

**INFLUENCE OF SCHOOL FEEDING PROGRAMMES ON PUPILS' PARTICIPATION IN
PRIMARY SCHOOL EDUCATION IN SAMBURU EAST CONSTITUENCY,
SAMBURU COUNTY, KENYA.**

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DECLARATION

This research project report is my original work and has not been presented to any other university for award of a degree.

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DEDICATION

This work is dedicated to my husband, Daniel Wahome; my daughter, Dorcas Mwendwa; and my sons, Jack Muriithi and Samuel Muthomi, for the great support and encouragement they gave me during my course work, and especially when preparing my research proposal.

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ABBREVIATIONS AND ACRONYMS

SFP: School Feeding Program

ECDE: Early Childhood Development Education

FPE: Free Primary Education

GoK: Government of Kenya

MoE: Ministry of Education

NACOSTI: National Commission for Science, Technology and Innovation

SPSS: Statistical Package for Social Sciences

THR: Take Home Rations

WFP: World Food Programme

ABSTRACT

This study investigated the influence of School Feeding Programmes (SFP) on pupils' participation in primary education in Samburu East Constituency, Samburu County. The objectives of the study were to establish how types of school feeding programmes influence pupils' participation in primary school education; to assess how frequency of feeding affects pupils' participation in primary school education; to examine how adequacy of food influences pupils' participation in primary school education, and to determine the influence of community participation on pupils' participation in primary school education in Samburu East Constituency. The study adopted a descriptive survey design. Purposive sampling, proportionate stratified sampling and simple random sampling were used to derive a sample of 9 headteachers, 45 teachers and 135 pupils from a population of 45 primary schools. Data was collected using three different questionnaires for headteachers, teachers and pupils respectively. Descriptive statistics were used to analyse data with the help of Statistical Package for Social Sciences (SPSS). The study established that type of SFP implemented had a strong positive influence on participation of pupils in primary education; frequency of feeding has a moderate positive influence on pupils' participation in primary school education; adequacy of food had a moderate positive influence on pupils' participation in primary school education, and community participation in SFP had a strong, positive influence on participation of pupils in primary school education. The study recommended that the SFP menu should be diversified; the portions served increased, and the number of meals upscaled. In addition, schools should lobby for more food, and local agriculture production should be increased to foster greater community participation and sustainability of School Feeding Programme. These findings and recommendations will help the government and Ministry of Education officials, school administrators and teachers, to plan SFP for maximal benefit to pupils and the education system. Moreover, this study will benefit the academic community in the areas of SPF, education and project planning and management.

CHAPTER ONE

INTRODUCTION

1.1. Background to the Study

According to Drake *et al.* (2016), the global economic crisis of 2008 contributed to the current 1.22 billion people living in abject poverty worldwide. Further, chronic hunger affects about 846 million people. The link between poverty and hunger is evident and worrying, especially among children. Hungry children are likely to drop out of school thus hampering efforts to attain universal basic education. For example, during the global economic crisis of 2008 as well as the preceding and ensuing years, global school enrolment decreased between the years 2005 and 2011. It is for this reason that WFP has upscaled its support for countries implementing pro-poor feeding programmes geared towards boosting wider educational strategies.

According to Bundy *et al.* (2009), School Feeding Programmes (SFPs) are acclaimed globally as effective strategies for keeping children in school, hence promoting learning and education in general. While the practice is pervasive on the world, developing nations give SFPs prominence considering most of these nations experience financial and food crises intermittently. WFP (2013) asserts that children who get a meal in school record improved performance and complete their education.

SFPs are implemented by governments and NGOs alike. WFP asserts that in 2015, it provided school meals in 62 countries, reaching about 17.4 million children (WFP, 2017). In another 10 countries, the UN agency offered technical support for government-sponsored SFP programmes, targeting about 10 million children. While the number of meals and their composition differed from country to another, the bottom line was that SFPs boosted education and nutrition and also promoted smallholder agricultural production in implementing countries (Zwane, 2014).

WFP (2013) asserts that on the globe, about 368 million learners in early childhood development classes, primary and secondary schools are beneficiaries of school meals. India, Brazil, the United States and China have the best-funded programmes having invested \$114m, \$47m, 45m and \$27m respectively. In about 43 countries, SFPs target more than a million learners. In terms

of magnitude of beneficiaries at regional levels, South Asia, Latin America and the Caribbean are the best performing, in that order.

Following a study conducted in 14 countries, Drake *et al.* (2016), established that in India, 113,600,000 were fed under a universal program led by the education sector, with \$32.40 being spent on every child annually. In Mexico, the program reached 6,100,000 children, was led by the health sector, and spent \$69 per child every year. In Ecuador, 1,788,414 children were fed through efforts spearheaded by education officials at a cost of \$40.40 per child. Brazil fed 42,333,722 children under an initiative spearheaded by autonomous entities, at a cost of \$0.15 to \$0.50 for every child, every day. A similar initiative in Chile reached 1,850,000 children, with the agencies incurring \$331.52 for each child in one year.

In Africa, autonomous institutions spearheaded an initiative that fed 85,079 children in Cape Verde at a cost of \$44-\$50 for every child annually. Similarly, more than 252,00 children were fed through the office of the Deputy Governor of Osun State in Nigeria, an initiative that cost \$63.40 per learner. In Ghana, 1,739,357 children benefitted from SFPs led by local governments at a cost of \$45 per child, per year. Cote D'Ivoire's education sector fed 265,000 children at a cost of \$0.05-\$0.21 per day, per child. The Namibian education sector targeted 300,000 children and fed them at \$31.85 for every child in one year. Likewise, Botswana's local governments spent \$104.02 per child to feed 332,972 children in one year. Finally, South Africa's education ministry spent \$0.32 per child, per day, to feed 8,821,392 children (Drake *et al.*, 2016).

In Kenya, the Home-Grown School Meals (HGSM) and Njaa Marufuku Kenya (NMK) programmes, led by the education and agriculture ministries, respectively, spent \$28 and \$31.25, in that order, to feed a combined total of 825,715 children. The World Bank (2016) estimates that 1.5 million Kenyan children eat lunch composed mainly of corn and legumes every school day, and this was likely to be the only meal such children got in a day.

The importance of SFPs in education are documented. WFP (2017) asserts that these programmes help to increase enrolment and attendance in schools because they serve as incentives to children to participate in learning. According to Tomlinson (2007), SFPs provide

children with the nutrition they need to grow their cognitive abilities, hence excellence in education. School meals boost concentration, performance and retention of children. Hgsf-global.org (2012) corroborates these assertions by insisting that malnourished children from poor backgrounds can record improved performances in school if given the right kind of nutrition in school.

1.2.Statement of the problem

School Feeding Programmes (SFPs) are implemented globally as strategies of providing adequate nutrition and satiation to children in the quest for more effective learning and retention in school, among other reasons. WFP (2013) opines that about 368 million learners in early childhood development classes, primary and secondary schools are beneficiaries of school meals globally. The World Bank (2016) estimates that 1.5 million Kenyan children benefit from SFP every day. Drake *et al.* (2016) assert that the Home-Grown School Meals (HGSM) and Njaa Marufuku Kenya (NMK) programmes spent \$28 and \$31.25 respectively to feed a combined total of 825,715 children. The World Bank (2012) opines that SFPs offer educational and health gains to children in extremely vulnerable situations, and in the process, boost enrolment, curtail absenteeism, and promote food security within households. All public schools in Baringo East have some form of SFP, with financial and material support from GoK and donors. A number of studies have been conducted in Kenya to determine how SFPs influence pupils' participation in primary schools. Aila (2012), Chege (2013), Githuku (2015) and Mkanyika (2014) studied SFPs in Nairobi, Isiolo, Embu and Tana Delta Counties respectively, with specific focus on informal settlement, conflict areas, Early Childhood Development and flood-prone areas in that order. The study that closely corresponds to the current one was conducted by Cheserem (2013) in Baringo County. The current study was the first one to be conducted in Samburu East Constituency to establish how SFPs influence pupils' participation in primary school education, with specific focus on school enrolment, attendance, active participation and retention.

