres supported the same suggestion. As such, it was deduced that school heads were convinced that availing nutritious food would boost the efficacy of SFP in relation to enhanced educational participation.

Additionally, 20.4 percentage of the respondents from regular and 54.5 percent from mobile schools indicated the need for sufficient rations for learners. Clearly, more headmasters from mobile than from regular learning centres preferred this option.

A low number, 24.5 percent of heads of the regular learning centres proposed the introduction of milk and beef in meals, a suggestion supported by 68.2 percent of heads from mobile learning centres. Distinctly, more headmasters from the mobile learning centres believed in this suggestion than their counterparts from regular schools.

Other suggestions made by the school heads were: availing up to 3 meals each day (24.5 percentage of the regular learning centres head teachers and 54.5 percent of mobile school heads) and supplying households with food or feeding plan (regular = 10.2 percent and mobile = 22.7 percent). In the view of these headmasters, these measures would guarantee that the SFP in their institutions support increased engagement in schooling. The results suggested that mobile learning centres needed these support strategies more than did their regular counterparts.

These above research outcomes also indicated that school heads were conscious of the importance of provision of nutritious meals to learners. As such, in their view, appropriate diet is an indicator of the efficacy SFP state initiative. The heads also urged for enough amounts of food. They proposed for enough ratios of at least 3 meals daily.

The research outcomes were reiterated those of Taylor (2009) that learners with stunted growth, history of anaemia, starvation or lack nutrition tend to register poorer grades, enrol at a late age and are often absent, and exhibit conduct problems, among other problems. As such, they are likely to quit school altogether. Providing appropriate dietary and welfare measures in school will boost the pupilsô achievement. Securing the health and nourishment of children leads to increased educational participation and academic achievement.

Additionally, Kariuki (2013) argues that Kenyaôs Makueni District had been supplying school lunches with great assistance from WFP, parents help to supply some of the food needed. The goal was to guarantee that learners never starve, and performance was thus noticed because of the programme. Shortfalls in support structures and finances have made the adoption of SFPs in ECDE centres difficult in Kenya. Malnourished children use low body energy and other vital nutrients whereas overly-fed learners experience weight gain health challenges. These also affect the academic performance of such learners.

In the Focus Group Discussions, parents were asked to state whether their children went to regular schools or mobile schools. Since the parents were drawn from both regular and mobile schools, a general survey revealed that majority of them had children in regular than in mobile schools. As they responded to the question, one of the parents remarked that they also referred to mobile schools as *kraal* or village schools in the area.

On whether their children received free meals in the learning centres, all the parents affirmed that the WFP provided corn and cereals to schools. Nevertheless, as several parents/guardians indicated, day learning centres singlehanded availed lunches to the learners.

The researcher inquired from the parents whether or not there were delays in supply of food within the SFP in their childrenôs schools. In their response, the parents first confirmed that the delivery of food always tended to delayed.

The parents were requested to indicate if learners only attended school when meals were availed. They indicated that the meals were availed to pupils who attended

school. Consequently, as one parent stated, the learners lacked the motivation to attend school during holidays since in those sessions no meals were provided.

The researcher also requested the parents to indicate the interventions they felt the state should adopt to enhance SFPôs effect on childrenôs educational participation. Most of the respondents held the view that the state should provide sufficient food to support 3 daily meals. Some proposed that orphaned children and those whose parents were away be given food during off-school days. Lastly, the respondents suggested that the meals availed should be nutritious. As such, they proposed that the state introduces free milk, meat and other mealsô fortifiers.

The three Education Officers were also interviewed concerning the efficacy of the SFP on pastoralistsô learnersô engagement in primary education in Turkana. First, the Education Officers (EOs) were also requested to shed light on the state policy on SFP in relation to the study area. Their response reiterated the feedback from the County Director of Education. One EO stated that the state was mandated them to carry out frequent assessment of the status of SFP adoption in their respective jurisdictions and give feedback to the Directorate for more insight. This suggested there existed an appropriate policy system for rolling out the SFP in the county. This result was in line with Jensenôs (2010) view that school meals mostly operate in the wider arena of national educational transformation agenda. This agenda targets other essential education support as aspects, including instructor development, syllabus changes and student evaluation.

Another Officer also explained that the school feeding programme had been a good avenue for the government to provide nutritious meals to learners as a means to promoting healthy growth.

The researcher further requested asked the Education Officers to indicate if all the schools from the three sub-counties benefited from the school feeding programme. All the 3 EOs mentioned all the state-owned primary institutions in their jurisdictions were supplied with food under SFP. Nevertheless, as one EO had this to add:

> *Not all schools receive the same quantity of foods. First, food is given according to number of pupils and then we also consider the location of the school. Some schools are located where parents can afford to provide food for their children and we strike a balance with them so that we can help the most needy schools first (Education Officer, Turkana County, Personal Communication, 2017).*

Moreover, the Education Officers were asked to explain if and how the school feeding programme had affected the learnersô engagement in regular and mobile education centres. According to the all the Education Officers, the availing of food in the learning centres had boosted learnersô enrolment and retention in school. This response confirmed the feedback from the CDE, that SFP had reduced learner absenteeism. The finding also agreed with Pediatreôs (2001) suggestion that presence in learning centres and academic output were impressively bolstered by learning centres meals.

The research also inquired from the Education Officers if food supplies to schools experienced any delays and to state the possible causes of those delays whenever they occurred. All the EOs agreed that they had acknowledged accounts of slow disbursements of food to learning centres in their jurisdiction. Like the CDE, they also mentioned the causes of these delays to include security problems, poor roads, weather challenges and absence of transit means.

Furthermore, the researcher probed the Education Officers to explain the effect of food supply delays on pupilsô attendance of school. According to one Education Officer:

> *Food supply delays of course lead to many other problems. Within the school, the kids will not eat in time and they may get discouraged from coming back to school the next day. There is also the psychological effect when they expect food at a certain time and it doesn't come. In one school, parents actually came to school to complain after food delays. Some parents threatened to keep their children home where they [pupils] will at least know if meals are coming or not (Education Officer, Turkana County, Personal Communication, 2017).*

Lastly, the EOs were asked to suggest measures that the state should adopt to reduce delays in food supplies to schools in Turkana County. Apart from the measures mentioned by the CDE, the EOs also suggested the need to supply sufficient and off-road cars to transport food to schools.

The CDE was also interviewed regarding the efficacy of the SFP on pastoralistsô learnersô partaking in basic education in Turkana. To start with, the County Director of Education was requested to summarise the state policy on SFP as it related to Turkana region. As the Director expounded, the state established the idea of supplying school food within it efforts to attain the MDG of reducing starvation and guaranteeing access to universal basic education. The respondent further indicated that SFP supports only daytime food, which consists of mid-morning refreshments, lunch and evening intakes. He intimated that those parents were also urged to supply some food to whenever they could. As such, the Director added, the guideline/strategy had been broken miserable in Turkana County via the Directorate of Education.

The researcher further asked the County Director of Education to state if all the schools from the three sub-counties benefited from the school feeding programme. In answer to this question, the Director had this to say:

> *In my opinion, I believe all the public primary schools do receive food from the government. We have a pretty good structure of reporting if there are any schools that have not received food. And so far we have not heard that a school did not receive food, maybe a few cases of delays in delivery of food due to many factors like road issues and security matters (CDE, Turkana County, Personal Communication, 2017).*

Additionally, the County Director of Education was asked to explain if and how the school feeding programme had affected the pupilsô partaking in primary education. In his response, the CDE said that, based on reports, school feeding had improved enrolment of pupils in state-owned primary learning centres in Turkana County.

> *Moreover, many pupils actually stay longer in school. Before FPE was brought into the fore we had incidences where pupils would come to school today, then miss the next day because he is sent by the parents to look for food. In fact, some of the kids would stay [in school] only in the morning and disappear in the afternoon. Now it is a different scenario. Most of them [pupils] stay in school from morning to afternoon when they are released officially to go home by the teachers (CDE, Turkana County, Personal Communication, 2017).*

The above finding affirmed those of Adelman *et al.* (2008) who showed that the supply of meals offsets the financial implication of education by availing surplus earning for families, and subsequently raising the value of education. Where this income outcome is increased, it can make families to enrol their kids at a young age thus limiting the late entry.

The researcher also sought to find out from the Education Director if food supplies to schools experienced any delays and to state the possible causes of those delays whenever they occurred. The CDE affirmed that there were occasional delays in delivery of food to schools in Turkana County.

> *As already mentioned, food delays are mostly caused by bad roads at times, something the County government is working hard to address. Remember this is a very big County and schools are distributed all over the large areas. Some of these areas have not had good roads for a long time. Coupled with this road issues is the weather problems we encounter at times. Another challenge is the few vehicles provided to deliver foods to these many schools. Another serious issue is if there is an insecurity problem. Some of these bandits attack our vehicles and steal food meant for schools. So we have to send more food again which leads to delays (CDE, Turkana County, Personal Communication, 2017).*

The above citation indicates that the disbursement of school meals was slow because of poor infrastructure and security shortcomings. This further implied that insecurity

impacted education in the study area. It further revealed that the state had not instituted effective measures to secure educational projects in the area.

Moreover, the researcher probed the Education Director to explain the effect of food supply delays on pupilsô attendance of school. The CDE reported that since the delays were not very severe, he had not heard of a school reporting low delays owing specifically to food supply delays. This implied that food delays had not had a significant effect in pupilsô attendance of school.

Lastly, the Director of Education was asked to suggest measures that the government should adopt to reduce delays in food supplies to schools in the study area. The CDE had this to say in response to the question:

> *Already the government is doing a lot. As I already mentioned, we are working on improving roads. What we need from both the National and County governments is to provide more security, especially to places where we make our food supplies to schools. We already addressed this matter at the County by providing security officers to accompany trucks that supply food. But more is needed definitely (CDE, Turkana County, Personal Communication, 2017).*

The above assertion indicates that security measures were urgently required to guarantee the efficacy of both school meals and FPE initiatives, and the general instructional activities.

The first null hypothesis of the study stated that the state-initiated SFP does not substantially impact pastoralistsô learnersô engagement in the mobile and regular educational learning centres in Turkana County. To evaluate this claim, a simple regression amongst SFP and learnersô engagement in schooling was done. The model summary and coefficient tables depict the outcome.

Table 4.14: Regression Model on Effectiveness of School Feeding

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.723[a]	.713	.718	.2240

a. Predictors: (Constant), School Feeding Programme

The regression model shows the coefficient of resolve was 0.71; as such, around 71 percentage of the learner involvement was accounted for by SFP. This inferred that school feeding programme was an effective government intervention that enhanced pastoralistsô learnersô partaking in both mobile and regular educational centres in the study area.

Table 4.15: Relationship between School Feeding Programme and Pupils' Participation

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.23	.212		11.119	.000
	School feeding	-.767	.111	-.724	-7.298	.000

a. Dependent Variable: school participation

The results in Table 4.15 suggest that there is a statistical significant connection between SFPs and learners; participation in education (*p value* <0.05). Consequently, the investigator rejected the null hypothesis that SFP does not substantially influence nomadic-pastoralistsô learnersô involvement in the mobile and regular learning centres in Turkana.

4.5 Effectiveness of Government Security on Pastoralists' Pupils' Participation in Education

The second study objective was to determine the influence of state-initiated security measures on pastoralistsô learnersô engagement in basic education in Turkana Kenya. This was intended to ascertain if the state availed regular police watches, had started sufficient police stations and police personnel, and to ascertain the efficacy of these

measures in boosting pastoralistsô learnersô engagement in primary learning centres in Turkana Kenya.

A questionnaire-survey was administered to the sampled learners to address issues on the efficacy of state security involvements on nomadic-pastoralistsô learnersô engagement in education in the study area. First, the learners were asked to provide a general mapping of the allocation of safety personnel and structures in the County. Their feedback was as depicted in Table 4.16.

Table 4.116: Pupils' Responses on Distribution of Security Agents in Turkana County

Type of Security Agent	f	%
Watchman/Security Guards	271	69%
KPR	110	28%
Regular Police (Patrols)	12	3%
Total	**373**	**100%**

Information captured in Table 4.16 depicts that, generally, 69.0 percent of the pupils indicated that security guards or watchmen were the main agents of security offering security in schools in Turkana County. The results also showed that 28 percent of security agents offering security were Kenya Police Reservists (KPR) while 3 percent of the pupils said that government police officers offered security in through frequent patrols. From these findings, it was evident that the state had provided security to schools through deployment of regular police and KPR. The schools had also recruited security guards to facilitate security for the pupils and the schools.

Table 4.17: Types of Security Agents by School Category

Security Forms	Regular schools		Mobile schools	
	f	%	f	%
Watchmen/Security Guards	197	77.8	59	49.2
KPR	51	20.2	53	44.2
Regular Police (Patrols)	5	2.0	8	6.7
Total	**253**	**100**	**120**	**100**

As presented in Table 4.17 above, 77.8 percent and 49.2 percentage of pupils of the mobile educational centres and regular learning centres, respectively, received safety from guards. This suggested that most of the learning centres got security from the educational centresô guards.

Nevertheless, unlike the regular educational centres, majority, 44.2 percentage, of mobile learning centres were secured by KPR, since a mere 20.2 percent of the regular centres relied on KPR. The results indicated that the state availed more KPR officers to mobile than regular schools.

Similar results were reported in which more police who undertook frequent patrols were sent to mobile than to regular learning centres. This was as attested to by 6.7 percentage of pupils in mobile learning centres and 2.0 percentage learners from regular learning centres. These results indicated that the state had supplied security via frequent police patrols and KPR personnel to mainly mobile and some regular learning centres. Meanwhile, most regular learning centres depended on security personnel or watchmen.

The above results concurred with Oburaôs (2008) that mutually consistent police and the KPR are positioned in nomadic-pastoralistsô regions to provide security to learning institutions. Obura also noted that insecurity in ASAL regions is prevalent and a barrier to education. The author further notes that armed skirmishes comprise a critical hindrance to education in Africa.

The learners were further requested to state if they faced insecurity in or around schools. The findings were as presented in Table 4.18.

Table 4.18: Pupils' Views on Schools that Experienced Banditry Attacks

School Experienced attack	f	%
Yes	145	39%
No	225	61%
Total	**373**	**100%**

Learners were requested to show whether or not their schools had been attacked by bandits. Their views as shown in the Table 4.18 indicated that 39.0 percent of the pupils reported that bandits at one time had attacked their schools. The results also showed that 61.0 percent of the pupils said their schools had never faced such attacks. These results intimated that some schools had experienced incidences of insecurity, which underscored the need or necessity of security interventions to ensure teaching and learning continued uninterrupted. The fact that many schools had never experienced attacks was encouraging. This implied that without government intervention of offering security in schools, many pupils will not be able to participate in schooling for fear of death, attack or roughed on the road to school.

In a bid to establish whether or not attacks vary by the category of the school, cross tabulation was carried out between school category. The results were as summed up in Table 4.19.

Table 4.19: Pupils' Views on Attacks in Regular and Mobile Schools

Variables on School Attacks	Regular schools		Mobile schools	
	Yes f(%)	No f(%)	Yes f(%)	No f(%)
Has this school been attacked and pupils killed?	84(33.2)	169(66.7)	61(50.8)	59(49.2)
Total	**253(100)**		**120(100)**	

Table 4.19 indicated that according to 66.7 percent of the learners in regular learning centres, their institutions had not encountered incidents whereas only 33.2 had faced such attacks. This suggested that there was an improved safety in majority of regular learning centres. For mobile educational centres, about one-half, 50.8 percentage, had

faced invasions whereas nearly one-half of the them indicated they had certainly not faced such challenges. These statistics suggested that mobile learning centres were at higher risk of attacks than did regular schools. These findings suggested that mobile learning centres face more attacks than do regular schools.

To tackle security challenges the learners were requested to state the type of security systems they preferred for their schools. The replies were as indicated in Table 4.20.

Table 4.20: Pupils' Most Preferred Security Agent for their Schools

Type of Security Agent	f	%
Watchmen	23	6
KPR	252	68
Regular Police (Patrols)	98	26
Total	**373**	**100**

According to the findings in Table 4.20, 26.0 percent of all the pupils recommended police patrols as the best method to provide safety in their schools. However, 68.0 percent suggested KPR to be employed as security for the school while 6 percent recommended security guards to be employed as security in their school. These findings showed that KPR was the most preferred method of security provision according to the students.

The distribution of security agents that pupils recommend in line with the school category is as summarized in Table 4.21.

Table 4.21: Pupils' Views on the Kind of Security Agent they Preferred

Recommended Security Forms	Regular schools		Mobile schools		Total	
	f	%	f	%	f	%
Watchmen/Security Guards	14	5.5	9	7.5	23	6
KPR	193	76.3	59	49.2	252	68
Regular Police (Patrols)	46	18.2	52	43.3	98	26
Total	**253**	**100**	**120**	**100**	**373**	**100**

Table 4.21 depicts the learnersô feedback on security they preferred for their institutions. As shown, 49.2 percentage of them from mobile schools preferred KPR.

A substantial figure, 43.3 percentage, of learners from mobile learning centres opted for frequent police patrols. From the regular learning centres, most learners, 76.3 percent, proposed KPR. The remaining 18.2 percentage and 5.5 percentage mentioned frequent police tours and guards, correspondingly. This was credited to the idea that KPR are drawn from within the local society and they know the region satisfactory and its related security problems.

From these results, generally, KPR and regular police watches seemed to be the preferred security system for mobile learning centres. This was attributable to increased invasions reported in mobile than regular learning centres. In contrast, majority of the learners in regular centres opted for KPR more than regular police and guards. This was explainable by the idea that, mostly, KPR come from the region, thus know well the problems of the area. As such, the learners preferred these officers since, maybe, they could associate with them easily.

Security is a critical aspect in ASAL because much of it is at risk of to such challenges as cattle rustling, invasions and skirmishes that spill over to educational institutions. These results concurred with OôMalleyôs (2007) that in much of Africaôs sub-Sahara violence and chaos are great disruptors of education.

The instructors were also requested to give their views on security issues in their institutions. Their feedback was as indicated below.

Table 4.22: Teachers' Views on Government Security in Regular Schools

RS-Regular Schools (n=111), MS-Mobile Schools (n=96)					
Statements on Security Measures	**Schools**	**SD %**	**D %**	**A %**	**SA %**
We have witnessed cases of insecurity in the area	RS	-	-	1.8	98.2
	MS	-	-	2.1	97.9
Sometimes pupils miss school due to insecurity in the area	RS	-	2.7	11.7	85.6
	MS	-	1.0	11.5	87.5
The government has built a police post near this school	RS	19.8	27.9	39.6	12.6
	MS	24.0	27.1	31.3	17.7
There are regular patrols by police and KPR in this area	RS	20.7	8.1	14.4	56.8
	MS	22.9	14.6	13.5	49.0
There is a general improvement insecurity of the area due to police post and patrols	RS	15.3	12.6	34.2	37.8
	MS	24.0	11.5	30.2	34.4
Learning in school has improved due to improved security	RS	8.1	18.9	6.3	66.7
	MS	14.6	20.8	5.2	59.4
A policeman and KPR are required to secure this school	RS	-	-	6.3	93.7
	MS	-	-	2.1	97.9

As indicated in the table above, nearly all, 98.2 percentage, of the instructors from the regular learning centres had faced incidences of insecurity. Similarly, majority of the mobile school teachers strongly agreed, 97.9 percentage, and agreed, 2.1 percentage, that their institutions had faced incidences of insecurity. Therefore, it was concluded that all the learning centres in the area had witnessed cases of insecurity.

Moreover, most of the instructors from the regular centres, 85.6 percentage, strongly affirmed that often learners skipped school because of insecurity. This assertion also saw 11.7 percentage of the tutors who affirmed with it. An almost similar number of the teachers, 87.5 percent, from the mobile learning centres also indicated that sometimes learners skipped owing to insecurity. As such, the findings showed that the instructors concurred with the learners that insecurity was a challenge to education in the study area. It was thus deduced that insecurity was a serious disruptor of pastoralistsô childrenôs partaking in education for all schools in the study area.

The study results in Table 4.22 also underlined that the assertion that the state had erected police stations near the schools elicited varying views from the instructors. In the regular schools, the ones that affirmed, 39.6 percentage, and strongly affirmed, 12.6 percent, were majority. However, the teaching group who disagreed were 27.9 percent, and strongly opposed, 19.8 percent, constituted a substantial figure too. As such, it was clear that the state had erected police stations close to more regular than mobile schools. The results in the mobile schools contrasted those from the regular ones. In the mobile learning centres, those who strongly agreed, 17.7 out of a hundred, and agreed, 31.3 out of a hundred, cumulated to 47 though the ones who strongly disagreed, 24.0 percent, and disagreed, 27.1 percent, summed up to 49 mobile school teachers. Therefore, an almost equal number of respondents agreed and disagreed that the state had established a police station close to their institutions. This implied that an almost equal number of mobile schools had had security posts built around them by the government.

The next item stated that there were frequent police and KPR patrols in the region. For example, in the regular schools, 56.8 out of a hundred strongly affirmed and 14.4 percent of the trainers affirmed with this assertion. Similarly, in the mobile learning centres, 49.0 percent strongly affirmed and 13.5 percent agreed that there were frequent patrols by constabularies and KPR in the region. This suggested the that some regular learning centres enjoyed enhanced state security services compared to others. However, it would appear that, compared to regular schools, there were more frequent patrols around mobile schools by the police and the KPR agents. It was encouraging, however, to note that in both school categories the total sum of those who affirmed surpassed those who declined this claim, implying that more isntructors had experienced police and NPR patrols. Nevertheless, still a significant number of

mobile schools were not reached during these patrols. This was attested to by 22.9 percent who disagreed strongly and 14.6 percent who disagreed with the statement. This could be attributed to the fact that, compared to regular schools, mobile schools were more geographically scattered making them hard to reach for the few police officers and KPR agents on regular patrols. This also underscored the fact that security patrols were not sufficient to guarantee security needed for education participation.

The above scenario also explained the varying views from the instructors in both categories of schools on the statement that they have experienced a general enhancement of security in the region owing to police stations and tours. For instance, in the regular learning centres, 37.8 out of a hundred of the teaching group strongly agreed and 34.2 out of a hundred agreed, whereas others strongly affirmed, 15.3 percent, and declined, 12.6 out of a hundred, concurrently. Similarly, in the mobile schools, 34.4 out of a hundred of the instructors strongly affirmed and 30.2 percent agreed. The remaining group, that is, 11.5 out of a hundred and 24.0 out of a hundred, respectively, declined and strongly opposed. These results were an indicator that insecurity was still rampant in the entire Turkana County.

The above interpretation was further reinforced by the respondentsô reactions to the assertion that learning in school had evolved owing to enhanced security. In the regular schools, majority, 66.7 percent strongly affirmed, and 6.3 percent agreed with the assertion. Similarly, in the mobile learning centres, those who strongly agreed constituted the majority at 59.4 percent. It was encouraging to note that majority strongly agreed with the statement in both schools as this implied that education in these learning centres had enhanced owing to better-quality security. However, considering that a significant number of the teachers disagreed (18.9 out of a hundred

in regular and 20.8 out of a hundred in mobile learning centres) and strongly disagreed (8.1 percent in the regular schools and 14.6 percent in the mobile schools) with the statement suggested that the security situation in the County still needed more government interventions. This implied that insecurity around schools was still a challenge to pupilsô participation.

Ultimately, almost all the respondents strongly agreed (97.9 out of a hundred in mobile learning centres and 93.7 percentage in regular schools) and agreed (2.1 percent in mobile schools and 63 percent in regular schools) that police officers and KPR were required to secure their mobile schools. Again, this reiterated the recommendations from the learners and school heads from both the mobile educational centres and regular learning centres in which police officers and KPRs were the most preferred sources of security for learning institutions, apart from the watchmen.

The research findings concerning the impact of security on learnersô enrolment and full engagement in education reiterated the views of United Nation (2011). The UN report revealed that insecurity destroyed many learning centres and subsequently reduce schooling chances for those in war-stricken regions. Specifically, fear stemming from conflicts force parents to retain their children at home. It is thus necessary to clearly spell vibrant policy guidelines and include such groups of people in preparation as well as integrate essentials of their prevailing customary education organizations (UN, 2011). This has been tried out by many governments in attempt to provide educational interventions among the marginalized and excluded groups.

The instructors from both school types were also requested to mention the most suitable strategy to guarantee efficacy of state-initiated security programmes for schools. Their views were as projected in Table 4.23.

Table 4.23: Teachers' Views on Measures for Effective Government Security Interventions

Measures	Regular schools		Mobile schools	
	f	%	f	%
Deploy more police officers to schools	45	40.5	39	40.6
Recruit more KPR agents	51	45.9	41	42.7
Effective screening of all students daily	15	13.5	15	15.6
Use of community policing (nyumba kumi initiative)	-	-	1	1.0
Valid n	**111**		**96**	

Table 4.23 underscores that the instructors from regular, 40.5 percent, and mobile learning centres, 40.6 percent, preferred the provision of many armed-police to guard their institutions. These views concurred with the regular school instructorsô who called for more police and KPR officers to secure schools.

A close number, 45.9 out of a hundred and 42.7 out of a hundred, of instructors from regular and mobile learning centres, correspondingly, supported the strategy of hiring more KPR to secure schools.

Some instructors from both school types also rooted for the use of effective daily screening of all learners. This proposal was lauded by 13.5 out of a hundred of instructors from regular and 15.6 percent from mobile learners. This indicated that some institutions believed that thorough inspection could aid in delineating and pre-emptying security fears and intimidations.

Only one instructor in mobile learning centre believed the use of communal policing (nyumba kumi initiative) could better secure schools. The fact that only one instructor

supported this idea was credited to the poor popularisation of the *nyumba kumi* initiative.

Based on the above results, it was deduced that instructors mostly regarded the presence of police the most dependable means to guarantee safety for learning centres. The next most teacher-preferred approach was the hiring of more KPR officers. It is evident that equally the instructors and the head teachers preferred police to secure their schools. However, these results varied from those of the learners who trusted the KPR more than the police.

Concerning the efficacy of state-initiated security on learnersô participation in education, the instructors and school heads were requested to show how much they agreed with given statements. To compare the views of the heads and instructors across school types, a cross-tabulation was done for the responses given to the items posed to the respondents. The outcomes were as depicted in Table 4.24.

Table 4.24: Head Teachers' Views on Security Matters for Regular Schools

RS-Regular Schools (n=49), MS-Mobile Schools (n=22)					
Statements on Security Interventions	**Schools**	**SD %**	**D %**	**A %**	**SA %**
We have witnessed cases of insecurity in the area	RS	2.0	4.1	10.2	83.7
	MS	-	-	9.1	90.98
Sometimes pupils miss school due to insecurity in the area	RS	-	8.2	12.2	79.6
	MS	-	-	18.2	81.8
The government has built a police post near this school	RS	32.7	36.8	28.6	2.0
	MS	36.4	36.4	27.3	-
There are regular patrols by police and KPR in this area	RS	36.8	14.3	32.7	16.3
	MS	40.9	18.2	22.7	18.2
There is a general improvement insecurity of the area due to police post and patrols	RS	30.6	18.4	36.8	14.3
	MS	40.9	18.2	14.3	27.3
Learning in school has improved due to improved security	RS	20.4	26.5	26.5	26.5
	MS	31.8	22.7	18.2	27.3
A policeman and KPR are required to secure this school	RS	2.0	6.1	20.4	71.4
	MS	4.5	9.1	-	86.4

As tabulated, most of the heads from regular learning centres strongly agreed, 83.7 percent and agreed 10.2 percentage that they had faced incidences of insecurity. Very few head teachers opposed, 4.1 percent, and strongly differed, 2.0 percentage, that they had experienced some form of uncertainty in their schools. In the mobile learning centres, all the head teachers affirmed (90.9 percent strongly agreeing and 9.1 percent agreeing) that they had experienced incidences of insecurity. This suggested the existence of insecurity around almost all of the learning institutions in the study area.

Additionally, the assertion that often learners skipped school because of security threats invited strong agreement by most, 79.6 percent, and agreement from some, 12.2 percent. Relatedly, in the mobile learning centres, 81.8 percent strongly affirmed and 18.2 percent affirmed. Only a few regular schools, 8.2 percent, disagreed with this assertion while none of the mobile learning centres disagreed. These statistics affirmed the responses to the previous statement and attested to the fact that there is rampant insecurity in the regions and it is impairing with nomadic-pastoralistsô pupilsô involvement in learning centre.

To worsen the situation, many of the heads of regular schools disagreed, 36.8 percentage, and powerfully affirmed, 32.7 percent, that the state had constructed police camps and stations close to the learning institutions. This statement also had 36.4 percentage of the teaching heads from the mobile learning centre who disagreed and strongly disagreed in each case. In both school categories, some agreed (30.2 percent in regular schools and 27.3 out of a hundred in mobile learning centres) to this statement. These results indicated that the state had made effort to erect police posts around some schools, but majority of the schools had not had security posts built around them.

The same deductions were drawn concerning the headmastersô feedback to the statement that frequent tours by police and KPR was present in that region. The item was supported by the majority of regular teaching heads with strongly affirming, 36.8 percentage, and some disagreeing, 14.3 percentage. In the mobile centres, almost related numbers of teaching heads additionally strongly opposed, 40.9 percentage, and disagreed, 18.2 percent. However, it was interesting to see that some headmasters (regular=32.1 percent and mobile=22.7 percent) and strongly agreed (regular=17.0 percent and mobile=18.2 percent) that there were frequent patrols by tese agents. As such, the extent of police presence instilled a sense of security to education participants in the County. This could be attributed to the limited number of police officers conducting patrols compared to the wide geographical distribution of schools in Turkana County.

The diverse views above were further strengthened by the headsô responses to the assertion that there had been an overall improvement of security due to increased police presence. To this assertion, in the regular schools, 36.8 percentage and 14.3

percentage teaching heads strongly affirmed and affirmed, concurrently. In mobile learning centres, majority of the heads also strongly declined, 40.9 percent, and some declined, 18.2 percent. Nevertheless, a good figure, 30.6 out of a hundred, and a few, 18.4 out of a hundred, of the teaching heads from regular learning centres powerfully declined and declined, correspondingly. Likewise, many teaching heads powerfully affirmed, 27.3 percentage, and some affirmed, 14.3 out of a hundred, that there was a general enhancement of security owing to police stations and watches. Consequently, it was concluded that some institutions were situated in regions that had witnessed improved security because of to police stations and patrols. Still, the state of security around all schools in Turkana County remained unsatisfactory.