1.3.Purpose of the study

The purpose of this study was to determine the influence of school feeding programmes on participation of pupils in primary school education in Samburu East Constituency, Samburu County.

1.4. Objectives of the study

This study was guided by the following objectives:

1. To establish how types of school feeding programmes influence pupils' participation in primary school education in Samburu East Constituency.
2. To assess how frequency of feeding affects pupils' participation in primary school education in Samburu East Constituency.
3. To examine how adequacy of food influences pupils' participation in primary school education in Samburu East Constituency.
4. To determine the influence of community participation on pupils' participation in primary school education in Samburu East Constituency.

1.5. Research questions

The study sought answers to the following questions:

1. What is the effect of types of school feeding programmes on pupils' participation in primary school education in Samburu East Constituency?
2. How does frequency of feeding influence pupils' participation in primary school education in Samburu East Constituency?
3. How does adequacy of food influence pupils' participation in primary school education in Samburu East Constituency?
4. To what extent does community participation influence pupils' participation in primary school education in Samburu East Constituency?

1.6. Significance of the study

The findings of this study will help schools implementing SFP to understand the link between the program and pupil participation, thus improving general standards of education. In addition, the Ministry of Education is expected to use these findings to improve various aspects of SFPs such as food distribution and quality of food offered. NGOs and other charitable agencies interested in complementing government SFP efforts or those implementing the program in schools that are not targeted by the state will also benefit from the findings of this study. Finally, this study will boost the quality and quantity of literature on the area of SFP, education and project planning and management.

1.7. Assumptions of the study

The study presupposed that the target population would volunteer honest and accurate information during data collection.

1.8. Delimitations of the study

The study was carried out among pupils in Class 4 to Class 8 in public primary schools in Samburu East Constituency, since they attend school the whole day and can, therefore, assess the influence of SFP meals on learning.

1.9. Limitation of the study

Samburu East is an arid and semi-arid area prone to drought, famine, banditry and cattle rustling. Residents are also deeply-ingrained in cultural practices and may be reluctant to open up to a stranger. The area also has poor infrastructure. Consequently, the researcher obtained necessary permits from the national and local government and work through the local Ministry of Education officials to access schools for data collection. Moreover, the researcher sought the help of school heads and teachers when collecting data from pupils since teachers are trusted by learners.

1.10. Definition of Key Terms

School Feeding Programmes: Initiatives by the government (often supported by donors) to offer meals to pupils in primary schools.

Pupils' Participation: Enrolment, attendance, active participation and retention in school.

Influence: A situation where a factor has an effect on another, whether positive or negative.

1.11. Organization of the study

This study is organized in five chapters. Chapter One is the introduction to the study. It gives the background to the study, statement of the problem, study objectives and questions, purpose of the study, significance of the study, limitations and delimitations, assumptions of the study and definitions of significant terms. Chapter Two is the review of pertinent literature. It is organized thematically and encompasses the theoretical framework, and a review of primary and secondary information on the dependent and independent variables, before ending with the conceptual

framework. Chapter Three discusses the research methodology, which is a plan on how, where and from whom data will be collected, and how it will be analysed and presented. Chapter Four summarises, presents and interprets data gathered from respondents while Chapter 5 discusses the findings and present conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1.Introduction

This chapter delves into various aspects of the study based on the objectives. It reviews both primary and secondary literature on school feeding programmes, types of school feeding programmes (SFPs), frequency of meals, adequacy of food, community participation and pupils' participation in primary school education. In addition, this section discusses the theoretical framework of the study, the conceptual framework and research gaps.

2.2.Pupils' Participation in Primary School Education

According to UNICEF (2017), the world did not achieve the Millennium Development Goal of achieving Universal Primary Education (UPE) by 2015. To attain UPE, countries had to maintain a net enrolment or net attendance of above 95%. Pupil's participation is most negatively affected in South Asia, West and Central Africa, regions that are conflict-prone. According to UNESCO (2012), despite Kenya achieving gender parity in primary education, universal access to primary education is yet to be attained. Pupils' participation in primary education is understood within the context of four constructs: school enrolment, school attendance, pupils' active participation in school activities and pupils' retention.

According to World Bank (2017), global enrolment rates for primary school averaged 88.5% in the year 2014. By 2013, 59 million who were eligible to join primary school were not in school, 52% of them being girls. In Sub-Saharan Africa, primary school enrolment was 75% in 2009. By 2013, Liberia had an out-of-school rate of 63%, while 8 million eligible children were not attending primary school in Nigeria. In 2012, more than 540,000 children were not attending school in Kenya. According to UNESCO (2012), net primary school enrolment in Kenya improved from 62% in 1999 to 83% in 2010. Comparatively, Sub-Saharan Africa had a lower enrolment rate in 2010 (76%), while global enrolment stood at a higher figure of 89%. By the year 2016, 59 million children were not attending primary school globally, with more than 50% of them living in Sub-Saharan African countries. The number of out-of-school children in Kenya decreased from 1.98 million in 1999 to 1.01 million in 2010. During the same period, Sub-Saharan Africa had 30.6 million children not in school while

globally, 60.7 million children were not attending school. These statistics indicate that Sub-Saharan Africa hosted about 50% of children who were not accessing primary school education, with Kenya claiming about 3.3% of that group. Considering the importance of education to economic, social and human development, this is a worrying trend.

School attendance is another crucial indicator of school participation. UNICEF (2017) further asserts that school attendance is closely related to economic backgrounds of pupils. The poorer the family, the lesser the likelihood that a child from that family will attend school. West and Central Africa are the leading regions in this regard, with 90% of children from wealthy Guinean households attending school compared to less than 30% from the poorest households. Moreover, primary school attendance disparities are evident in the urban-rural divide, with children in urban areas having twice the chance of attending school compared to their rural counterparts. In the year 2012, for example, 83% of children in urban areas of Niger attended school, compared to 45% in rural areas.

According to UNICEF (2017), while enrolment rates have seen a slight rise in the last decade, most children who attend primary school do not attain the minimum levels of learning expected of them by Grade 4. Out of 10 pupils in primary school four will fail to meet the minimum requirements of their level of education. Many Sub-Saharan nations experience dismal levels of learning performance at most levels of primary education. In Togo, for example, while over 70% of primary school children reach Grade 4, below 30% of this number master rudimentary reading skills. In Kenya, surveys by government and non-governmental organizations indicate that children at higher levels of primary education are often not proficient in content and methodologies of lower classes, which they have transcended over the years. Cheserem (2013) concluded that school meals were responsible for good performance among students. According to the headteachers who participated in the study, pupils attended both morning and afternoon school session because of the midday meal, thus getting an opportunity to participate actively in class work, which in turn boosted performance. Concentration during learning was attributed to the nutritional benefits of the food they ate.

Osman (2015), in a study conducted in Bungoma County, Kenya, among ECDE learners, concluded that school meals contributed to active participation in classrooms. Beneficiaries participated more actively in class discussions and assigned duties. Del Rosso (1999) buttresses these assertions. Despite this, the Osman (2015) concluded that since the meals provided were few, participation in classwork was still below par. This is in tandem with the assertions of Tomlinson (2007) who stated that children who were not fed adequately had nutritional deficiencies that hindered concentration and cognitive development. It was reported that classrooms were lively owing to SFP. Despite this study being conducted among learners in formative stages of education, the findings can be generalized to primary education.

UNICEF (2017) opines that by Grade 4, of the 650 million children who had enrolled in primary school by 2016, 120 million will drop out. According to World Bank (2017), global primary school completion rates declined from 91.073% in 2012 to 90.121% in 2014, with more boys than girls dropping out of school. Most countries in Sub-Saharan Africa are faced with problems of non-completion. Kenya's primary school completion rate was 105% in 2015, with almost equal numbers for both genders. However, children continue to drop out of school for a number of reasons, hunger being a crucial factor.