The assertion that learning had upgraded in certain sections because of improved safety had majority of the teaching heads from regular learning centres strongly concurring, 26.5 percent, and agreeing, 26.5 out of a hundred. This view also had a similar count of heads, i.e. 26.5 percent, declining as only 20.4 is the percentage of those who strongly rejected the idea. In the mobile schools, the responses were also somewhat evenly distributed as was the case in the regular schools. For instance, 31.8 percent of the mobile school heads who disagreed strongly and 22.7 percentage who disagreed. Conversely, 27.3 percent agreed strongly as 18.2 out of a hundred supported this assertion. These statistics testified that learning in most learning centres had improved owing to enhanced safety. All this feedback showed that security had been availed to learning institutions although the level of safety was not enough to ensure uninterrupted learning.

The last item in the head teachersô questionnaire on security matters stated that a police officers and KPR were needed to safeguard schools. This item attracted a

majority of the heads of regular learning centres, 71.4 percent, agreeing strongly and 20.4 percent agreeing. In the mobile schools, 86.4 percent of the respondents strongly supported the idea that police officers and KPR were required to secure their schools. Consequently, the results indicated that the headmasters from both school types had confidence in regular police and KPR for safeguarding schools. Nevertheless, some regular school head teachers, 6.1 percent, disagreed and 2.0 percent strongly disagreed on this assertion. Similarly, in the mobile learning centres, 9.1 percent disagreed and only 4.5 percent strongly disagreed. These figures were attributed to the fact that, perhaps, some school heads preferred other forms of security than the police officers and KPR.

Based on the above outcomes, the headmasters were requested to mention the strategies they regarded most preferable to enhance the efficacy of state provision of security to learning centres. Their views were as represented in Table 4.25.

Table 4.25: Head Teachers' Measures on Effective Government Security

Measures	Regular schools		Mobile schools	
	f	%	f	%
The government should employ KPR in schools	20	40.8	8	36.4
To increase patrols	20	40.8	8	36.4
Effective security screening of all pupils	9	18.4	6	27.3
Valid n	**49**		**22**	

Table 4.25 demonstrates that most of the regular schoolsô headmasters, 40.8 out of a hundred, averred that the state should deploy KPR to secure schools. Many heads, 36.4 percent, of mobile schools also supported this view. As such, the utilisation of KPR in securing schools was preferred by school heads in the study area.

Another measure suggested was for the state to increase patrols; this had 40.8 percentage from headmasters from regular and 36.4 percentage from mobile learning

centres proposing. This item garnered a similar level of support as that on the deployment of KPR. As such, it was concluded that an combined use of KPR and frequent police patrols would safeguard schools more.

Lastly, the proposal for efficient security scanning of every learner had 18.4 percent of heads of regular schoolsô backup and 27.3 percentage of those of mobile schools approving.

The general impression from these results was that the three strategies or measures proposed would be affected to increase security provision for schools in the study area. From the research findings, the heads from both school types were of the view that the government should recruit more KPR agents to provide security to schools. The second most proposed strategy was to increase regular police patrols in the area where these schools operated. A significant number of the principals also proposed for effective screening of all pupils as a strategy to ensure security of schools.

During the FGDs, the guardians were requested to indicate their opinions on the general condition of safety in the region. There were mixed reactions from the parents. Some indicated that security was average around schools. Others were of the view that security around their learning centres was in a bad state. Generally, the parents concurred that security in and around mobile learning centres was bad and that the state needed make effort to safeguard all learning institutions.

The research further sought parentsô views on experiences of insecurity experienced by schools. All the parents affirmed that their childrenôs schools had witnessed incidents of insecurity.

The parents were also asked to indicate the effect of insecurity on their youngsters' learning events. A single guardian who seemed hesitant to give their view indicated that one of her kids had been killed. Quickly, another parent mentioned that some instructors had died as well, a declaration affirmed by most parents by nodding. One other parent mentioned that in one learning centre, the school guard was murdered during an invasion. Additionally, two more parents intimated that because many schools had experienced frequent attacks, the had chosen to keep their children at home. The parents added that they were still looking for more secure schools for their children.

During the FGDs, the members were similarly requested to state particular measures they would want the government to institute to enhance security for their teens' learning centres. Most guardians proposed to the state that it should deploy armed experts to secure all schools. They additionally said that the state should compensate the KPR that had been deployed to safeguard schools. Again, they suggested at the need to have at least 2 KPRs in each school.

The researcher further interviewed the Turkana County Commissioner on the efficacy of state-provided security measures on nomadic-pastoralistsô youngsters' engagement in basic schooling. During the interview, the County Commissioner was, first, asked to give a general appraisal of the state of security in the County. He responded that security in Turkana County was largely adequate. In the Commissionerôs view, the security aspect of the region was split into three. Firstly, was security within the region ï internal safety, which was good. Secondly was intercounty boundary security, particularly across the Turkana-Pokot, Turkana-Baringo, and Turkana-Samburu borders. This feature mainly addresses challenges engendered by cattle

rustling, a common cultural problem in these borders. The respondent added that security experts endeavoured to limit the frequency of rustling by ongoing community sensitisation, anti-livestock theft watches and increased presence of NPR. When the researcher probed him regarding the effect of cattle rustling on education, the Commissioner had this to say:

> *Definitely cattle rustling disrupt education. The rustlers usually pose a risk to children going to school. They can even kill children, especially young boys. They harm girls as well. Most times they destroy buildings, including school structures. And during dialogues, the security officers try to demonstrate to the participants the negative effects of cattle rustling. These effects include death, in worst cases, loss of livestock and disruption of normal life, like the education of our children. So, if parents see those cattle rustling activities are destructive to their children's education, maybe they will reduce the activities (Personal Communication, County Commissioner, 2017).*

The Commissioner indicated that part three of the security spectrum in the area included the inter-national border amid Turkana of Kenya and the close-border groups in Ethiopia, Southern Sudan, and Uganda. As he explained:

> *Security in the Kenya-Uganda border is generally good and this is as a result of agreements pacts like Lokiriama Peace Accord between the Karamojong and the Turkana as well as disarmament policy in Ugandan side. The Nomadic pastoralists in Northern Uganda are disarmed and therefore for the Nomadic pastoralists in Kenya to go grazing in that land, then they must go there without arms at all for them to be allowed. Peaceful coexistence has been earned there through such agreements. A small pocket in Kaabong District host community still continues with stock thefts with the Turkana Community. Turkana Kenya and Southern Sudan and Turkana Kenya Ethiopian border is cattle rustling conflict issue with the communities at the border (Personal Communication, County Commissioner, 2017).*

The researcher also asked the County Commissioner to state if there were schools in this county that had ever encountered any insecurity incidences that had impaired with teaching and learning in schools. In his response, the Commissioner stated that some schools had witnessed invasions from intercounty and national border cattle rustling skirmishes. The interviewer inquired further from the Commissioner to narrate if there

were reports on instructors and pupils being hurt or killed during invasions. He affirmed that some instructors and pupils, and even parents, had been killed in some unfortunate events. On the effect of such insecurity incidences on teaching and learning, he had this to say:

> *It interrupted some pupils from doing their examination especially in Lomelo and Kaapedo area. Whenever there is an invasion, people begin to be afraid to go to school. Parents tell their kids not to go to school because they are afraid, they might be harmed. When people are killed so many children don't go to school. Teachers may also not come. In fact, in some cases, the rustlers destroy schools. That's why insecurity is a serious threat to schooling in this area and as a county we take the issue very seriously (Personal Communication, County Commissioner, 2017).*

These reports reiterated United Nationôs (2011) postulation that conflicts destroy educational facilities and further diminish education chances for those affected. Moreover, distress arising from conflicts forces parents to keep children at home.

The key informant further indicated that insecurity events had impaired with learning ñbecause parents had to take their children to safe areas to school there and some took them to take care of their animals that are being stolen in the processò (Personal Communication, County Commissioner, 2017). He cited scenarios where learners had been abducted, particularly along the Ethiopian border.

For comparative purposes, the researcher asked the County Commissioner to state which, between mobile and regular learning centres, were more prone to insecurity issues than the other. In his response, the Commissioner stated that comparatively, mobile schools were more at risk to invasions than regular learning centres since they were located at the *kraals* (villages) where cattle rustling menace was an issue. He also added that those schools at the borders were also more prone to being affected than those located in the interior regions of the County, and these included both regular and mobile institutions.

The Commissioner was also requested to state whether or not the County had sufficient security personnel to guarantee safety for all parents, teachers and learners in schools. In his response, the Commissioner stated that the County did not have enough security personnel needed to protect the livelihood of the pastoralists ï that is their animals and people. He had the following to add to this:

> *Nevertheless, the National Police Reserve are being recruited in every kraal to boost security in that kraal. More importantly, all our schools are now supposed to be protected by armed personnel on day and night taking into consideration such attacks and terrorism (Personal Communication, County Commissioner, 2017).*

To establish the forms of interventions the government had provided to boost security in the County, the Commissioner was asked to state whether or not the government had tried to improve security in schools in Turkana County. He replied that the government had tried to improve security in the County through recruitment of more NPR in every *kraal.* He added that the government was also placing armed police in every school to protect the schools and property. The Commissioner further had this to say:

> *The government is planning to put up specialized unit in bandit prone areas together with regular police and National Police Reserve. Such deployment will repulse any planned attacks and also recover animals taken by the neighbouring communities (Personal Communication, County Commissioner, 2017).*

Asked to state other measures that can be used to make the government security interventions more effective in schools, the Commissioner urged for proper screening of the foreign pupils before enrolment to our institution of learning must be done by every school. He added that the UNHCR must screen, vet and re-vet all foreign students joining refugee camp schools in the County.

The CDE was also interviewed concerning the efficacy of state-provided security measures on nomadic-pastoralistsô youngsters' partaking in basic education in

Turkana. The County Director of Education was requested to describe the state policy-guidelines on safety stateôs basic education learning centres in the study area. This was in accordance with Sifunaôs (2005) suggestion for the need to articulate vibrant policies and include such communities in strategizing, and integrate features of their existing schooling structures. In his reply, the Director averred that the state was dedicated to securing all schools and endeavoured to safeguard institutions in at-risk areas. Concerning Turkana, the Director stated the state had come up with a mechanism for using both the regular police, the NPR and additional homegrown community-initiated security measures to secure learning centres. He reiterated that the local administration was mandated with deployment of security structures flowing from the national administration to those it deemed at-risk regions. Within the policy-guidelines, the County administration appreciated the function that groups around learning centres played in safeguarding educational structures, instructors and learners. It was evident that from the inferred views above, that the state had daily security updates on risky places like Turkana that needed enhanced security environment to boost education efforts and other community initiatives. Additionally, the state had delineated the necessary policy systems to support provision of security and incorporation of local initiatives security.

The County Director of Education was asked to give a general status of security around schools in the County. In his response, the CDE said the general situation of security around public primary schools was fair. He made further explanation thus:

> *I believe what has helped to secure our schools has been the cooperation between local residents, mainly parents, and the government security systems. If you walk around and talk to parents around these schools you will actually notice how much they are concerned about the safety of their children on the way to and from school and when they are in school. In one of my visits I was told some parents escorted their children all the way to school and come for them later in the afternoon, just to make sure*

they [children] are safe (CDE, Turkana County, Personal Communication, 2017).

The CDE was also probed further to state if there were schools in the County that had experienced incidences of insecurity that had adverse effects on learning. The CDE had this to say in response:

Yes, there have been sporadic attacks of schools here and there, but these happen almost concurrently with cattle rustling activities. You see, when cattle rustling happens, communities begin to retaliate. The avengers come with wrath. They attack anyone on their way, including teachers and pupils. They burn schools that they consider to benefit their so-called enemy. This is a real threat all the time because you never know when rustling will happen next and then the chaos ensue again (CDE, Turkana County, Personal Communication, 2017).

The above views agreed with OôMalleyôs (2007) observation that schools, the areas that ought to be secure for children, have gradually developed to the primary focus of incidents by armed attackers. For example, in Gaza, UNESCO (2013) observed that in 2 months of fighting 148 educational centres were damaged or destroyed. Three attacks on UN-run educational institutions had claimed 45 lives, among them 17 pupils. Similarly, in Nigeria, the Boko Haram provoked international backlash in April after it stormed a secondary school and kidnapped almost 300 girls (UNESCO, 2013). In this study, it was reported that cattle rustlers often targeted learners during raids.

The County Director was asked to state how insecurity had affected participation of pupils in the County. According to the Director, poor security was the biggest challenge to schooling in the County. In his own words,

Insecurity is a big challenge, more than other problems we have here. You find that insecurity prevents learners from going to school. When there is an attack, parents cannot send their children to school until they know it is safe again. Also, when such attacks happen, teachers are afraid to go to school. In fact, in one incident a teacher was killed by raiders on his way to school. Kids have also been killed by bandits. There is also another problem I mentioned earlier. These bandits attack and steal food supplies to school. They also burn schools making it difficult to learn. So

it is a really serious problem (CDE, Turkana County, Personal Communication, 2017).

The County Director of Education was asked to indicate some measures that the government could take to ensure the problem of insecurity could not interfere with educational activities in the County. In his response, he said the government should, ñfirst provide enough policing in the areaò. Moreover:

> *Policing is not enough alone. Involving local communities in security is key. The national police reservists are better placed in this kind of job because they understand the land very well. So they know where bandits from the neighbouring communities can come in and hide. And these [NPRs] should be given arms, because most attackers actually have guns. Another measure is to ensure every school has at least two or three watchmen, depending on the size of the school and the dangers around it. Those schools that keep moving from place to place [mobile schools] must be accompanied by these security men. Also teaching the community to be vigilant and to work with the security people can help make schools safe for the children (CDE, Turkana County, Personal Communication, 2017).*

The second null hypothesis of the study stated that that the state security measures does not substantially impact pastoralistsô learners partaking in the mobile educational centres and regular learning centres in Turkana County. A regression scrutiny was conducted and the outcomes were as depicted in Tables 4.26 and 4.27.

Table 4.26: Model Summary

Model	R	R-Squared	Adjusted R Square	Std. Error of the Estimate
1	.313[a]	0.98	0.94	1.023239

a. Predictors: (Constant), government security

Table 4.26 depicts the adjusted R2 as .94, which suggested that state availing of security explained 94 percent of the change in learnersô participation in schooling. This meant that 94 percent of Turkana childrenôs engagement with schooling was a product of state security provision. The simple regression test between state security prvision and leanersô participation in school was as displayed in Table 4.27.

Table 4.27: Simple Regression on Government Provision of Security and Pupils' Participation

Model	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.52	0.18		13.75	0.000
Government security	0.28	0.06	0.313	5.048	0.000

a. Dependent Variable: pupilsô participation. Correlation is significant at the 0.05 level

Information in Table 4.27 portrays that state availing of security had a statistically significant influence on learnersô partaking in basic schooling in Turkana County. This was shown by *p* value<0.05, which engendered a rejection of the null hypothesis that ñGovernment security does not significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana Countyò. As such, it was deduced that state security provision did substantially impact pastoralists learnersô engagement in regular and mobile primary learning centres in Turkana.

Having analysed data on the efficacy of state security measures on nomadic-pastoralistsô pupilsô engagement in basic schooling, the next section examines the effectiveness if free primary education intervention on participation in education by pastoralistsô pupils.

4.6 Effectiveness of Free Primary Education on Pupils' Participation in Education in Pastoralist Communities

The study also tried to investigate the effect of Free Primary Education, as one of the stateôs involvement approaches, on the involvement of pastoralistsô pupils in education in Turkana County. The variables examined under the FPE intervention included the governmentsô provision of free tuition for every pupil, provision of teaching and learning materials, and provision of teachers. First, each category of

respondents was asked to give their overall views regarding free primary education as a government intervention.

The pupils were also asked to give their views on the influences of FPE on pastoralistsô pupilsô participation in education. The research findings were disaggregated by the school categories and were presented as indicated in Table 4.28.

Table 4.28: State of FPE in Public Primary Schools

FPE interventions	Regular Schools		Mobile Schools	
	Yes(%)	No(%)	Yes(%)	No(%)
Do you pay fees in this school	0(0.0)	253(100.0)	0(0.0)	120(100.0)
Does this school have enough teachers	0(0.0)	253(100.0)	0(0.0)	120(100.0)
Does this school have enough T/L materials	1(0.4)	252(99.6)	1(0.8)	119(99.2)
Does school give free sanitary pads to girls	23(9.1)	230(90.9)	11(9.2)	109(90.8)
Does school have electricity	228(90.1)	25(9.9)	97(80.8)	23(19.2)
Valid n	**253**		**120**	

Data contained in Table 4.28 shows that all the pupils in regular, 100.0 percent, and mobile, 100 percent, schools indicated that they did not pay school fees. This implied that the schools complied with the government policy of Free Primary Education where parents are not supposed to cater for any portion of the tuition fees required by schools.

On whether the schools had adequate teachers, all of the pupils in both the regular and mobile schools said that they did not have adequate teachers. This implied that even though the government had implemented the free primary education policy, it had not provided adequate teachers to schools. This could be attributed to the fact that once FPE was rolled out there had been an increase in pupilsô enrolment which had put a strain on the existing number of teachers.

The results also indicated that jointly in the mobile and regular learning institutions, the teaching and learning materials were not adequate. This was attested to by 99.6 percentage of the pupils from regular learning institutions and 99.2 percentage of the

pupils from mobile learning institutions. This also implied that the tuition free policy in primary schools was not effectively implemented. The lack of adequate teaching and learning materials may lead to parentsô spending money to provide such materials hence violating the free tuition policy.

One of the mechanisms of ensuring that girls have access and fully participate in school is the provision of sanitary pads to girls. To this effect, the study compared the provision of sanitary towels in mobile and regular schools. The results indicated that only 9.1 percentage of the pupils that come from regular learning institutions said that they were provided with sanitary towels. The rest 90.9 percent said they never received sanitary pads. This was indicative of the fact that there was low provision of sanitary pads to girls in most regular schools in Turkana County. Similarly, a majority, 90.8 percent, of pupils from mobile schools said they never received sanitary pads in school. Only a paltry 9.2 percent said they received the sanitary pads. This suggested that the participation rate for girls, especially during the time they were experiencing menstruation, in both the mobile educational centres and regular learning centres was threatened by the absence of sanitary pads in school.

Installation of electricity in primary schools was one of the Jubilee government manifestos aimed at strengthening the FPE intervention. It was aimed to facilitate the provision of laptop computers for pupils in grade one. To this effect, the researcher found it important to ask the pupils to indicate whether or not their schools had been connected with electric power. The findings showed that majority, 90.1 percentage, of the regular learning institutions had had electricity installed. Many, 80.8 percentage, of the pupils coming from mobile learning institutions also indicated that their schools had been supplied with electricity. These findings implied that more regular schools had been connected to electricity compared to mobile schools.

The above findings corresponded with those of Sifuna and Sawarum (2008) and Adea *et al*. (2013) argued that in an effort of Kenya to implement a long-standing goal of achieving universal primary education targeted since independence, the government introduced free primary education in 2003. Since then, enrolments rates have increased sharply while the quantitative goal has not been accompanied by any clearly articulated policy for maintaining enrolment and excellence of the learning and teaching assets and funds.

The trainers jointly from the mobile and regular learning institutions were also requested to give their views on the proposed measure to improve the effectiveness of FPE on involvement in education among pupils. Their perspectives were as summarized in Table 4.29 underneath.

Table 4.29: Teachers' Views on Measures for Effective Free Primary Education in Regular and Mobile Schools

	Regular schools		Mobile schools	
Measures	**N**	**%**	**N**	**%**
Provide free uniforms and other personal effects to pupils	79	71.2	75	78.1
Provide free education	19	17.1	10	10.4
Free pupils from pastoralist activities	46	41.4	56	58.3
Provide free pads to girls	14	12.6	16	16.7
Educate parents on the need for education	12	10.8	8	8.3
Settle pastoralists with water and pasture	60	54.1	46	47.9
Valid n	**111**		**96**	

The statistics enclosed in Table 4.29 above shows that majority of the trainers from the regular, 71.2 percent, and mobile, 78.1 percent, schools proposed the need to provide free uniforms and other personal effects to pupils. Therefore, like the head teachers, the teachers took governmentôs provision of school uniforms as an important priority in supporting participation in schools by pastoralistsô pupils in Turkana County.

Many other teachers, 54.1 percentage from regular learning institutions and 47.9 percentage from mobile learning institutions, thought it would help bolster FPE is the government settled pastoralists by providing them with stable sources of water and pasture. This strategy was also given a high priority by the head teachers.

Another popularly supported strategy was to free pupils from pastoralist activities. This was affirmed by 41.4 percent trainers from regular learning institutions and 58.3 percent from mobile learning institutions. It is interesting that the teachers thought it was the role of government, and not parents, to free pupils from pastoralists activities. Perhaps these teachers had experienced some level of resistance to attempts to put children in school from the parents and, as such, thought that only the government could force the parents to take children to school.

The teachers also suggested the need to provide free education, which was proposed by 17.1 percentage of the trainers from regular learning centres and 10.4 percentage of the trainers from mobile learning centres. Since the government was already providing free education in the form of FPE, perhaps the teachers meant, by this suggestion, referred to a complete elimination of other costs levied on the parents, such as school uniforms.

Moreover, the teachers also suggested the provision of free pads to girls in schools, which was supported and held by 12.6 percentage of the trainers from regular learning institutions and 16.7 percentage of the trainers from mobile learning institutions. A greater percentage of teachers than the school heads jointly from the mobile and regular learning institutions suggested this idea of provision of sanitary pads to girls. This implied that the teachers were more informed on how lack of sanitary pads was

affecting the participation of the pastoralistsô pupils in education institutions in Turkana County.

The last suggestion made by the teachers was to educate parents on the need for education, which received support from 10.8 percentage of the trainers in regular and 8.3 percentage from the trainers from mobile learning institutions. Therefore, it was concluded that the teachers believed that there was a need to sensitize parents on the value of educating children.

These findings were in line with the Republic of Kenya (2006) and Bold *et al*. (2009) who contend that UNESCO used a sample of 162 public primary schools in Kenya in 2005 to carry out a survey that showed that the average pupil-teacher ratio stood at 58:1 against the recommended average of 40:1. The survey revealed that FPE program had put a lot of pressure on teachers such that some in the rural areas were handling 100 pupils while some of their counterparts in the urban slums were teaching 120 pupils in a class and hence there was very little teacher-pupil interaction and teachers opted to attend bright pupils at the expense of slow ones. Traditionally teachers in private primary schools handle smaller class sizes which has enabled most of the schools to produce very good end of school exams to an extent that owners of the institutions are complaining that the ministry of education is discriminating their pupils when it comes to placement in form 1 class under the pretext that these pupils have been spoon fed with knowledge all along (UNESCO, 2005).

The study further sought the teaching heads opinions on the influence of FPE on the involvement of the pastoralistsô pupils in regular educational institutions. The responses from the head teachers were as summarised in Table 4.30.

Table 4.30: Head Teachers' Views on Effect of Free Primary Education on Pupils' Participation in Regular and Mobile Schools

RS-Regular Schools (n=49), MS-Mobile Schools (n=22)					
Statements on FPE Measures	**Schools**	**SD**	**D**	**A**	**SA**
Parents do not pay tuition fees in this school	RS	-	-	2.0	98.0
	MS	-	-	-	100.0
The number of pupils increased after the introduction of FPE	RS	-	2.0	14.3	83.7
	MS	-	-	9.1	90.9
Teaching and learning material are availed by the government	RS	-	14.3	57.1	28.6
	MS	4.5	13.6	59.1	22.7
The teacher to pupil ratio is commendable	RS	81.6	18.4	-	-
	MS	81.8	18.2	-	-
The government has provided textbooks to the pupils	RS	2.0	2.0	85.7	10.2
	MS	9.1	86.4	-	4.5
The government has provided free sanitary pads to girls	RS	42.9	28.6	18.4	10.2
	MS	50.0	31.8	13.6	4.5
The government has brought electricity to this school	RS	10.2	4.1	14.3	71.4
	MS	31.8	-	9.1	59.1

The results contained in Table 4.30 show that almost all, 98.0 percentage, of the school heads in regular educational institutions said that parents did not pay tuition fees in their schools. In the mobile schools, all, 100.0 percentage, of the school heads from mobile educational institutions affirmed that parents did not pay tuition fees in their schools. It was unclear why 1 head teacher in the regular schools admitted that parents paid tuition fees in his school, considering that this was against the government policy on FPE. Nevertheless, the fact that almost all the regular schoolsô heads indicated that their schools never levied parents for tuition fees was evidence of the implementation of FPE in the area.

Many of the regular school heads, 84.7 percentage, strongly agreed while 14.3 percent agreed that the total number of schools going children had improved after the introduction of FPE. The number of those who strongly accepted with this assertion in the mobile educational institutions was slightly higher than in the regular schools, at 90.9 percentage. This was revealing of the information that FPE had encouraged

participation in schooling in the study area. This finding affirmed that the FPE programme had been effective in increasing pupil enrolment in public learning institutions in Turkana County. It was also consistent with statistics which showed that pupil enrolment in Kenyaôs primary schools had increased since the introduction of FPE in 2003 (Sifuna & Sawarum, 2008). The results further reinforced findings from other countries such as Tanzania (World Bank, 2003), Uganda (World Bank, 2001) and Malawi (Save the Children UK, 2002) which showed that the elimination of tuition fees had increased enrolment in primary schools. Only one head teacher, 2.0 percent, disagreed with the statement, meaning that there were some schools that had not seen any changes in enrolment since the introduction of FPE.

Moreover, 57.1 percentage of the regular school-heads strongly accepted and 28.6 percent accepted that teaching and learning materials had been availed to their schools by the government. An almost similar number of mobile school heads, 59.1 percent, agreed, that the government had provided teaching and learning materials to their schools. Those who strongly accepted this assertion in the mobile educational institutions were 22.7 percent. These figures showed that many of the regular and mobile schools had received teaching and learning materials from the government at the time of the study. However, 14.3 percentage of the regular school heads differed with this assertion. Similarly, in the mobile schools, 13.6 percent and 4.5 percent head teachers disagreed and strongly differed, respectively, with the statement. These findings also implied that teaching and learning materials had not been availed by the government in some mobile and regular educational institutions in Turkana County. This might be justified by the information that perhaps some learning centres had not met the requirements for receiving the supplies at the time of the study.

Additionally, the study found that the introduction of FPE had negatively impacted the teacher-pupil ratio in regular learning institutions. This was attested to by 81.6 percentage and 18.4 percentage of the regular school-heads who pungently decided and agreed, singly. It was also attested to by 81.8 percentage and 18.2 percentage of the mobile learning centre heads who powerfully disagreed and disagreed, correspondingly, that the teacher to pupil ratio was commendable. As such, it was deduced that the increased enrolment of pupils brought about by the FPE interventions had put a strain on the available teachers in public primary schools in Turkana County. These results confirmed the earlier finding that the government had not provided sufficient teachers to schools in the County. This finding was consistent with that of Vreede (2003) that most of the countries that introduced FPE failed to pre-empt the problem of teacher-pupils ratio.

In Kenya, an evaluation of the effects of FPE on teacher-pupils ratio by UNESCO (2005) found that FPE project had greatly impressed upon instructors so that in certain instructors in up-country schools taught 100 learners whereas others in metropolitan areas taught 120 learners per class. Therefore, there was hardly any instructor-learner interaction and instructors preferred to attend to bright pupils at the expense of slow ones. Conventionally, instructors in private learning centres teach fewer learners at once (UNESCO, 2005). This explains why most of these institutions register better academic outcomes than their public counterparts.

It was nonetheless encouraging to note that the government had provided textbooks to the pupils in most of the regular educational institutions. This fact was indicated by 85.7 percentage of the principals who agreed and 10.2 percent who strongly agreed. As such, it was interpreted to mean that most of the regular schools received

textbooks as part of the governmentsô FPE programme. Only a few of the regular school heads, 2.0 percentage in individual case, disagreed and strongly disagreed with the assertion. Unfortunately, most of the mobile schools had not received textbooks from the government as attested to by head teachers who disagreed, 86.4 percent, and disagreed, 9.1 percent, disagreed. Only one head teacher, 4.5 percent, from the mobile learning institutions accepted this assertion. The disparity in provision of textbooks to mobile and regular schools was attributed to the fact that most of the mobile schools were more geographically dispersed than the regular schools.

The study also found that the government had not provided free sanitary pads to girls in most of the regular schools. This was attested to by 42.9 percent of the school heads who strongly disagreed and 28.6 percent who disagreed that the government had provided free sanitary pads to girls. Again, in the mobile schools, 50.0 percent of the heads powerfully disagreed and 31.8 percentage disagreed that the government had provided free sanitary pads to girls. As such, it was inferred that most of the school girls in both the mobile and regular learning institutions had never been provided with free sanitary pads by the government. Only 17.6 percent agreed and 9.8 percent of the school-heads from the regular learning institutions strongly agreed with this assertion. Similarly, at least 14.3 percentage and 4.8 percentage of the mobile school-heads agreed and strongly agreed, respectively, that the government had provided free sanitary pads to girls. These findings were consistent with those of the pupils, majority of whom said the government had not provided sanitary pads to girls in the schools. It was unclear, however, how some of the schools had received sanitary pads had received the pads while others had not.

Lastly, the study established that the government had provided electricity to most of the schools. To this statement, majority of the regular school-heads strongly accepted,

71.4 percentage, and a good number accepted, 14.3 percentage, that the government had supplied electricity to their schools. Moreover, in the mobile schools, 59.1 percent sand 9.1 percentage of the school-heads intensely agreed and agreed, separately, that the government had brought electricity to their schools. This finding concurred with those of the pupils who said the government had supplied electricity to most of their schools. Considering that similar findings were reported by the heads of regular schools, it was deduced that most of the schools in Turkana County had received electricity supply from the government. It was nonetheless evident that some schools had not received electricity supply since 10.2 percentage of the regular school-heads strongly disagreed and 4.1 percent disagreed while by 31.8 percentage of the school-heads from the mobile learning institutions disagreed with the assertion.

The above findings on the effectiveness of FPE concurred with those of Otieno (2009) who gave a descriptive account of the implementation of FPE in Kenya. According to Otieno, Kenyans responded happily by enrolling massively. However, as the supply of facilities and the number of teachers were not prepared in advance, there is a big problem of extremely large class size resulting in overcrowding especially in the rural areas, high pupil/teacher ratio and eventually, a difficult teaching and learning environment. Additionally, during the implementation of the program, the government had frozen the recruitment of teachers for purposes that are not explained; this crippled the FPE program from the beginning as the number of children was increasing. Otieno *et al.* therefore claims that this may not have been the best time to implement this policy. This view by Otieno e*t al*. is not necessarily true since FPE has gained considerably good results in regions that had good facilities and teachers. The argument that these authors should have made was perhaps that improved facilities and teacher numbers should have preceded the implementation of FPE. Besides, since

FPE has already been implemented, it is best to simply examine its effectiveness in order to identify and address the inherent gaps.