Chege (2013) found out that SFPs had significantly reduced primary school dropout rates in conflict zones of Isiolo Central District, especially because hunger was one of the key reasons for poor school retention, the other one being insecurity. Chege's (2013) findings were in tandem with those of Cheserem (2013) following a study conducted in Baringo County. SFP gave the incentive to children to come to school since most of them only counted the midday school meal as the sole meal of the day. In return, pupils who remained longer but progressed within the education system were determined to excel in academics to overcome the vagaries of poverty in future.

According to UNESCO (2012) pupils' participation in primary education in Kenya is hampered by poverty in households, among other reasons. The cost of sending children to school is too high for poor families. Moreover, even when families decide to send children to

primary school, girls are disadvantaged because of cultural norms that consider female children only good for marrying off and not for learning. Republic of Kenya (2015), asserts that the National School Health Policy of 2008 was developed to boost nutrition and health towards enhancement of pupils' participation and improved performance in education. Dheressa (2011) conducted a study to in Southern Ethiopia and established that poor families would rather use their children as sources of labour to overcome hunger instead of sending their children to school.

Under Kenya's National School Health Policy of 2008, over 1.3 million pupils received midday meals in primary schools, particularly in Arid and Semi-Arid Areas (ASALs) and slums, as a way of boosting School Feeding Programmes (SFPs). Other achievements of the programme included improvement of school facilities and enhancement of participation of parents in education and access to treatment and immunization services for pupils. In essence, SFPs are crucial in boosting participation of pupils in primary school education in Kenya (UNESCO, 2012).

2.3.Rationale of School Feeding Programs

According to World Bank (2012), SFPs are “targeted social safety nets that provide both educational and health benefits to the most vulnerable children, thereby increasing enrolment rates, reducing absenteeism, and improving food security at the household level.” This is in recognition of the fact that over 66 million children globally attend school while hungry and offering meals in schools – lunch, snacks and take-home meals – assuages hunger in the short term, thus allowing children to concentrate and participate in school activities. Moreover, the greatest impact of SFPs is said to be among the poorest learners.

World Bank (2016) opines that SFPs boost learning and education in general. Developed countries have modelled successful SFPs, but developing nations need to refine their approaches. The World Bank and the World Food Programme are at the forefront of providing material and technical support to low and middle-income countries on development of efficacious SFPs. Hgsf-global.org (2012) asserts that SFPs are crucial in fragile states and regions where children suffer from malnutrition and general ill health. Even

in states with relative peace, over \$30 billion is invested annually in feeding programmes in schools. The long-term development of a child is intricately interwoven with health and nutritional strategies within the education sector.

A study carried out in Ghana by Oduro-Ofori and Adwoa-Yeboah (2014) brought to the limelight some crucial issues on SFP. It was established that pupils had no role in deciding the type and quality of meals they took. Moreover, while many were satisfied with the menu and quality of meals, a few complained that the meals were not nutritious or adequate to keep them satiated until the next meal. Predictably, children from the most vulnerable families wanted the program to continue while majority of respondents wanted SFP to be improved in terms of the frequency and quality of meals.

2.4.Types of School Feeding Programmes and Pupils’ Participation in Education

According to Tomlinson (2007), based on the objectives of SFPs, these programmes can be categorized into five. School feeding as an emergency intervention, entails providing meals for children to eat in schools or to take home, especially during crises such as drought or war, or chronic epidemic (such as HIV) among parents, hence boosting enrolment and retention. Secondly, SFP can be a developmental intervention to aid recovery, in which case children get take-home rations, the intention being to increase food security in the wider community, while attracting children to school. The third type of SFP is implementing it as a nutritional intervention, especially in situations where food availed at home is not balanced, mostly due to poverty. The fourth version of SFP is meant to boost child cognitive development. While this type is related to the third, it emphasizes the need for children to take breakfast to improve their concentration, memory and verbal fluency. The last type is short-term and long-term food security with the intention of boosting educational outcomes, hence promoting literacy, education for girls, smaller families and better household management.

According to Lawson (2012), in the Kenyan primary school education context, SFP is practiced two-fold. Pupils benefit from either take-home rations or on-site meals or both. Children can be offered full meals or snacks at school under the latter, while the former entails giving children oil and dry cereals (in most cases) to take home after school. In

addition, for children to get school-based meals, they need to attend school daily while those interested in rations to take home are required to attend for a specified minimum number of days. The rationale in both instances is that school attendance is mandatory and antecedent to the child getting food. SFP, therefore, becomes an incentive for children to attend school daily, and in the case of take-home-rations, parents encourage children to go to school in order to return with rations that feed the entire family.

According to World Bank (2012), school-based meals also create an atmosphere of fairness and equality among students of different socio-economic class, thus promoting psychological contentment during learning. This owes to the fact that meals are fortified with essential minerals and vitamins in addition to being well-balanced, something that children from many homes cannot afford. School meals are either fully or partly prepared at school, but the quality is always higher than that of meals accessed by children from poor backgrounds. Nutritionally fortified biscuits and other snacks may also comprise the meals offered in school. Ideally, children who are fed on the same type of nutritional are offered the same pedestal to succeed in academics, considering the absence of disruptive stimuli such as hunger (WFP, 2017).

Kazianga, de Walque and Alderman (2009) assert that the minimum duration for a child to benefit from Take-Home-Rations differs from country to another. For example, in Burkina Faso, a pupil must attend at least 90% of classes to benefit under a World Food Programme (WFP) initiative. This approach is especially effective when targeting marginalized and vulnerable children, like girls. SFP, therefore, is crucial in promoting girl-child education. According to WFP (2013), take-home-rations came in handy for Afghani households that were severely affected by a dearth of wheat as well as inaccessible food markets. Alderman, Gilligan and Lehrer (2010) studied the impact of Food for Education (FFE) programmes on school participation in Northern Ugandan and established that Moreover, take-home meals also played a crucial role in encouraging children to attend school.

2.5.Frequency of Feeding and Pupils' Participation in Education

For SFPs to achieve their objectives, children need to be fed at regular intervals and consistently. According to WFP (2017), an SFP programme that had promoted school enrolment in Nigeria witnessed sudden decline as soon as pupils stopped getting free meals. This programme had been providing three meals per day for learners and the absenteeism and total withdrawal from school that followed suspension of the programme is indicative of the crucial role of SFPs in education, especially if the programme is sustained.

Yendaw and Dayour (2015) also documented how the need for consistency in Ghana's SFP resulted in the promotion of kitchen gardens and subsistence farming in the country. Government authorities encouraged farming to avert gaps in supply of food to schools as this would hamper participation of learners in education. A study by Githuku (2010) established that children who ate two meals per day in school were more contented; concentrated in their studies, and preferred being in school compared to those who got fewer meals. The study investigated how SFPs affected pupils' enrolment in Early Childhood Education and established that SFPs had increased enrolment. The frequency of feeding was particularly important in this regard.

2.6.Adequacy of Food and Pupils' Participation in Education

Closely related to the frequency of meals under School Feeding Programmes is the adequacy of rations that pupils receive. According to Lawson (2012), it is important to offer pupils the right amount of food in order to boost attention and cognitive abilities. In many poor household, children rarely take breakfast, thus making the midday school crucial for learning. Moreover, school meals are likely to be the only food the child will eat for the day. Consequently, there is need to make sure the food offered in school is of the highest quality and quantity. Wekesa (2015) carried out a study in Garissa County, Kenya, and found out that fortified adequacy of food rations was a crucial contributor to the success of failure of SFP.