The study also sought school-headsô views on ways to guarantee the effectiveness of free primary education on participation. The school-heads responses on approaches to ensure effectiveness of FPE were tallied up in Table 4.31.

Table 4.31: Head Teachers' Views on Measures for Effective Free Primary Education Programme

Measures	Mobile schools		Regular schools	
	N	%	N	%
The government should provide uniform to pupils	18	81.8	41	83.7
Settle pastoralists with water and pasture	15	68.2	31	63.3
KPR to take care of pastoralists	19	86.4	28	57.1
Create awareness to parents on benefits of education	8	36.4	13	26.5
KPR/police/army to provide security to pupils	1	4.5	2	4.1
Provide free sanitary pads to girls	-	-	4	8.2
Valid n	**22**		**49**	

Facts summarized in Table 4.31 indicated that majority of the school-heads from mobile learning institutions, 81.8 percent, and regular schools, 83.0 percent, recommended that the Kenyan-government should offer uniform to pupils. Therefore, according to most head teachers in Turkana County, the most critical strategy by which the government can strengthen the FPE programme effectiveness is to cater for the pupilsôschool uniform.

Another strategy proposed to enhance FPE effectiveness on pupil participation was settling pastoralists with water and pasture. This was attested to by 68.2 percent and 63.3 percentage of the school-heads from mobile schools and regular education institutions, respectively. As such, the second most significant strategy for enhancing the effectiveness of FPE in Turkana County, according to the head teachers, was for

the government to provide water and pasture for the pastoralists to enable them to have a more settled life.

Many of the respondents from the mobile educational institutions, 86.4 percentage, proposed the strategy that KPR should take care of pastoralists. A good number of school-heads from the regular educational institutions, 56.6 percent, also supported this idea. This finding concurred with the proposals on the improvement of government security interventions in which the pupils, the teachers and head teachers supported the use of KPR as the second most critical means of securing schools after provision of more police officers.

Some of the head teachers also proposed the need to create awareness to parents on benefits of education. A total of 26.4 percentage of the school-heads of regular learning centres and 36.4 percentage from mobile learning centres proposed this idea. This showed that the head teachers understood that one of the causes of low participation by pupils in education was lack of proper parental education on the importance of education.

Very few head teachers, 4.5 percentage, from the regular learning centres and 4.1 percentage from the mobile learning centres thought that a combination of KPR, police and army should provide security to pupils. Again, this suggestion supported the earlier proposals on measures to strengthen the governmentôs security intervention on participation of the pastoralistsô pupils in educational institutions in Turkana County.

A few of the school heads from the regular schools, 8.2 percent, also suggested the essential need to give sanitary pads to girls to enhance FPE effectiveness on participation in education by pupils. Although the school-heads from the mobile

learning institutions had earlier indicated that the government had not provided sanitary pads to pupils in their schools, none of them proposed this measure as a means for strengthening FPE. The fact that the head teachers who suggested provision of sanitary pads from the regular schools was also low indicated that, perhaps, the issue of lack sanitary pad either did not have so much severe effect on participation or the head teachers did not seem to understand how this issue affected pupilsô participation in the first place.

The researcher held FGDs with the parents and the guardians on the effectiveness of FPE on the participation of the nomadic-pastoralistsô pupils in statesô learning institutions in Turkana County. During the FGDs, the parents were questioned concerning the effectiveness of Free Primary Education interventions that the government had provided to both the mobile educational centres and regular learning centres in Turkana County.

The first question relating FPEs discussed in the FGDs was on whether or not the parents still paid any amounts to schools to cater for tuition for their children. All the parents said that the tuition was fully subsidized by the government in the schools. Majority of the parents said they would not afford to take their children to school if they had been required to cater for the tuition fees.

Asked if there were other payments that they made to schools, the parents said the schools levied them fees for examination, school uniforms, stationeries and learnersô personal effects. Most of the parents said they could not afford many of these levies and were thus often forced to retain their children from going to school. A parent in the FGD narrated how her child was unable to sit his long-awaited examination just because she could not afford the required fees. The parent said, following that

incident, the child was very discouraged and stopped going to school thereafter. This finding resonated with that of Sifuna (2003) that levies in the learning institutions are the main barrier to participation and access of pupils to schools amongst pastoralist communities.

The parents were also asked to state if the government had recruited enough teachers, provided sufficient teaching and learning materials and sanitary pads to the schools where their children went. The parents said the teachers in all the schools were few. However, majority of the parents reported that in most of the schools, the teaching and learning resources were sufficient. On the issues of sanitary pads, the parents reported that sometimes the schools provided sanitary pads to pupils with the help of government agencies and non-governmental organizations.

Lastly, the parents were asked to identify the measures they would want the government to put in place to ensure their children participated fully in schools without interruptions. The most recommended measure was for the government to provide sufficient funds to schools to support their teaching and learning operations. The parents and the guardians also proposed that the Kenyan-government should provide school uniforms, stationaries and cater to the personal effects of learners. Moreover, the parents asked the government to cater to examination fees for the learners. They also urged that the government should recruit enough teachers for their learning institutions. Lastly, they recommended that the government should provide sufficient and balanced diet foods.

The Education Officers were also interviewed concerning the effectiveness of FPE. First, the Education Officers were asked to give an overview of the government policy on Free Primary Education (FPE). All the three Education Officers affirmed that the

FPE was based on the need to ensure every school-age going child had access to universal primary education. One of Education Officers stated that it was the task of the County Directorate of Education and all officers under him in the County to ensure that this policy was realized in Turkana County.

The researcher asked the Education Officers to describe how the FPE intervention had affected the participation of the pastoralistsô pupils in the learning institutions in their respective sub-counties. Like the CDE, each of the Education Officers affirmed the increase in enrolment as the first most visible impact of FPE in their respective Sub-Counties. In explaining this fact, one of the Education Officers stated thus:

> *You see most of the families in this sub-county, in fact in the entire Turkana, are poor. This is a marginalised area in Kenya. So, the FPE initiative was a really welcome thing for our people. Most people welcomed the fact that their children would go to school without them having to pay school fees. Of course, there is still some amounts required from them [parents] but it is better than nothing (Education Officer, Turkana County, Personal Communication, 2017).*

The researcher further asked the Education Officers to state if the government had provided sufficient teachers, teaching materials and learning materials and sanitary pads to girls in all their schools. In general, the Education Officers said the number of teachers was not sufficient. According to one of the Education Officers,

> *Although the government has provided some teaching and learning materials, more needs to be done. For instance, some of the learners study under trees. The government needs to build more classes and expand existing ones to accommodate the increased number of pupils (Education Officer, Turkana County, Personal Communication, 2017).*

An Education Officer stated that, with increase in enrolment, more sanitary pads were needed for girls in school in his sub-county.

The Education Officers were also asked to point out the approaches they would desire the Kenyan-government to put in place to improve FPE in order to enhance participation of pastoralistsô pupils in the learning institutions in their individual Sub-

Counties. An Education Officer said some schools still requested parents to contribute funds for certain meals, such as breakfast, which were not catered for in the school feeding programmes. He said the government should subsidize these fees. The same Officer also said the government should help parents meet the cost of uniforms, especially the neediest families. Another Officer urged the government to ensure there was early or timely disbursement of tuition fees to schools to ensure schools worked within set academic timetables. The Officer also suggested that there was a need to educate parents on what FPE catered since, as he explained, most parents thought the government paid for everything required in school. Therefore, as he stated, some parents were upset when asked to provide small fees for things like uniforms and some meals.

Lastly, the County Director of Education was interviewed on the effectiveness of FPE. First, the County Director of Education was requested to give an summary of the Kenyan-governmentôs policy on Free Primary Education (FPE). In his response, he stated that the government had put a policy in place to guarantee that every child had entry to basic primary education in Kenya. The CDE said the policy was informed by the millennium development goal number 2 which sought to realize universal primary education for all children, especially in developing countries.

The researcher asked the CDE to describe how the FPE intervention had affected the participation of the pastoralistsô pupils in the learning institutions in Turkana County. The CDE acknowledged the introduction of FPE in Kenya in 2003 had enabled many families in Turkana County to enrol their children in school. He said prior to FPE introduction, most of the children who are now in school used to be home, serving in family chores and taking care of cattle. He added that since most of the pupils,

especially young boys, had joined school, cases of Turkana youth engaging in cattle raids to neighbouring communities had reduced leading to more peace with neighbours.

The researcher also asked the CDE to state if the government had provided sufficient teachers, teaching materials and learning materials and sanitary pads to girls in all the schools in the County. In the CDEôs view:

> *The government has made enough efforts to provide teachers and all those other requirements. However, as you must be aware, there is a shortage of teachers everywhere, not in Turkana alone. Plus recently you heard incidents in which teachers from our neighbouring regions were attacked and killed. So many teachers, especially those who do not come from around here, are feeling nervous about working in these regions (CDE, Turkana County, Personal Communication, 2017).*

Lastly, the CDE was also requested to give the approaches they would like the Kenyan-government to put in place to improve FPE in order to improve the participation of pastoralistsô pupils in schools in the County.

> *Of course, we need more teachers, more than anything. And what we want is more teachers from Turkana who understand the unique educational needs of the people here. Second, we need to ensure there are good school structures, classrooms and all, including teaching and learning materials of course. We also need to ensure these schools are safe. The government must enhance security in the entire region to allow parents to send kids to school without worry. The children and teachers also need to feel safe in school (CDE, Turkana County, Personal Communication, 2017).*

The third null hypothesis of the study stated that Free Primary Education does not significantly affect the involvement of the nomadic-pastoralistsô pupils in mobile and regular learning institutions in Turkana County. This was tested by means of single regression whose results are as presented in Table 4.32 and Table 4.33.

Table 4.32: Free Primary Education and Pupils' Participation in Education Model

Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate
1	.429[a]	0.84	0.81	0.975

a. Predictors: (Constant), Free primary education

Source: Field data (2018)

The results in Table 4.32 indicates that 81 percent of the total variability in the pupilsô participation was explained by Free Primary Education. The results showed that the adjusted R^2 was 0.81, which implied that Free Primary Education is the reason for 81 percentage of the variance in pupilsô access and participation in primary school in mobile and regular learning institutions. To establish the relationship between Free Primary Education on pupilsô participation in education a simple regression test was conducted. This is as shown in Table 4.33.

Table 4.33: Simple Regression on Free Primary Education and Pupils Participation in Primary Education Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	2.29	0.159		14.42	0.000
	Free Primary Education	0.400	0.053	0.429	7.58	0.000

a. Dependent Variable: Pupilsô participation in school, Correlation is significant at the 0.05 level

Table 4.33 shows that statistically, there is a significant relationship between free primary education and the participation of pastoralistsô pupils in primary schools in regular and mobile learning institutions. This is as shown by the (*p value*<0.05). This leads to the denial of the null hypothesis that ñFree Primary Education does not significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana Countyò. This implies that free primary education influences pupilsô participation in primary education, hence enhancement of free primary education leads to increase participation and vice versa.

The last hypotheses combined all the independent variables and stated that school Feeding Programme, Government Security and the Free Primary Education combined

does not significantly affect participation of pastoralistsô pupils in regular and mobile learning institutions in Turkana County. This is as presented in Table 4.34.

Table 4.34: Regression Coefficients Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.771	.712		6.701	.0000
Effectiveness of school feeding program [X_1]	0.752	.148	.845	5.081	.0000
Effectiveness of government security [X_2]	0.681	.206	.729	3.306	.0000
Effectiveness of free primary education [X_3]	0.718	.194	.655	3.701	.0000

a. Dependent Variable: Pastoralistsô pupilsô participation in regular and mobile primary schools

The regression equation for Table 4.34 thus is $Y = 4.771 + 0.752\ X_1 + 0.681\ X_2 + 0.718\ X_3$.

From the regression equation above, taking all factors (effectiveness of school feeding programme, effectiveness of the Kenyan-governmentôs security and effectiveness of free primary education) constant at zero, participation of the nomadic-pastoralistsô pupils in the mobile educational centres and regular learning centres in Turkana County, Kenya would be 4.771. The results further indicate that a unit increase in the effectiveness of SFP would lead to a 0.752 increase in nomadic-pastoralistsô pupilsô involvement in the mobile educational centres and regular learning centres in Turkana County, Kenya; a unit increase in the effectiveness of government security would lead to a 0.681 increase in nomadic-pastoralistsô pupilsô involvement in the mobile

educational centres and regular learning centres in Turkana County, Kenya while a unit increase in the effectiveness of free primary education would lead to a 0.718 increase in participation of pastoralistsô pupils in regular and mobile learning institutions in Turkana County, Kenya.

At 5 percent significance level [or 95 percent level of confidence], the three independent variables were significant ($p<0.05$) with the most significant factor affecting participation of nomadic-pastoralistsô pupils in the mobile educational centres and regular learning centres in Turkana County, Kenya being effectiveness of school feeding program followed by effectiveness of free primary education and effectiveness of government security, respectively. The study thus rejects the aggregate null hypothesis that the effectiveness of school feeding programme, government security and free primary education combined does not significantly affect pastoralistsô pupilsô participation in regular and mobile learning institutions in Turkana County and hence accepts its alternate hypothesis that the effectiveness of school feeding programme, government security and free primary education combined do significantly affect pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County. These findings correspond with those of Sifuna (2005), Nanok (2010) and Migosi *et al*. (2012) who found a significant positive association between enrolment of free primary education as well as enhancement of school feeding programmes and government security and the level of school participation among pastoralistsô communities in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section presents a summary, conclusion and recommendations of the study. The chapter first presents a summary of the major findings of the study for every research objective. The next section presents the conclusions drawn from the study. This is followed by recommendations for policy and practice. The chapter ends with suggestions for further research.

5.2 Summary of the Study

This section provides a summary of the whole study. The overall objective of the report was to ascertain the usefulness of the Kenyan administrationôs intervention approaches on the involvement of the nomadic-pastoralistsô pupils in schooling in Turkana County, Kenya. The study was guided by three objectives that focused on usefulness of the feeding programme, security and free basic education on pupilsô participation in schools. The study also formulated and tested four hypotheses so as to investigate the efficiency of governmentôs intervention measures. The study was guided by the Policy Implementation Theory by McDonnell and Elmore (1987). The descriptive survey research design and correlation research design were adopted in this study. The sample size was 30% of the entire population as suggested by Mugenda & Mugenda (2003) that a sample size of 30% is appropriate for descriptive studies. The study had a total target population of 2755. The sample size of 30% of 2755 was 830 drawn from the six categories of the relevant population of pupils, teachers, head teachers, parents, and education officers and County Commissioner using simple random and purposive sampling. Data was gathered using questionnaires, interview guide and focus group discussion schedule. Quantifiable

statistics was analysed descriptively using frequencies tables and percentages while inferential analysis adopted regression models. Qualitative information from interview timetables and focused group discussion was analysed thematically. It was structured into main themes according to the research objects. The null hypotheses (H_0) were analysed at $\alpha = 0.05$ significance level and 95% confidence level and tested using p-value method. The null hypotheses were rejected since the p-value was less than 0.05. The results of the studyôs findings revealed that the school meals programme, government security and free primary education were effective government intervention measures that could make the nomadic-pastoralistsô pupils participate in mobile and regular basic educational centres in Turkana County if well implemented. The report advocated that there was prerequisite to enhance the measures of food from one meal to three meals a day and the nutritive value of meals in order to increase the usefulness of school meal program. The report also recommended that armed security could be provided to guard schools and that foreign students could be properly vetted before joining institutions of learning so as to increase the usefulness of governmentôs security. It is also recommended that more teachers be recruited, infrastructure build in schools and pastoralists communities settled so as to enhance nomadic-pastoralistsô pupilsô involvement in the mobile educational centres and regular learning centres The report further recommended that a research study be conducted to establish the effectiveness of free secondary education on the participation of pastoralistsô pupils in secondary schools in Turkana County, Kenya.

5.3 Major Findings of the Study

This sub-section presents the major findings of the study. The major findings were arranged according to the objectives of the study. In each objective, there is a

summarized presentation of the key findings from all the categories of the respondents.

5.3.1 Findings on Effectiveness of School Feeding Programme

The first objective of the report undertook an investigation on the effect of School Feeding Programme (SFP) on the involvement of the pastoralistsô pupils in mobile and regular educational centres in Turkana County, Kenya. The study found that all the schools provided meals to pupils. The data collected from the pupils revealed that pupils in the mobile educational centres and regular learning centres were in agreement that freely-given meals were given in their schools. They also stated that there were regular delays in supply of food. Moreover, all the pupils said the food supplied was low in quantity meaning it could not sustain pupils up to the end of the term. The pupils further indicated that even though there was food supplied to schools, much of it was of less nutritional value to the pupils in both the mobile and regular schools. The provision of meals was also related to regular attendance as was attested to all pupils in all schools.

The findings from the teachers showed that many of the mobile and regular schools gave meals regularly to all pupils. Again, the teachers from both school categories confirmed that the meals given in schools were not dietetic and nutritive. The teachers also reported that when the food is not given in regular schools the incidents of attendance reduced accordingly. Almost all the teachers in regular schools said that they exclusively depend on the Kenyan authorities and other partners for food donations. Additionally, from the teachers, owing to dearth of fuel and dependable water sources, occasionally many pupils are sent schools to fetch firewood and water which interrupted learning and teaching activities. The positive effect of meals provision on participation was emphasized by the teachers who said that occasionally

children stayed in schools long after the schools had shut down so long as food was still in school.

The responses from the head teachers mostly confirmed those from the pupils and the teachers. For instance, almost all the head teachers stated that their learning institutions were recipients of the schoolôs meal programme by the government. Again, majority of the principals from both the mobile educational centres and regular learning centres affirmed that the food given were not dietetic and nutritive. Likewise, most of the school principals from the mobile educational centres and regular learning centres were in agreement that the attendance in most classes was high at a time when the meals were provided. Conversely, the head teachers reported that while meals were not offered, they witnessed reduced incidences of attendance. All the mobile schools and most of the regular schoolsôhead teachers said they exclusively depended on the Kenyan-government and other supporters for donations of food. On the issue of provision of fuel and water for making meals, most of the school heads from the mobile and regular schools said they occasionally they direct school going children to go and fetch firewood and water. However, some of the schools seemed to have other methods of acquiring these necessities as they did not direct school going-children out of school to get firewood and water. In many of the mobile and regular schools, the head teachers reported that occasionally school-going children stayed in school long after the school closure especially during times when food was available in the learning institutions. Therefore, the study found that the provision of meals in school was effective in increasing nomadic-pastoralistsô pupilsô involvement in educational learning centres in Turkana County.

To enhance the usefulness of the feeding programme in the learning institutions as an intervention approach, the teachers prioritized the necessary demand to enhance the

measures of meals given to facilitate schools by providing at least two mealtimes per day. Another measure proposed by most teachers was on the commencement of milk and meat in the school meals to vary the nutritional worth of the food given to pupils. On approaches for usefulness of the feeding programme in the institutions of learning, the school-heads prioritized on commencement of milk or meat into mealtimes, followed by provision of at least three meals a day which would enhance the ratio of food provided to pupils. Another significant proposal made by the head teachers was on engaging of parents in the preparation and provision of meals in the institutions of learning. On the same issue, the parents proposed an increase in measures of food supplied to institutions of learning in order to cater for more meals a day. Most of the parents and the guardians embraced the suggestion that the government should provide sufficient food to satisfy the pupilsô breakfast, lunch and supper times. Others proposed that children without parents and pupils whose guardians had moved far away to be given meals especially when learning centres were closed. Finally, the guardians maintained that the meals given ought to be nutritionally dietetic. Consequently, they pleaded that the Kenyan administration to commence offering free milk, and meat as an additional complement to primary school mealtimes.

The qualitative data from the County Director of Education showed that the feeding programme policy was part of the Kenya governmentôs effort to recognize the Millennium Development Goals of lessening starvation and guaranteeing entrance to universal free basic schooling. The Director informed that the feeding programme simply served lunchtime meals, which included ten Oôclock appetisers and drinks, lunch and evening snacks and drinks. Moreover, guardians were similarly requested to share food to learning centres when they could. Moreover, the policy of school feeding was brought down to Turkana County using the Educational Directorate. In

providing meals, the County Government of Turkana prioritised on schools with severe food supply issues, which comprised mainly mobile schools. This was because mobile schools catered mainly to the more nomadic families which did not have reliable means of food supply. The Director also confirmed the quantitative data which showed that all the basic learning institutions in Turkana County received school meals.

On the influence of the feeding programme on access and participation, the County Director further reported that school feeding had improved enrolment of pupils in Community primary schools in Turkana County. These effects were shown by the longer stay in school by pupils, regular and consistency in attendance. The Education Officers also cited increased enrolment as the result of school feeding.

The study also found that food supplies to schools delayed due to bad roads, the wide geographical distances needed to reach schools, weather problems, few vehicles to deliver food and problems of insecurity. The parents also admitted that most of the time, delayance of food supply to institutions of learning as always been reported. These delays were reported by the CDEs as not being severe and had not had much significant effect in pupilsô attendance of school. However, the Education Officers cited psychological effects on students when food delayed and threats by parents to withdraw children from school. To reduce these delays, the County Government of Turkana was working on improving roads and providing more security to schools and transport routes.

The Education Officers reported that, as per the school feeding policy, they were mandated by the Educational Directorate to organize routine assessment of the position of the implementation of the school feeding programme in their

corresponding area of representation and present report of their evaluation/assessment to Educational Directorate for further advice and guidance. Although the Education Officers reported that most of the learning institutions received meals, they informed that not all institutions of learning got the same measure of food. Priority was given to mobile schools, then on the basis of the number of pupils per school, location and need.

The findings from the parents revealed that schools received food supplies from the World Food Programme. They affirmed that the WFP supplied mainly corn and cereals to learning centres. Nevertheless, as was stated by other parents, most day learning centres offered lunch to pupils.

The first null hypothesis of the study stated that the feeding-programme in many schools does not implicitly affect participation of nomadic pupils in the mobile and regular learning centres in Turkana County. Regression test led to a rejection of this hypothesis. As such, the study found that school feeding programme does in fact meaningfully touch the participation of nomadic pupils in the mobile educational centres and regular learning centres in Turkana County.

5.3.2 Findings on Effectiveness of Government Security

The second study objective of the report undertook to explore the impact of stateôs security on the involvement of the nomadic pupils in the mobile educational centres and regular learning centres in Turkana County.

From the CDE responses, the study established that the Kenyan-government had placed a structure of utilising equally the regular constable, the national police reservists and other additional security interventions from the community to guarantee safety in the learning institutions. In the Kenyan-governmentôs security guideline, the

County administration acknowledged the significant position that the rural local people, where learning institutions are situated, play a big role in safeguarding institutions, school-going children and educational facilities.

The findings from the pupils showed that a greater percentage of regular schools and mobile schools relied on night-watchmen or safety guards to offer security in the learning institutions. Many of the mobile schools also seemed to rely on KPRs in comparison to other domicile schools. The pupils also reported that some learning institutions benefited from regular police patrols. Nevertheless, on the security agents preferred by majority, the school going children opted for KPRs, followed by the regular police patrols and lastly watchmen or security guards.

From the FGDs with the parents, the study found that the safety condition around majority of the mobile learning institutions was deplorable and that the Kenyan-government required to perform more in securing all learning institutions in the area. The findings from the pupils revealed that majority of the learning institutions had not involved in attacks in the recent past. However, of those that had experienced some form of attacks, regular schools were in the higher percentage than the mobile schools. Either way, the findings confirmed that the schools, irrespective of the categories, were all prone to attacks. This finding was confirmed by the school-heads from all the learning institutions majority of whom reported that they had experienced incidences of school-insecurity in the region.

In both school categories, the study also found that occasionally school-going children skipped school owing to insecurity in the region, as reported by the head teachers. It was also established that the government had not started police camps close to majority of the learning institutions to act as a prevention to many crimes. Although

the head teachers said there were regular patrols around schools, it was found that some schools had not witnessed such patrols.

Most of the schools had not witnessed enhancement in safety in the nearby areas owing to police camps and troops patrol, based on the school headsô responses. This implied that the limited police camps and patrols had not been efficient in offering safety in and about learning institutions. However, it was established that some schools had witnessed an improvement in learning due to improved security. This was a testament of the positive impact that increased security had on participation of the pastoralistsô pupils in educational institutions in Turkana County.

From the response by the County Commissioner, the study established that the safety element in Turkana County was apportioned into three components. The first one is comprised of in-house security inside Turkana County, which the County Commissioner described as being largely suitable notwithstanding the political associations. The subsequent security component included the inter-county border security amongst the Pokot and the Turkana, Baringo and Turkana go, and Samburu and Turkana. Majorly, the emphasis of safety remained basically as cattle rustling that was a common cultural facet amongst these neighbouring communities. The County-Commissioner emphasized that security agents attempted to lessen the measure of cattle rustling by persistent communal discussion, anti-stock theft patrols and improved presence of National Police Reserve (NPR).

The study also found that there was rampant insecurity around schools. This finding was reported by the pupils, teachers and head teachers. Moreover, from the qualitative data, the CDE admitted that the general situation of security around public primary schools was fair. The CDE further affirmed that schools had experienced some attacks

and that these attacks almost always happened at the same time as the cattle rustling activities. The County Commissioner also confirmed that some schools had been attacked and underlined cattle rustling as the biggest source of insecurity in the area. He stated that cattle rustling activities posed risks to children going to school, had resulted in some deaths of children and teachers, led to destruction of school property, loss of livestock for families. However, as the CDE pointed out, some parents contributed to security by accompanying their children to and from school.

The study further established that insecurity was the greatest hindrance to participation of pastoralistsô pupils in learning institution. The CDE described insecurity as greatest challenge to schooling in the County. The County Commissioner similarly confirmed that the insecurity occurrences hindered the teaching and learning of school-going children. Most of the teachers and head teachers confirmed that there had been attacks in their respective schools. The parents reported that some of the pupils, school watchmen and teachers had been killed. Almost all the head teachers in both mobile and regular schools said they had experienced incidences of insecurity nearby their learning institutions.

The study found that in all schools, there had been incidences in which pupils missed school because of insecurity. Another effect of insecurity reported by the parents was the withdrawal of their pupils from school. The County Commissioner pointed out that the County did not have enough security personnel needed to protect the livelihood of the pastoralists ï that is their animals and people.

The study further established from the County Commissioner that mobile learning institutions were further disposed to regular attacks than regular learning institutions since they were located at the *kraals* (villages) where cattle rustling menace was an

issue. Moreover, those schools at the borders were also more prone to being affected than those located in the interior regions of the County, and these included both regular and mobile schools.

Several measures were proposed to increase the effectiveness of governmentôs security intervention on the participation of the pastoralistsô pupils in the learning institutions in Turkana County. The CDE suggested the provision of enough police officers around schools. The second suggestion was involving the local groups in preparation and executing security approaches. The choice of NPRs over other security agencies received an overwhelming support by the majority of the respondents because of the notion that home guards were more knowledgeable with rural environmental security encounters and were henceforth best suited to manage these attacks. The school-heads from the learning institutions supported the idea. It was also proposed that NPRs be provided with guns to support them in splashing off safety challenges. Lastly, the CDEs suggested that sensitising the communities to be more cautious and support the security can make the learning institutions more secure.

The County Commissioner suggested that if parents were assisted to understand that cattle rustling undertakings were vicious and damaging to their school-going childrenôs learning, maybe they will reduce the activities. The County Commissioner urged for appropriate screening of the external students and pupils before admittance to our institution of learning must be done by every school. He added that the UNHCR must screen, vet and re-vet all foreign students joining refugee camp schools in the County. This suggestion had also been proposed by the head teachers in the questionnaire. Most of the FGD parents proposed that the Kenyan-government ought to offer equipped security personnel devoted to safeguarding each of the learning

institutions, be it mobile or regular learning institutions. The parents likewise recommended that the Kenyan-government ought to pay well the NPR that are seconded to the keep security in the learning institutions.

From the findings from the teachers, the study established that the use of community policing was the least popular method preferred to provide security in the learning institutions in Turkana County.

The second null proposition examined in the study stated that the Kenyan-governmentôs security interventions do not significantly affect the participation of the pastoralistsô pupils in mobile and regular learning institutions in Turkana County. The test of this hypothesis revealed that the hypothesis was rejected, meaning that the Kenyan-governmentôs security interventions do significantly affect the participation of the pastoralistsô pupils in the learning institutions in Turkana County.

5.3.3 Findings on Effectiveness of Free Primary Education

The third objective of the report undertook an investigation to examine the influence of Free Primary Education, as one of the Kenyan-government interventions, on the participation of the pastoralistsô pupils in education in Turkana County. From the pupilsô responses, the study found that none of the learners paid school fees in either of the schools studied. This view was confirmed by the head teachers who reported that none of the schools levied parents for tuition fees. Additionally, almost all the schools did not have enough teaching and learning materials.

On the existence of government policy for FPE in Turkana County, the study established that the national government had put a policy in place to guarantee that every child had access to basic schooling in Kenya based on the Millennium Development Goal number two, which sought to realize universal primary education

for all children, especially in developing countries. On the same issue of policy, the Education Officers stated that it was the task of the County Directorate of Education and all officers under him in the County to ensure that this policy was realized in Turkana County.

The study found that most of the parents understood FPE as government paying all of the tuition fees for their pupils. However, the parents catered for school uniforms, stationeries and other personal effects of the learners. According to most of the parents, these levies were still too high for them to afford.

On the effect of FPE on participation, the CDE reported that the introduction of FPE in Kenya in 2003 had enabled many families in Turkana County to enrol their children in school. This finding reinforced an earlier response by the school heads which confirmed that FPE had enhanced enrolment of pupils in their schools. An interesting finding, as reported by the CDE, was that there had been reduced cases of cattle rustling from Turkana community because most of the young boys had enrolled in school. Therefore, the study found that increased education, courtesy of the FPE programme, had a direct effect of reducing cattle rustling in Turkana County.

The study further established that, to improve the effectiveness of FPE programme, the government, as reported by the CDE, had made some efforts to provide teachers, teaching and learning materials and sanitary pads for girls. Similarly, most of the head teachers reported that the government provided the requisite teaching and learning materials. However, all the pupils also reported that their schools did not have enough teachers. This could explain why all the Education Officers said more teachers were needed. This finding reinforced the report from the head teachers that as a result of increased FPE, the teacher to pupil ratios in their schools had not been commendable.