Leathers and Foster (2009) assert that school meals should ideally provide about 30% -50% of the daily nutritional needs of a child, especially in terms of protein and energy. This

requirement cuts across age groups and is particularly crucial for children who spend most of their time in school, engaging in learning and play. As the progress into adulthood, pupils require even more energy, thus the need to increase rations. It is estimated that 4-8-year-olds need about 1692 calories every day while their 9-13-year-old counterparts should get 2195 calories daily. The study by Wekesa (2015) further established that offering fortified food to pupils was important especially because of high rates of malnutrition in Northern Kenya.

The amount and type of school meals served differs across countries. Namibian children receive 125 grams of fortified maize flour in form of porridge, and biscuits (WFP & PCD, 2011). Burbano (2011) observes that in Nigeria, children eat a cooked meal every day and the rations are adequate. According to WFP (2017), children who do not eat enough food experience hunger pangs, thus hindering learning. Moreover, many countries that implement SFP do not offer adequate food for pupils, and the little that is offered is the same variety, and this affects participation of children in school negatively.

Munyiri (2010), following a study in Kenya, established that children who were provided with adequate meals of high quality nutritional value, tended to love being in school. These pupils also reported that the meals they took in school were incomparable, both in terms of quantity and quality, to the ones they shared with siblings and the rest of the family at home. Parents, in this study, corroborated the information provided by their children. Most of the children in the study, took two meals per day at school, leaving the parent with the responsibility of preparing dinner only. These findings are corroborated by a report on school feeding by the Republic of Kenya (2015).

Drake *et al.* (2016) asserts that food rations need not only to be adequate quantitatively but also in terms of the nutritional value they provide to pupils. Children in school may have transcended the infantile period when they gain immensely from nutrition but their nutritional needs must continue to be addressed as they grow. According to Alderman (2009), for school-going children whose backgrounds do not guarantee micronutrient and adequate baseline energy levels, quality school meals are vital for weight and height

improvement, as well as warding off illnesses. Moreover, providing children with fortified food improves their cognitive abilities in the short term.

Child mortality is often attributed to malnutrition or low nutrition among other reasons. It is estimated that 35% of deaths among children in the developing world is indirectly due to poor nutritional foundation (WHO, 2010). The situation is aggravated by abject poverty in households and frequent famine especially in third world nations. Concerted efforts are needed, therefore, to deal with hunger and malnutrition among children, both at home and in school (Van de Poel, *et al*, 2008).

Githuku (2015) further established that the type of food offered under SFP was a positive factor especially because it was arrived at through consensus between parents and teachers. Despite this, the program was affected by some parents not being able to pay the required fees and not supplying firewood as expected. While this study did not focus on primary school children, it gives crucial insights into school feeding program at lower levels of education. Another important

2.7. Community Participation and Pupils' Participation in Education

School Feeding Programs (SFPs) cannot be successful if isolated from the community within which schools operate. Moreover, the participation of parents and other society members is crucial for the success of SFP. A case in point is Afghanistan where a school bakery failed to achieve its targets because of poor management and absence of community participation (WFP, 2013). According to the World Bank (2016), for SFPs to be successful, the community must have an input, for example through provision of labour, cash and food donations, and production and sales of the food to be consumed by children under the program. Moreover, the most effective SFPs are those that incorporate community participation right from the conception and planning stages of the project cycle management. A typical example of this is Malawi, where parents fetch firewood, prepare meals, serve the children, wash utensils and keep store records (Chikuni, 2010). Similarly, in Namibia, the community is involved in cooking meals for pupils, construction of stores and shelters, securing schools, organizing and participating in planning meetings, fundraising for SFP, tending school garden kitchens and providing utensils for the program (WFP, 2013).

According to Bundy *et al.* (2009), community participation indicates ownership of the project by parents and the community. Members of the community also encourage their children to go to school in order to benefit from SFPs. Further, contribution of the society to SFPs increases and improves communication between various stakeholders in the education sector, namely, administrators, teachers, parents and learners, thus promoting participation of children in education. In addition, program management, ancillary activities and program sustainability are impacted positively by participation of the community in provision of meals in school. According to WFP (2017), 72% of parents in 19 countries that were implementing SFPs were donating financial or material resources for projects run by WFP.

Munyiri (2010) carried out a study to establish the role of parents in SFPs and found out that parents offered a range of services including paying kitchen staff, constructing cooking facilities, providing utensils and serving learners. The study also revealed that parents encouraged children to eat at school. Parents also held regular meetings with school administrators to discuss, among other issues, the nutritional content of the meals offered to pupils. Concerning the financial contributions they made every term towards SFP, parents felt that the amount was insignificant considering the burden of preparing all meals at home. Cooks also reported high job satisfaction from serving children. Most of the cooks had no professional training but had learned from experience.

2.8.Theoretical Framework

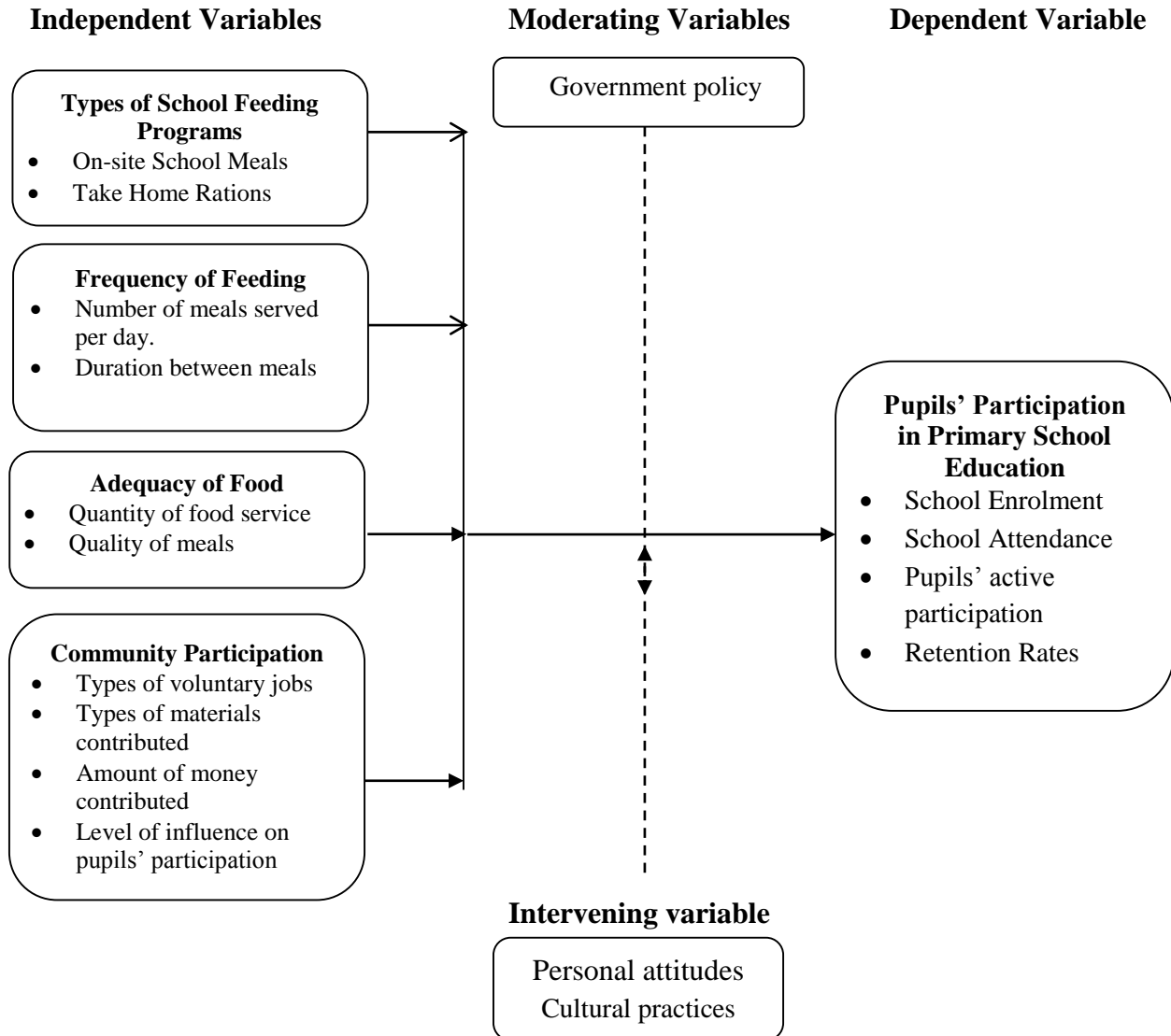
This study was guided by Abraham Maslow's Hierarchy of Needs. According to Hill and Tisdall (2014), Maslow presented his theory in a paper titled "Theory of Human Motivation" in 1943. His five-tier pyramidal model categorized human needs from the most basic ones that are necessary for survival to those that involve living a better life. The psychologists asserted that a need is physiological or psychological deficit which a human being is intrinsically compelled to satisfy. Satisfaction of lower-level needs sets the stage and offers motivation to achieve the needs on the higher level. However, a human being can regress to a lower level from a higher one when the lower level need demands satisfaction once again.

This theory is applicable to SFP because it explains how the programme is used as bait or motivator to ensure children enrol in school attend lessons, participate actively and remain in school for the expected duration. To meet the cognitive needs of a pupil, it is important to address his or her physiological wellbeing. Giving pupils meals in school enables learners to concentrate on studies, in the hope that they can attain the resources they require to meet their higher-level needs. In other words, availability of food in school for children who would normally go without food at home, is an inducement for school attendance and learning. School then creates fecund ground and adequate motivation for children to aspire to improved lives courtesy of education. Despite this, as studies by Dheressa (2011), Cheserem (2013), Mkanyika (2014) and Chege (2013), have revealed, free schooling can be a positive motivating factor while insecurity, negative cultural practices, child labour and migration in search of pasture can have the opposite effect.

2.9. Conceptual Framework

Figure 1 is the conceptual framework that was used in this study. A conceptual framework is a diagrammatic representation of the relationship between various variables.

Figure 1. Conceptual Framework



2.10. Summary of Conceptual Framework

Pupils participation in primary school education in Samburu East Constituency, Samburu County, is the dependent variable in this study. It entails school enrolment, school attendance, pupils' active participation in school and pupils' retention. There are four independent variables. To begin with, types of school feeding programmes that affect participation of pupils are on-site meals and take-home-rations (THR). Secondly, frequency of feeding programmes involves number of meals served per day and the duration between meals. Thirdly, adequacy of food consists of quality and quantity of meals. Lastly, community participation encompasses the material and immaterial contribution of the society to SFP, such as money and labour as well as the influence society's participation has on pupils' participation in school. Moderating variables such as government policy and cultural values have a role to play in determining pupils' participation in primary school education, but these variables are not being studied. Finally, the personal attitudes of pupils are intervening variables because they have a role to play in participation in school activities, albeit to a slight extent.

2.11. Research Gaps

A number of studies have been conducted in the area of School Feeding Programmes (SFPs) and their influence on education, albeit from different perspectives. Majority of these studies do not differentiate the various aspects of SFP, choosing to treat the programme singularly. Chege (2013) investigated the "Influence of School Feeding Programme on Pupils' Participation in Primary Schools in Conflict Areas", specifically, Isiolo County. Similar studies were conducted by Cheserem (2013) in Baringo County, Mkanyika (2014) in Garissa County and Dheressa (2011) in Southern Ethiopia. Some researchers studied how SFPs affected specific aspects of pupils' participation in education. They include Chikuni (2010), who focussed on school attendance and retention in Zambia; Githuku (2015), who delved into pupils' enrolment in Early Childhood Education (ECD) in Embu County; Ndung'u (2010), who investigated access and retention in Nairobi, and Wekesa (2015), who concentrated on school retention in Garissa County. The current study not only differentiates various aspects of SFP, it also approaches participation in primary school education in terms

of enrolment, attendance, active participation and retention. Moreover, no similar study had been conducted in Samburu East Constituency before this one, thus filling a unique gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1.Introduction

This chapter discusses the research methodology that was utilized in the study. It explains the research design, delineates the target population, delves into the sampling procedure and describes the research instrument that were used. This section also explains how the data collection instrument was assessed for validity and reliability; describes data collection and analysis procedures, elaborates how ethical issues were dealt with, and culminates with a summary of the definition of variables.

3.2.Research design

A research design is the framework that explains the relationships between various aspects of the study and explains how the research will be carried out to the end. This study was based on a descriptive survey design, which entails collecting data on a phenomenon and describing the latter without alterations or manipulations (Mertler, 2006). This study was designed to examine the influence of School Feeding Programmes on pupils' participation in primary school education in Samburu East Constituency, Samburu County.

3.3.Target population

The term population in research describes all the items whose characteristics qualify them for the study (McBurney & White, 2009). In this study, the population comprised pupils benefiting from SFP, and teachers and headteachers in all public primary schools in Samburu East Constituency. There were 45 public primary schools in the constituency, with a total of 11,350 pupils and 362 streams and 297 teachers.

3.4.Sampling Procedure

A population is generally too large to be studied in entirety. Consequently, it is important to derive a small portion of the population which can be studied conveniently and whose findings can be generalized to the entire population (Trochim & Donnelly, 2006). The researcher used purposive sampling to select 27 primary schools out of 45 available since the 27 have 8 streams to represent the 8 classes of a complete primary school. This is also

because the study intended to collect data from children in upper primary school i.e. Standard 4 to Standard 8, and schools normally create classes progressively.

According to Mugenda and Mugenda (2003), a sample of between 10% and 30% is acceptable in descriptive studies. Consequently, the researcher derived 30% from the 27 schools eligible for the study, thus remaining with nine (9) schools as the sample. The researcher used stratified random sampling to distribute the 9 schools across the four wards of the constituency as follows:

Table 3.1. Sampling Frame

	Ward	Population	Sample
1	Wamba		6
2	Nairimirimo		11
3	Sereolipi		2
4	Waso		8
	Total		27

Census sampling was used to select all the 9 headteachers of the schools to form the sample. In addition, since data from pupils was to be derived from upper primary classes, purposive sampling and simple random sampling (where there is more than one stream for one level of education) was used to select one teacher per class for the five classes in each of the nine schools. In essence, each school was represented by 5 teachers, with the total for the 9 schools being 45 teachers. In addition, based on the data provided by the Ministry of Education, the average number of students per stream in Samburu East Constituency was 31. Using the concept provided by Mugenda and Mugenda (2003), as explained above, the researcher derived a random sample of 10% from every class, implying that the five levels were represented by 3 pupils each, totalling to 15 pupils per school and 135 pupils for the 9 schools in the study. In essence, the sample from which data was collected was - 9 Headteachers, 45 Teachers and 135 pupils - to make a total of 189 respondents.

3.5. Research instrument

For purposes of data collection, the study used a questionnaire. This is a data collection instrument that requires respondents to offer written answers to open-ended as well as close-ended questions. The questionnaire has the advantage of collecting accurate information and opinions, an aspect that ensures the researcher has both qualitative and quantitative data. Three different questionnaires were used for each category of respondents – headteachers, teachers and students. However, respective questionnaires were structured based on specific research objectives.

3.6. Validity and reliability of research instrument

3.6.1. Validity of instruments

Connaway and Powell (2010) assert that a data collection instrument has validity when it measures the variables it was meant to. The research used test-retest method to measure the validity of the questionnaire to be used in this study. Respective questionnaires were administered on at least 10% of the targeted sample. Two headteachers, five teachers and fourteen pupils from three different schools which were not part of the sample were given respective questionnaires to fill, and the responses were assessed for consistency. The researcher discussed the responses and analysis with the supervisor to establish gaps that needed to be filled before testing the questionnaires on the same individuals. The final instrument was used to collect data during the study.