Nonetheless, almost all of the school-going children from the regular learning institutions and many others from the mobile schools said their schools had enough teaching and learning materials. The Education Officers, however, stated that there was a severe shortage of classes owing to increased enrolment of pupils. The CDE also reported that the attacks on teachers in some places within and around Turkana County had made teachers, especially those who did not come from within or around Turkana, to fear working in Turkana County. On the same issue, most parents reported that the teaching and learning materials were sufficient in many of the schools. Moreover, from the pupilsô responses, the study found that majority of the schools had been connected with electricity to facilitate teaching and learning.

On the issue of sanitary pads for girls, the parents said the schools provided pads to girls sometimes with the help of government agencies and non-governmental organizations. Majority of the pupils in both school categories reported that their schools did not give sanitary pads to girls. In both schools, however, the head teachers reported that the government had provided sanitary pads to girls.

On the measures to improve the effectiveness of the FPE programme, the CDE suggested the need to recruit more teachers, especially those who understand the unique challenges of schools in Turkana County. This suggestion was also proposed by the parents in the FGDs. The CDE also suggested the need to build more infrastructure for schools and increase security in the area. The Education Officers proposed that the government should subsidize or fully cover costs that parents incurred, such as for school uniforms and meals not covered within the school feeding programme. This suggestion was also proposed by most of the head teachers. They also urged for timely disbursement of tuition fees to schools to ensure teaching and learning activities were not disrupted. Another strategy proposed by the Education

Officers was to sensitize parents on the exact education amenities for which the government paid. In a related finding, the teachers and head teachers proposed the need to create awareness to parents in the benefits of education. On the same issue, the parents proposed that the government should provide sufficient funds to support teaching and learning activities fully. They also suggested that the government should cater for school uniforms and examination fees. Another suggestion reinforced by the teachers and head teachers in both school categories was to settle pastoralists with water and pasture.

The third null hypothesis tested in the study stated that Free Primary Education intervention does not significantly affect participation of the nomadic pupils in the mobile and regular learning institutions in Turkana County. The test of the hypothesis led to its rejection, meaning that Free Primary Education does in fact significantly affect involvement of the nomadic pupils in mobile and regular learning institutions in Turkana County.

5.4 Conclusion of the Study

Concerning the major issues of the feeding programme in the learning institutions, it was resolved that feeding was provided in most of the mobile and regular public learning institutions in Turkana County. The Kenyan-government had a distinct strategy for executing the feeding programme in the public learning institutions. Education Officers were instructed to forward all the issues concerning the supply of food to all public learning institutions to the Directorate to act accordingly. The food offered by the Kenyan-government is not nutritive and dietetic. The delivery of the feeding programme to the public learning institutions improved school attendance and retention of many pupils in schools. Most of the public learning institutions relied exclusively on the Kenyan-government and other partners in order to offer food to the

school-going children. The WFP supplied largely maize and beans to the learning institutions. Nonetheless, most of the learning institutions urged parents and guardians to provide food to schools if they are able. Owing to the absence of firewood and consistent water sources for making meals in school, occasionally most of the learning institutions ask pupils to go fetch water and firewood, thus which interrupting the school educational activities. The delivery of the feeding programme to the public learning institutions frequently witnessed delays owing to poor road infrastructure, scarce means of transport/vehicles and more importantly the insecurity in the area. Generally, the meal plan has had a substantial effect on the involvement of the nomadic pupils in the mobile educational centres and regular learning centres in Turkana County.

On the issue regarding the stateôs security involvement measures, the Kenyan administration has put in place a structure of utilizing mutually the regular police officers, the national police reservists and additional homegrown established security approaches to firmly guarantee safety in all our public learning centres. Nevertheless, the security conditions surrounding many learning institutions is deplorable, thus most learning institutions are disposed to external attacks. Many learning institutions have experienced and witnessed attacks. In most cases the school-going children, tutors and even the security workers have been mutilated or killed, and properties of the learning institutions destroyed completely. The attacks always happen in areas prone to cattle rustling, implying that cattle rustling attack is the greatest insecurity threat to most of the learning institutions. The Kenyan-government has delayed in establishing police camps close to most of the learning institutions which might act as a preventive measure to cattle rustling related crimes. The limited police camps and the few existing patrols have not been more effective in offering security in and about our

learning institutions. A higher proportion of learning institutions depend on night-watchmen or guards to offer security in schools. Nonetheless, the security agent favoured by the school going children are the KPRs. The participation of the pastoralistsô pupils in the learning institutions mostly affected by the insecurity. When cases of insecurity happen, most of the school-going children fail to attend schools and their parents would decide to withhold the pupils at home. It was observed that many Mobile learning institutions were more prone and disposed to attacks than regular learning institutions. Largely, the governmentôs security measure had a significant influence on the participation of the pastoralistsô pupils in mobile and regular learning institutions in Turkana County.

Regarding Free Primary Education, as one of the government interventions, it is concluded that the national government has put a policy in place to ensure that every child has access to basic schooling in Kenya based on the Millennium Development Goal number two, which sought to realize universal primary education for all children, especially in developing countries. Therefore, none of the learners or parents pay school fees in either of the schools studied. Most of the parents understand FPE as government paying all of the tuition fees for their pupils. However, the parents cater for school uniforms, stationeries and other personal effects of the learners. Most of the parents find these extra levies too high for them to afford. The introduction of FPE has enhanced enrolment of pupils in schools. Interestingly, there have been reduced cases of cattle rustling from Turkana community because most of the young boys have enrolled in school. As such, increased education courtesy of the FPE programme has a direct effect of reducing cattle rustling in Turkana County. To enrich the usefulness of FPE programme, the Kenyan administration has made some efforts to provide teachers, teaching and learning materials and sanitary pads for girls.

However, more of these resources are needed in the schools. In most schools, the teacher to pupil ratio has been impaired by the increased pupil enrolment resulting from the introduction of FPE. Recent attacks on schools in the north-eastern regions of Kenya by bandits and terror groups have had a adverse influence on teachersô motivation to teach in schools in and around Turkana County. Overall, Free Primary Education had a substantial effect on the involvement of nomadic pupils in the mobile educational centres and regular learning centres in Turkana County.

5.5 Recommendations of the Study

Based on the data analysis in this study, the following recommendations were derived. Based on the study objective one, that required to enhance the usefulness of feeding programme in the learning institutions as a strategic intervention, the following recommendations are made:

i. That the food measures offered in the learning institutions need to be slightly increased to allow at least three mealtimes a day to the pupils.
ii. That the dietetic and nutritional value of meals offered needs to be diversified and strengthen by introducing animal proteins like milk and meat.
iii. That parentôs engagement in preparing and planning of school meals should be a considered view by educationists.
iv. That pupils who are orphans and others whose parents have relocated to distant land/region need to be given meals throughout the holidays.
v. That the food supplies delay processes should be minimized or eliminated especially by the County and National governments.
vi. Furthermore, the Kenyan-government ought to offer security as and when the vehicles take food to the learning institutions.

vii. That improved road infrastructure and suitable vehicles could be availed to supply food to the learning institutions.

Based on the study objective two that sought to improve the effectiveness of the stateôs security approaches on the involvement of the pastoralistsô pupils in the public learning institutions in Turkana County, the following recommendations were made:

i. That the Kenyan government should deploy sufficient police officers in all learning institutions.

ii. That the government should engage the local communities especially during the planning and executing of security approaches for the learning institutions.

iii. That the government should support NPRs and offer them arms to protect learning institutions since they are well versed and skilled in matters of local security and the challenges thereof.

iv. That sensitization of the community and making them alert and vigilant as they mutually work with security teams will assist in securing our schools.

v. Furthermore, parents and guardians should be made to understand that engaging in cattle rusting is not only destructive but a great hindrance to education of our children.

vi. That the vetting process of the foreign students and learners should be thorough and exhaustive before they are admitted to the Kenyan learning institutions.

vii. Finally, the Kenyan-government ought to offer arms to the security teams deployed to take care of our learning institutions.

Based on the study objective three that sought to ascertain the usefulness of the FPE programme, the following recommendations were made:

i. There is need to recruit more teachers, especially those who understand the unique challenges of schools in Turkana County.
ii. From the outset, the government should provide sufficient funds to support teaching and learning activities fully.
iii. The government should also build more infrastructure for schools and increase security in the area.
iv. The government should subsidize or fully cover costs that parents incur, such as for school uniforms and meals not covered within the school feeding programme. The government should adopt this recommendation, especially for hardship areas like Turkana County.
v. There is also a need for timely disbursement of tuition fees to schools to ensure teaching and learning activities are not disrupted by delays.
vi. Moreover, parents should be sensitized on the exact education amenities for which the government pays to avoid confusion. In general, there is need to create awareness to parents on the benefits of education.
vii. The government should also strive to settle pastoralists with water and pasture to ensure they are in a better place to educate their children.

5.6 Suggestions for Further Research

The following suggestions are made for further inquiry grounded on the scope and objectives of the present study:

i. The present report undertook to investigate the effect of School Feeding Programme (SFP) on the participation of pastoralistsô pupils

in the learning institutions in Turkana County, Kenya. A additional studies should be undertaken to assess the strategic mandate of the County Government of Turkana in provision of food to pastoralistsô families and pupils in local schools.

ii. The present study also ought to examine the effect of governmentôs security on participation of the pastoralistsô pupils in the learning institutions in Turkana County. A additional study ought to be undertaken to establish the effect of terror attacks on learning institutions in the north-eastern Kenya on participation and performance of public learning institution in Turkana County.

iii. Lastly, the present study sought to establish the effect of Free Primary Education, as one of the government interventions, on the participation of the pastoralistsô pupils in the learning institutions in Turkana County. A similar study should be conducted to establish the effect of free secondary education on pastoralistsô pupilsô progression from primary schools to secondary education in Turkana County.

iv. In general, the present study was conducted in primary public schools in Turkana County, the same study can be replicated in other schools both public and private within the country to evaluate effectiveness of government interventions. This would confirm if the findings will yield similar or different results. Research also needs to be done in other countries in Africa for comparison of results.

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APPENDIX I

TRANSMITTAL LETTER

UNIVERSITY OF NAIROBI,
P. O. BOX 30,197 ï 00100
NAIROBI.

TO: THE HEAD TEACHER:
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Dear Sir/Madam,

RE: PERMISSION TO COLLECT DATA IN YOUR SCHOOL

I am a doctoral student pursuing degree of doctor of philosophy in comparative and international education of the University of Nairobi. I am researching on ñ**Effectiveness of Government Interventions measures on Pastoralists' Pupils' Participation in Regular and Mobile Primary Schools in Turkana County, Kenya"**. Your school has been selected to participate in the research. The information given will be treated with utmost confidentiality; neither you nor your school will be quoted. Kindly respond to all the items in the questionnaire as honestly as possible and to the best of your knowledge.

Thanks in advance for your cooperation,

Yours sincerely,

PAUL EKENO EJORE

APPENDIX II

PUPILS' QUESTIONNAIRE

Dear Respondent,

I am a PhD student of University of Nairobi doing research on **"Effectiveness of the Government interventions measures on the pastoralists' pupils' participation in regular and mobile primary schools in Turkana County."** You are kindly requested to respond to this questionnaire as genuinely as possible. The information given here will be treated with utmost privacy; neither you nor your school will be quoted here. Thank you in Advance.

Section A: Demographic data

1. Please indicate your gender

   Male [ ] Female[ ]

2. Please indicate your age bracket

6-10 years	[ ]	11- 15 years	[ ]
16-20 years	[ ]	Over 20 years	[ ]

3. Please indicate the category of this school

   Regular school [ ] Public Primary with a Mobile school attached to it [ ]

4. Kindly indicate how long you have been in this school

Less than 1 year	[ ]	2-5 years	[ ]
6-10 years	[ ]	More than 10 years	[ ]

5. Kindly indicate the distance you cover daily from home to school.

Less than 1 km	[ ]	1 ï 5 km	[ ]
6 ï 10 km	[ ]	Over 10 km	[ ]

Section B School Feeding Programme

6. Please tick where applicable

S/NO	Aspect	Yes	No
	Free meals are offered in this school		
	Sometimes this school receives food long after it has opened		
	Food received in this school does not sustain the school to the very end of the term		
	The meals offered in this school are nutritious and dietary		
	When there is no food in school some pupils donôt go to school		
	Which of the following are provided in this school Breakfast Lunch Super		
	This school normally send pupils to collect water and firewood		
	When food is in school some pupils remain in school even after the school has closed.		

Section C: Government Security

7. Please tick where applicable: Which security is available in this school?

   Watchman [ ] KPR [ ]

   Police [ ] Others (specify)é é é é é é

8. Has this school ever been attacked and pupils killed? Yes [ ] No [ ]

9. Which of the following security would you recommend for this school?

   Watchman [ ] KPR [ ] Police [ ] Others (specify)é é é é .

Section D: Free Primary Education

10. Tick Yes or No where applicable in the table below

Aspect	**Yes**	**No**
Do you pay fees in this school?		
Does this school have enough teachers?		
Does this school have enough teaching and learning materials?		
Does this school give free sanitary pads to girls?		
Does this school have electricity?		

APPENDIX III

TEACHERS' QUESTIONNAIRE

Dear Respondent,

I am a PhD student of University of Nairobi doing research on **"Effectiveness of the Government interventions on the pastoralists' pupils' participation in regular and mobile primary schools in Turkana County."** You are kindly requested to respond to this questionnaire as truly as possible. The information given here will be treated with utmost confidentiality; neither you nor your school will be quoted here. Thank you in Advance.

SECTION A: Demographic Data

1. Please indicate your gender

   Male [ ] Female [ ]

2. Pease indicate your age bracket

   25 and below years [ ] 26-35 years [ ]

   36-45 years [ ] 46-55 years [ ]

   Above 55 years [ ]

3. Please indicate the category of your school

   Regular School [ ] Public Primary school with a mobile School attached to it [ ]

4. Please indicate your highest level of your education

   Primary (KCPE/CPE) [ ] Secondary (KCSE/KPE) [ ]

   College (Middle level) [ ] University [ ]

5. Please indicate how long have you been in the teaching profession

   Less than 5 years [ ] 5-10 years [ ]

   11-15 years [ ] 16-20 years [ ]

More than 20 years [ ]

Section B: School Feeding Programme

6. To what extent do you agree with the following statements on school feeding program as an effective strategy by the government. Use a scale of 1- 4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree**.

Aspect	**1**	**2**	**3**	**4**
The school provide meals to all pupils on a daily basis				
The meals provided are dietary and nutritious				
We witness reduced cases of attendance when meals are not offered				
The school solely rely on the government and well-wishers for food donations				
Sometimes we send pupils to collect firewood and water				
Sometimes pupils remain in school even after the school has closed down when food is in school.				

7. In your own view what **effective feeding measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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Section C: Government Security

8. To what extent do you agree with the following statements on government security as an effective strategy by the government? Use a scale of 1-4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree.**

Aspect	**1**	**2**	**3**	**4**
We have witnessed cases of insecurity in the area				
Sometimes pupils miss school due to insecurity in the area				
The government has built a police post near this school				
There are regular patrols by police and KPR in this area.				
There is a general improvement in security of the area due to police posts and patrols				
Learning in schools has improved due to improved security				
A policeman and a KPR are required to secure this school				

9. In your own view what **effective security measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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Section D: Free Primary Education

10. To what extent do you agree with the following statements on free primary education as an effective strategy by the government? Use a scale of 1-4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree**.