3.6.2. Reliability of data instruments

A data collection instrument that is reliable measures variables in accurately and reliably (Connaway & Powell, 2010). In this study, the measure of reliability was The Cronbach Alpha. It was used to assess the test-retest questionnaires to establish whether they were reliable. The test and retest questionnaires reliability test returned a Cronbach's Alpha of 0.82, which is above the 0.7 (Andrew, Pedersen & McEvoy, (011)).

3.7. Data collection procedure

The researcher sought for authorization to collect data from University of Nairobi, and the Deputy County Commissioner and Sub-County Education officer in Samburu East. Data was collected from headteachers, teachers and pupils with the permission of school administrators. Three local research assistants were trained to help distribute / administer and collect questionnaires in respective schools in three wards. The remaining ward was handled by the researcher.

3.8. Data analysis technique

Data analysis aims at reducing data into units that can be interpreted logically in a manner that enables the testing of relationships between variables and the drawing of conclusions from findings (De Vaus, Fouche & Delport, 2005). The data collected from this study was edited, coded and classified based on the research objectives. Statistical Package for Social Sciences (SPSS) was used to generate frequency tables and charts for presentation of results since this is a descriptive study. The findings were presented and discussed thematically.

3.9. Ethical issues

The researcher obtained pertinent written authorization to carry out the researcher and attached the letter to the questionnaire to be issued to respondents. Moreover, respondents were given the assurance that the data being collected from them would only be used for academic purposes. The researcher also informed respondents not to indicate their names on the questionnaire and that participation was voluntary.

3.10. Operational Definition of variables

The following table expounds on the type of variables in the study, how they were identified and measured; how data was collected, the level of scale as well as type and level of analysis.

Table 3.2. Operationalization Table

	Research Objective	Type of Variable	Indicator	How to Measure Indicator	Level of Scale	Type of Analysis	Level of Analysis
1.	Pupils participation in primary school education	Dependent: Participation in education	School Enrolment	No. of pupils enrolled	Ratio	Quantitative	Descriptive
			School Attendance	Frequency of attendance	Ratio	Quantitative	Descriptive
			Pupils' Active participation	Level of participation in school activities	Ordinal	Quantitative	Descriptive
			Pupils' Retention	No. of pupils in school	Ratio	Quantitative	Descriptive
2.	To establish how types of school feeding programmes influence pupils' participation in primary school education in Samburu East Constituency.	Independent: Types of School Feeding Programmes	SFP options available to pupils	Type of School Feeding Programmes	Nominal	Qualitative	Descriptive
3.	To assess how frequency of feeding affects pupils' participation in primary school education in Samburu East Constituency.	Independent: frequency of feeding	Frequency of meals	No. of times pupils are given food	Ratio	Quantitative	Descriptive
				Duration between meals	Interval	Qualitative	Descriptive
4.	To examine how adequacy of food influences pupils' participation in primary school education in Samburu East Constituency.	Independent: adequacy of food	Quantity and Quality of food	Amount of food served	Ratio	Quantitative	Descriptive
				Types of minerals and nutrients in food	Nominal	Qualitative	Descriptive
5.	To determine the influence of community participation on pupils' participation in primary school education in Samburu East Constituency.	Independent: community participation	Community's contribution to SFP	Rate of retention	Ratio	Quantitative	Descriptive
				Types of voluntary jobs	Nominal	Quantitative	Descriptive
				Types of materials contributed	Nominal	Qualitative	Descriptive
				Amount of money contributed	Ratio	Quantitative	Descriptive
				Levels of influence on pupils' participation	Ordinal	Qualitative	Descriptive

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1. Introduction

This chapter entails data analysis, presentation and interpretation of findings based on research objectives and presented thematically. Data is presented in frequency tables. The study sought information from headteachers, teachers and pupils on the influence of school feeding program on participation of pupils in public primary school education in Samburu East Constituency, Samburu County, Kenya.

4.2. Questionnaire Return Rate

Three sets of questionnaires were issued to 9 headteachers, 45 teachers and 135 pupils, respectively. The researcher managed a return rate of 100% for all categories of questionnaires owing to cooperation by teachers, who filled their questionnaires and helped collect information from pupils.

4.3. Demographic Information of Respondents

The study sought for information on the demographic characteristics of the respondents including gender, age, number of years served, level of education and other characteristics from the headteachers, teachers and pupils respectively.

4.3.1. Gender of Respondents

Table 4.1. summarizes gender distribution among various classes of respondents.

Table 4.1. Gender of Respondents

Gender	H/Teachers	Percent	Teachers	Percent	Pupils	Percent	Total	Percent
Male	8	88.9	27	60.0	90	66.7	125	66.1
Female	1	11.1	18	40.0	45	33.3	64	33.9
Total	9	100	45	100	135	100	189	100

It is evident that males (66.1%) outnumber females (33.9%) in all spheres of the Samburu East primary school academic community. This can be attributed to the marginalization of the girl-child in society in general and education in particular in a society that has detrimental cultural practices such as early marriages, FGM (Female Genital Mutilation) and little or no

education for girls. The low rates of girl-child participation in education (33.3%) are reflected at higher levels of education and life with about 60% of teachers and 88.9% of headteachers being male.

4.3.2. Headteachers' and Teachers' Ages

The study also sought information on the ages of headteachers and teachers and the information is presented in Table 4.2.

Table 4.2. Headteachers' and Teachers' Ages

Age	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Below 30 years	0	0	14	31.1	14	25.9
30 - 35 years	2	22.2	10	22.2	12	22.2
36 - 40 years	1	11.1	7	15.6	8	14.8
41 - 45 years	2	22.2	5	11.1	7	13.0
46 - 50 years	3	33.3	5	11.1	8	14.8
Over 51 years	1	11.1	4	8.9	5	9.3
Total	9	100	45	100	54	100

The information on Table 4.2 indicates that majority of the teaching staff falls within the age-brackets of 'Below 30 years' (25.9%) and '30-35 years' (22.2%). However, among the headteachers, majority (33.3%) are aged 46-50 years, which is understandable considering the positive correlation between age and seniority in school management hierarchy. Moreover, it indicates that school heads have garnered adequate experience and knowledge to plan, organize, control and coordinate school feeding programmes in a manner that promotes effective participation of pupils in education. The fact that majority of teachers (31.1%) are aged below 30 years also attests to the pyramidal establishment of teaching cadre in terms of age, while increasing the sustainability and effectiveness of SFPs among future generations of headteachers.

4.3.3. Years Served as Headteacher

The study further investigated the number of years served by respective heads of schools in management, and the results are presented in Table 4.3.

Table 4.3. Years Served as Headteacher

Time	Frequency	Percent
1 - 5 Years	3	33.3
6 -10 Years	1	11.1
11 - 15 Years	2	22.2
16 - 20 Years	2	22.2
Over 20 Years	1	11.1
Total	9	100

From Table 4.3. it is evident that majority of the school administrators (33.3%) had served at that level for a period of between 1 and 5 years. However, cumulatively, 55.5% of the headteachers had experiences of between 11 and 20 years which attests to their vast experiences not only as school heads but also as implementers of SFP in respective schools.

4.3.4. Duration Teacher Has Served in Current Station / School

The study sought to establish how long respective teachers had served in their current schools and the information is presented in Table 4.4.

Table 4.4. Duration Teacher Has Served in Current Station / School

Time	Frequency	Percent
Below 1 Year	1	2.2
1 - 5 Years	10	22.2
6 -10 Years	17	37.8
11 - 15 Years	12	26.7
16 - 20 Years	2	4.4
Over 20 Years	3	6.7
Total	45	100

From Table 4.4. majority (37.8%) of the teachers had served for a period of between 6 and 10 years in their current schools, with only 2.2 % having served below 1 year. This implies that the teachers have sufficient knowledge of the implementation of SFP in their school and

were, therefore, in a position of authority, to assess how this programme impacts pupils' participation in education in respective schools.

4.3.5. Professional Qualifications of Headteachers and Teachers

The study sought to establish the professional qualifications of teachers in respective schools, and the results are summarised in Table 4.5.

Table 4.5. Professional Qualifications of Headteachers and Teachers

Qualifications	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Untrained Teacher	0	0	1	2.2	1	1.8
P1	0	0	23	51.1	23	42.6
SI/SII	6	66.7	13	28.9	19	35.2
Graduate	3	33.3	8	17.8	11	20.4
Total	9	100	45	100	54	100

From Table 4.5. it is evident that majority (66.7%) of the headteachers are in Grade SI/SII, which qualifies them for the responsibility they hold. Moreover, all school heads have attained this grade or more, implying they have the requisite experience and competency to implement SFP in respective schools. Among teachers, majority (51.1%) are at P1 level, which is the minimum qualification for a teacher to be employed to teach in primary school. Cumulatively, 98.2% of the teachers have P1 level of education.

4.3.6. Pupils' Level of Education

The 135 pupils sampled in the study were drawn proportionately from upper primary classes of each of the nine schools as summarized in Table 4.6.

Table 4.6. Pupils' Level of Education

Level	Frequency	Percent
Standard 4	27	20.0
Standard 5	27	20.0
Standard 6	27	20.0
Standard 7	27	20.0
Standard 8	27	20.0
Total	135	100

The researcher used this approach to ensure data collected was reliable and representative of children who would be in school the entire day as opposed to those who spent half-day in school. The sampled pupils were, therefore, in a position to explain the effect of SFP food on their concentration in school and participation in education in general.

4.3.7. Types of Schools

The study also wanted to establish the types of the headteachers and teachers worked in. Table 4.7. summarizes the responses:

Table 4.7. Types of Schools

Type of School	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mixed Boarding	3	33.3	15	33.3	18	33.3
Mixed Day	6	66.7	30	66.7	36	66.7
Total	9	100.0	45	100.0	54	100.0

From Table 4.7. It is evident that majority of schools are mixed day type (66.7%), which means some of the pupils may rely only on the school meal for survival, thus elevating the significance of SFP.

4.4. Types of School Feeding Programmes and Participation in Primary School Education

The study sought to establish the types of SFPs practiced in various schools and how the choice of SFP influenced participation of pupils in primary school education in Samburu East Constituency.

4.4.1. Duration of Implementation of SFP

Headteachers and teachers were asked to indicate the number of years SFP had been implemented in respective schools. The responses are presented in Table 4.8.

Table 4.8. Duration of SFP Implementation

Duration	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
6 - 10 Years	1	11.1	2	4.4	3	5.6
11 - 15 Years	2	22.2	7	15.6	9	16.7
16 - 20 Years	3	33.3	18	40.0	21	38.8
21 - 25 Years	2	22.2	10	22.2	12	22.2
More than 25 Years	1	11.1	8	17.8	9	16.7
Total	9	100.0	45	100.0	54	100

From Table 4.8. it is evident that majority (38.8%) of the schools have implemented SFP for a period of between 16 and 20 years. The same trend is evident when the information is disaggregated to represent headteachers (33.3%) and teachers (40%). This track record in majority of the schools implies that the instructors and administrators understand the influence SFP has on pupils' participation in education.

4.4.2. Sources of Food for SFP

Probed on where food for SFP came from, headteachers indicated that most of their rations were provided by the Government of Kenya, World Food Programme (WFP – in collaboration with the government, religious organizations, local Non-Governmental Organizations (NGOs) and in some cases, parents. This information is indicative of concerted efforts by various stakeholders to upscale and boost the capacity of SFP to promote pupil enrolment, concentration, attendance and retention in primary schools.

4.4.3. Form of SFP Implemented in School

School heads and teachers were asked to indicate the form of SFP that they implemented in their schools. All the respondents indicated that they gave pupils on-site meals and not take-home rations. In a study conducted in Garissa County, Wekesa (2015) had established that teachers considered on-site meals to be better incentives to children to attend school compared to take-home-rations.

4.4.4. Influence of Form of SFP on Pupils' Participation in Primary Education

The study further sought to know from school heads and teachers the extent to which the form of SFP implemented in a school influenced primary pupils' participation in education. The responses are presented in Table 4.9.

Table 4.9. Extent to Which Form of SFP Influences Participation in Education Table

Responses	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very Great Extent	5	55.6	13	28.9	18	33.3
Great Extent	4	44.4	30	66.7	34	63.0
Moderate Extent	0	0	2	4.4	2	3.7
Total	9	100	45	100	54	100

From the information in Table 4.9. all headteachers opined that the form of SFP implemented had a positive influence on participation of pupils in education, which is comparable to 95.6% of teachers who gave similar opinions. Cumulatively, 96.3% of the respondents regarded the form of SFP practiced in a school as a significant influence on pupils' involvement in education in schools.

4.4.5. Pearson Product-Moment Correlation on Type of SFP on Pupils' Participation in Primary School Education

To establish the influence of type of School Feeding Programme on participation of pupils' in primary school education, Pearson Product-Moment Correlation was used. Table 4.10. summarizes the results.

Table 4.10. Correlations of Type of SFP and Pupils' Participation in Primary School Education

		Type of SFP Implemented	Pupils' Participation in Education
Pearson	Type of SFP Implemented	1.000	0.73
Si 2 - tailed	Pupils' Participation in Education	0.73	1.000
N	189	189	

Correlation is significant at the 0.01 level (2-tailed).

From the results on Table 4.10. it is evident that there is a strong positive relationship (0.73) between type of SFP implemented in a school and the participation of pupils in primary education. This correlation was statistically significant at 0.01 level of confidence. In essence, pupils' participation improved with the type of SFP provided, and vice versa.

4.5. Frequency of Feeding and Participation in Primary School Education

The study also investigated the influence of school feeding programmes and participation of pupils in primary school education in Samburu East Constituency. Respondents were required to provide information on the number of times learners ate and how this influenced their participation in learning.

4.5.1. Number of Meals Served to Pupils Per Day

The study also probed headteachers, teachers and pupils on the number of meals served to pupils every day in each school. Majority of the headteachers (55.6%), teachers (60%) and pupils (56.3%) indicated that pupils were fed once every day. Those who indicated that learners ate three meals every day were from mixed day and boarding schools, and their responses were headteachers (33.3%), teachers (33.3%) and pupils (34.8%) respectively. The number of meals served depended on the type of school and availability of food. For pupils attending school from home, it was assumed that the child would take breakfast at home and only require a midday or afternoon meal in school.

4.5.2. Influence of Frequency of Serving on Participation in Education

The study also sought to establish from headteachers and teachers the extent to which the number of times pupils were served and the duration between meals influenced participation of pupils in education positively. The responses are summarized in Table 4.11.

Table 4.11. Influence of Frequency of Meals on Participation in Education

Responses	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very Great Extent	5	55.6	14	31.1	19	35.2
Great Extent	3	33.3	26	57.8	29	53.7
Moderate Extent	1	11.1	5	11.1	6	11.1
Total	9	100	45	100	54	100

As indicated in Table 4.11. majority of the respondents (53%), cumulatively, believe that frequency of school meals influenced participation in education for primary school pupils positively, to a great extent.

4.5.3. Pearson Product-Moment Correlation on Influence of Frequency of Feeding on Pupils' Participation in Primary School Education

To establish the influence of frequency of School Feeding Programme on participation of pupils' in primary school education, Pearson Product-Moment Correlation was used. Table 4.12. summarizes the results.

Table 4.12. Correlations of Frequency of Feeding and Pupils' Participation

		Frequency of Feeding	Pupils' Participation in Education
Pearson	Type of SFP Implemented	1.000	0.41
Si 2 - tailed	Pupils' Participation in Education	0.41	1.000
N	189	189	

Correlation is significant at the 0.01 level (2-tailed).