Aspect	**1**	**2**	**3**	**4**
Parents do not pay tuition fees in this school				
The number of pupils increased after the introduction of FPE				
Teaching and learning material are availed by the government				
The teacher to pupil ratio is commendable				
The government has provided textbooks to the pupils				
The government has provided free sanitary pads to girls				
The government has brought electricity to this school				

11. In your own view what **effective Free Primary Education measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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APPENDIX IV

HEAD TEACHERS' QUESTIONNAIRE

Dear Respondent,

I am a PhD student of University of Nairobi doing research on **"Effectiveness of the Government interventions on the pastoralists' pupils' participation in regular and mobile primary schools in Turkana County."** You are gently requested to respond to this questionnaire as honestly as possible. The information given here will be treated with utmost confidentiality; neither you nor your school will be quoted here. Thank you in Advance.

SECTION A: Demographic Data

1. Please indicate your gender

   Male [ ] Female [ ]

2. Pease indicate your age bracket

   25 and below years [ ] 26-35 years [ ]

   36-45 years [ ] 46-55 years [ ]

   Above 55 years [ ]

3. Please indicate the category of your school

   Regular School [ ] Public Primary school with a mobile school attached to it [ ]

4. Please indicate your highest level of your education

   Primary (KCPE/CPE) [ ] Secondary (KCSE/KPE) [ ]

   College (Middle level) [ ] University [ ]

5. Please indicate how long you have been in teaching profession

   Less than 5 years [ ] 5-10 years [ ]

   11-15 years [ ] 16-20 years [ ]

More than 20 years [ ]

6. For how long have you been in the administration position as a head teacher?

   Less than 5 years [ ] 5 -10 years [ ]

   11-15 years [ ] 16-20 years [ ]

   More than 20 years [ ]

Section B: School Feeding Programme

7. To what extent do you agree with the following statements on school feeding program as an effective strategy by the government. Use a scale of 1- 4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree**.

Aspect	**1**	**2**	**3**	**4**
This school is a beneficiary of the School Feeding programme				
The meals provided are dietary and nutritious				
When meals are provided attendance is high in all classes				
When meals are not offered we witness reduced cases of attendance				
The school solely rely on the government and well-wishers for food donations				
Sometimes we send pupils to collect firewood and water				
Sometimes pupils remain in school even after the school has closed down when food is in school.				

8. In your own view what **effective feeding measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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Section C: Government Security

9. To what extent do you agree with the following statements on government security as an effective strategy by the government? Use a scale of 1-4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree.**

Aspect	**1**	**2**	**3**	**4**
We have witnessed cases of insecurity in the area				
Sometimes pupils miss school due to insecurity in the area				
The government has built a police post near this school				
There are regular patrols by police and KPR in this area.				
There is a general improvement in security of the area due to police posts and patrols				
Learning in schools has improved due to improved security				
A policeman and a KPR are required to secure this school				

10. In your own view what **effective security measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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Section D: Free Primary Education

11. To what extent do you agree with the following statements on free primary education as an effective strategy by the government? Use a scale of 1-4 where 1=**strongly disagree**, 2=**disagree**, 3= **agree** and 4= **strongly agree**.

Aspect	**1**	**2**	**3**	**4**
Parents do not pay tuition fees in this school				
The number of pupils increased after the introduction of FPE				
Teaching and learning material are availed by the government				
The teacher to pupil ratio is commendable				
The government has provided textbooks to the pupils				
The government has provided free sanitary pads to girls				
The government has brought electricity to this school				

12. In your own view what **effective Free Primary Education measures** do you think will increase pastoralistsô pupilsô participation in regular and mobile primary schools in Turkana County?

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SECTION E: PUPILS' PARTICIPATION

1. For the last five years, indicate the status of pupils enrolment in your school

a) Increasing b) decreasing, c fluctuating

2. In the following table, indicate the actual number of pupil participation in relation to enrolment and dropout parameters at your school for the last six years

Years	2018	2017	2016	2015	2014	2013
Number enrolled						
Number dropped out						

APPENDIX V

INTERVIEW SCHEDULE FOR EDUCATION OFFICERS

i. What is the government policy on the feeding program?

ii. Do all schools from your area benefit from the school feeding programme?

iii. How has the school feeding programme affected the pupilsô participation in this Sub-County?

iv. Do food supplies to schools sometimes delay and what causes the delay?

v. Does the food delay make some learners not go to school?

vi. What measures should the government implement in order to reduce delay of food in reaching schools?

vii. What is the government policy on security in public primary schools?

viii. How is the security in all the schools in your Sub-County? Probe further to see if the school has ever encountered any insecurity incident that hindered learning.

ix. How has the insecurity affected participation of pupils in this Sub-County?

x. What measures should the government take to improve the security in this area?

xi. What is the government policy on Free Primary Education (FPE)?

xii. How has (FPE) affected participation of pupils in this Sub-County?

xiii. Has the government provided enough teachers, teaching materials and learning materials and sanitary pads to girls in all your schools? Explain

xiv. What measure should government take in order to improve Free Primary Education in order to enhance participation of pastoralistsô pupils in schools in this Sub-County?

APPENDIX VI

INTERVIEW SCHEDULE FOR COUNTY DIRECTOR OF EDUCATION

i. What is the government policy on the feeding program?

ii. Do all schools from your area benefit from the school feeding programme?

iii. How has the school feeding programme affected the pupilsô participation in this Sub-County?

iv. Do food supplies to schools sometimes delay and what causes the delay?

v. Does the food delay make some learners not go to school?

vi. What measures should the government implement in order to reduce delay of food in reaching schools?

vii. What is the government policy on security in public primary schools?

viii. How is the security in all the schools in your Sub-County? Probe further to see if the school has ever encountered any insecurity incident that hindered learning.

ix. How has the insecurity affected participation of pupils in this Sub-County?

x. What measures should the government take to improve the security in this area?

xi. What is the government policy on Free Primary Education (FPE)?

xii. How has (FPE) affected participation of pupils in this Sub-County?

xiii. Has the government provided enough teachers, teaching materials and learning materials and sanitary pads to girls in all your schools? Explain

xiv. What measure should government take in order to improve Free Primary Education in order to enhance participation of pastoralistsô pupils in schools in this Sub-County?

APPENDIX VII

INTERVIEW SCHEDULE FOR COUNTY COMMISSIONER

i. How is the security in the areas surrounding the schools in Turkana County?

ii. Are there schools in this county that ever encountered any insecurity incidence that hindered learning? Probe further if both teachers and learners were killed and injured.

iii. How did the incident affect the participation of pupils in the schools that encountered by security issues?

iv. Between regular schools and mobile schools, which ones are more prone to insecurity issues than then other? And why?

v. Do you have enough security personnel in the county to guarantee all parents with safety of their learners in schools?

vi. How has the government tried to improve security in schools in Turkana County?

APPENDIX VIII

FOCUS GROUP DISCUSSION GUIDE FOR PARENTS

i. Do your children go to regular schools or mobile schools?

ii. Do your children get free meals from schools where they go?

iii. Do your children go to school when the school feeding program delays? Probe to know whether their children remain at home during that time.

iv. What measures do you want the government to take on feeding program in order to improve participation of your children in schools?

v. How is security in the area where your children go to school?

vi. Has there been any insecurity incident that made your children not go to school?

vii. How did it affect the participation of your children in school?

viii. What measures do you want the government to take on security in schools where your children go that will allow you take your children to school?

ix. Do your children pay tuition fees to learn where they go to school?

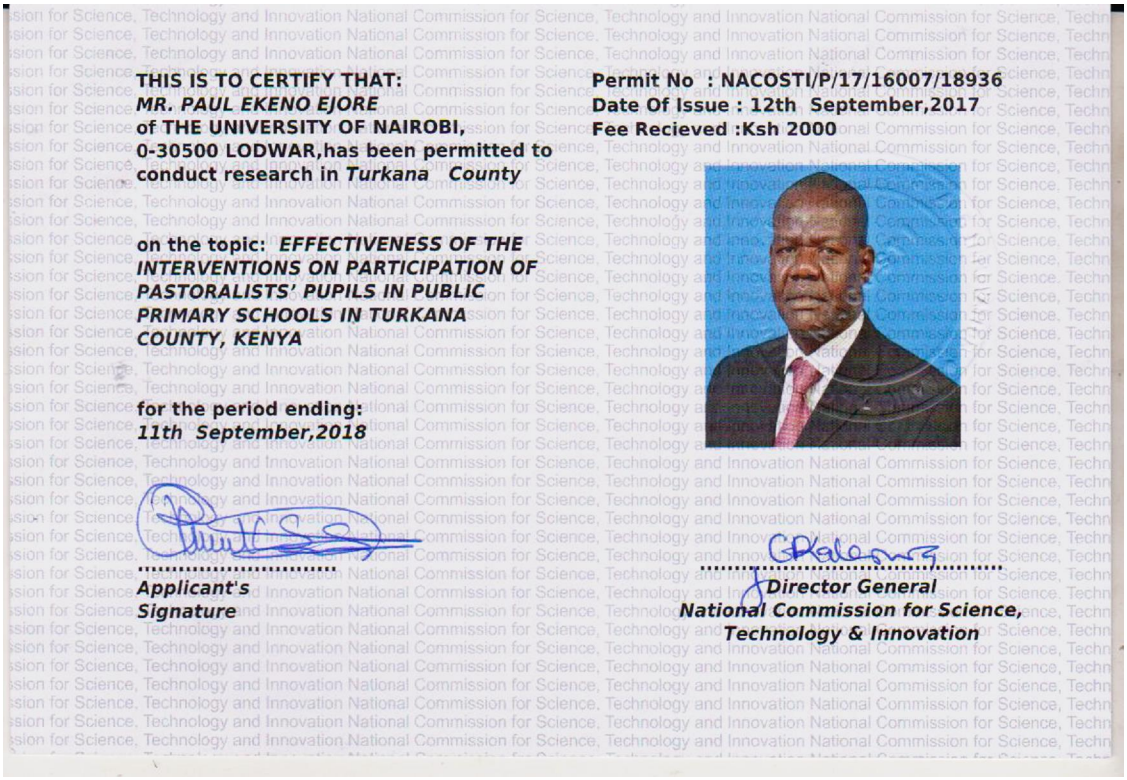
x. If they were paying school fees would you have taken them to school?

xi. Has the government taken enough teachers, teaching and learning materials and sanitary pads to the schools where your children go?

xii. What measures do you want the government to take in order for your children to participate fully in schools without interruptions?

APPENDIX VIX

RESEARCH PERMIT



THIS IS TO CERTIFY THAT:
MR. PAUL EKENO EJORE
of THE UNIVERSITY OF NAIROBI,
0-30500 LODWAR,has been permitted to
conduct research in *Turkana County*

on the topic: *EFFECTIVENESS OF THE INTERVENTIONS ON PARTICIPATION OF PASTORALISTS' PUPILS IN PUBLIC PRIMARY SCHOOLS IN TURKANA COUNTY, KENYA*

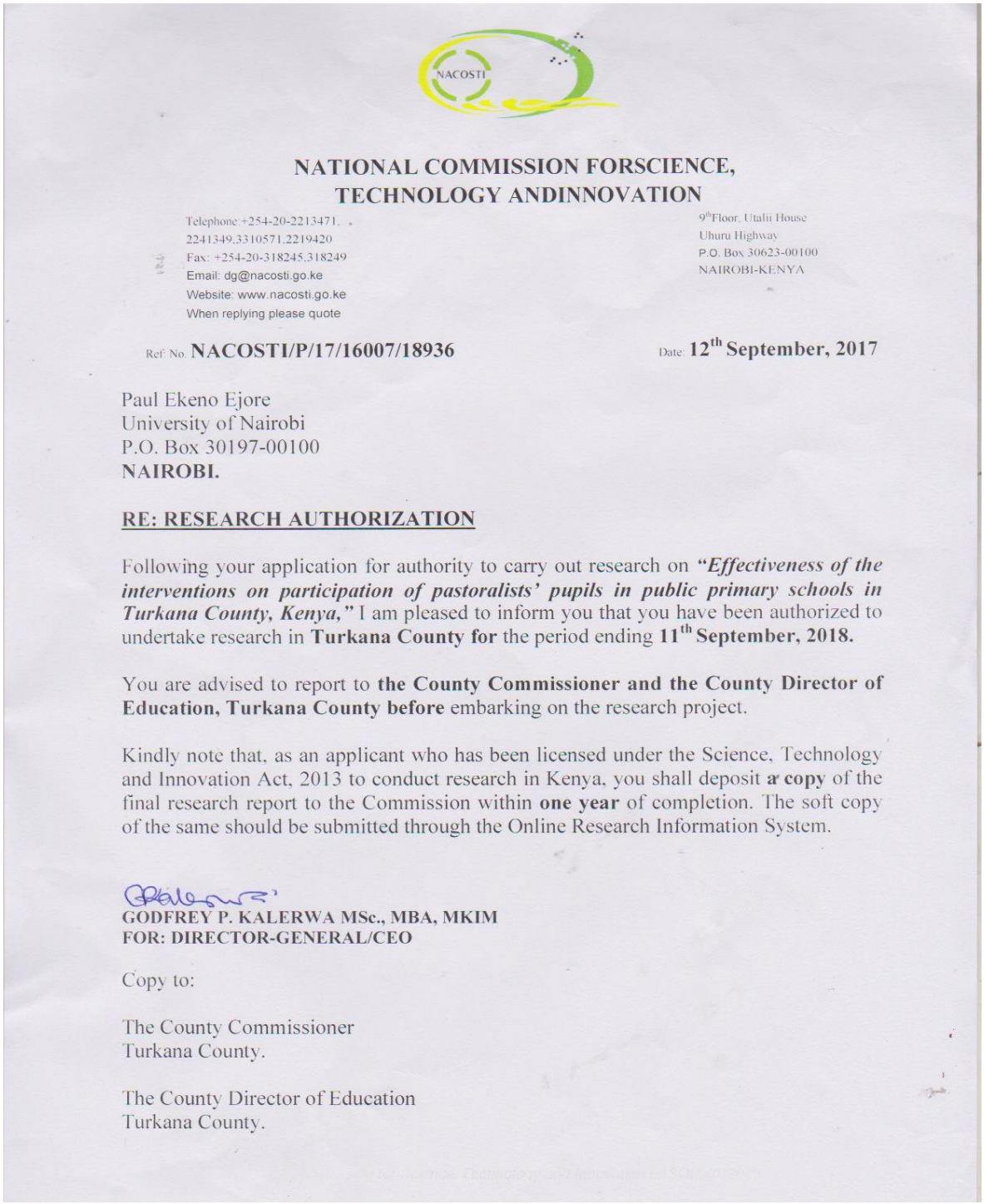
for the period ending:
11th September,2018

Permit No : NACOSTI/P/17/16007/18936
Date Of Issue : 12th September,2017
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

APPENDIX X
RESEARCH AUTHORIZATION



NACOSTI

NATIONAL COMMISSION FORSCIENCE, TECHNOLOGY ANDINNOVATION

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P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/16007/18936**

Date: **12th September, 2017**

Paul Ekeno Ejore
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Effectiveness of the interventions on participation of pastoralists' pupils in public primary schools in Turkana County, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Turkana County for** the period ending **11th September, 2018.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Turkana County.

The County Director of Education
Turkana County.