It is evident from Table 4.12 that frequency of feeding has a moderate positive (0.41) influence on pupils' participation in primary school education. There was a strong positive correlation between the two variables at 0.01 level of significance, implying that the more times students were fed, the more they participated in learning, albeit at a moderate level.

4.6. Adequacy of Food and Participation in Primary School Education

The study sought to establish whether the amount of food served was qualitatively and quantitatively adequate to keep children active in school in a manner that encouraged them to participate in education.

4.6.1. Types of Meals Served in Schools

All respondents (school heads, teachers and pupils) were asked to indicate the type of meals the latter were served in school. Githeri (a mixture of maize and beans) was indicated as the main food for pupils attending school during the day. Moreover, those who were in boarding schools indicated that they also took porridge for breakfast and Ugali for supper. Githeri, the main food, when mixed with vegetables, is a balanced meal, which is also easy to prepare, thus the preference by implementers of SFP. In essence, children in Samburu East Primary Schools were getting at least one balanced meal in a day in school.

4.6.2. Influence of Adequacy of Food on Participation in Education

The study sought information on how adequacy of food, both in quality and quantity influenced pupils' participation in education. The responses of headteachers and teachers are presented in Table 4.13.

Table 4.13. Extent to Which Adequacy of Meals Influences Participation in Education

Responses	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very Great Extent	3	33.3	15	33.3	18	33.3
Great Extent	5	55.6	28	62.2	33	61.1
Moderate Extent	1	11.1	2	4.4	3	5.6
Total	9	100	45	100	54	100

From Table 4.13. it is evident that most primary school instructors and administrators (61.1%) believe that adequacy of food positively influences participation in education to a great extent. Cumulatively, 94.4% of the respondents were in agreement that SFP food was adequate enough to promote enrolment, attendance, active participation and retention levels in primary schools in Samburu East Constituency.

In addition, when asked whether SFP meals were adequate enough to keep them attentive during learning, 86.7% of the pupils sampled answered in the affirmative, thus corroborating their opinions of their teachers and school heads.

4.6.3. Pupils’ Favourite Meals – Home Vs School Meals

The study further probed pupils on which food they preferred between home meals and school food. Their responses are summarised in Table 4.14.

Table 4.14. Pupils’ Favourite Source of Food

Preference	Frequency	Percent
School Food	53	39.3
Home Food	82	60.7
Total	135	100

From Table 4.1.4. it is evident that while pupils consider school food adequate to keep them attentive to school, majority (60.7%) prefer home food to school food.

4.6.4. Pupils’ Reasons for Preferences of Respective Meals

The study sought explanations from pupils on their food preferences. Their responses are presented in Table 4.15.

Table 4.15. Pupils' Reasons for Preferences of Respective Meals

Responses	Frequency	Percent
Home food is adequate and of higher quality	61	45.2
Home food has more variety	21	15.6
School food is always available	27	20.0
School offers a balanced diet	22	16.3
Eating together with other pupils is enjoyable	4	3.0
Total	135	100

Those who preferred home food asserted that it was adequate, of higher quality and differentiated. Lack of variety in school meals is corroborated by earlier findings that Githeri was the main type of meals served in school. However, those who preferred school meals cited availability and food in school being balanced, an indication that such learners were from poor backgrounds that could not afford better meals.

4.6.5. Influence of School Meals on School Attendance

The study further probed pupils on whether availability of school meals influenced their decisions to attend school. Majority (59.3%) answered in the negative, indicating there are other motivations for attending to school apart from free meals.

When tasked to explain their reasons for responses on whether availability of food in school influences attendance, the pupils gave the responses summarised in Table 4.16.

Table 4.16. Relationship Between Provision of School Meals and School Attendance

Responses	Frequency	Percent
We often lack food at home	56	41.5
I don't have to go and look for food	5	3.7
My family affords food always	15	11.1
I go to school to learn, not to eat	59	43.7
Total	135	100

As indicated in Table 4.16. majority of the pupils (43.7%) indicated that the reason they went to school was to learn and that availability of food was not a significant factor in the decision

to attend school. Among those who claimed that they would not attend school if there was no food, majority (41.5%) cited erratic supply of food at home as their reason.

4.6.6. Availability of Free Meals and Pupils Retention

The study further sought to establish whether availability of free meals in primary schools influenced pupils’ decisions to remain in school for the long haul or to drop out. Majority (58.5%) of the pupils replied in the negative, which means they would continue learning even without SFP meals.

Probed further on their answers, learners gave the responses summarized in Table 4.17.

Table 4.17. Influence of Free School Meals on Pupils’ Retention

Responses	Frequency	Percent
Food boosts concentration in school	50	37.0
I don't have to work for food	7	5.2
My family provides for all my food needs	29	21.5
Education is more valuable than a meal	49	36.3
Total	135	100

As Table 4.17. reveals, among the pupils who had indicated that free food would influence their decision to remain in school, majority (37%) indicated that food boosted their concentration in school. on the other hand, among those who felt food did not determine their continued stay in school, majority (36.3) indicated that they valued food above free school meals.

4.6.7. Pearson Product-Moment Correlation on Influence of Adequacy of Food on Pupils’ Participation in Primary School Education

To establish the influence of adequacy of food on participation of pupils’ in primary school education, Pearson Product-Moment Correlation was used. Table 4.18. summarizes the results.

Table 4.18. Correlations of Adequacy of Food and Pupils' Participation in Primary School Education

		Frequency of Feeding	Pupils' Participation in Education
Pearson	Type of SFP Implemented	1.000	0.48
Si 2 - tailed	Pupils' Participation in Education	0.48	1.000
N	189	189	

Correlation is significant at the 0.01 level (2-tailed).

As Table 4.18 indicates, adequacy of food has a moderate positive (0.48) influence on pupils' participation in primary school education. This implies that though participation in education increases as quantitative and qualitative adequacy of food increases, the relationship is not significantly strong.

4.7. Community Participation in SFP and Participation in Education

The study also wanted to establish how community participation in SFP influenced participation of pupils in education in primary schools in Samburu East Constituency.

4.7.1. Forms of Community Participation in SFP

All the three categories of respondents were asked to indicated ways in which the community participated in school feeding programmes in respective schools. The main forms of participation were indicated as fetching firewood and water, buying utensils, contributing foodstuff, offloading food from vehicles, financial contribution, attending planning meetings cooking. However, in a few schools, the community did not play any role in the programme. It is evident that the community participates actively in SFP.

4.7.2. Influence of Community Participation on Pupils' Participation in Education

Headteachers and teachers in the study was asked to indicate the extent to which community participation in SFP influenced pupils' participation in education. Their responses are summarized in Table 4.19.

Table 4.19. Influence of Community Participation on Participation in Education

Responses	Headteachers		Teachers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very Great Extent	2	22.2	7	15.6	9	16.7
Great Extent	3	33.3	18	40.0	21	38.9
Moderate Extent	3	33.3	15	33.3	18	33.3
Small Extent	1	11.1	3	6.7	4	7.4
No Extent at All	0	0	2	4.4	2	3.7
Total	9	100	45	100	54	100

From Table 4.19, it is evident that majority of the respondents (38.9%) consider community participation to as influencing pupils' participation in education to a great extent. Moreover, 55.6% of the headteachers and teachers have a positive attitude towards community participation's role in learning activities. However, it is important to note that 33.3% of the respondents see no significant influence of community participation in SFP. When pupils were asked whether community participation influenced their decision to continue learning, majority (82.2%) answered in the affirmative. This data indicates that pupils are motivated to continue learning when they see the way their parents and other members of the community assist in SFP activities.

4.7.3. Spearman Rank-Order Correlation on Influence of Community Participation on Pupils' Participation in Primary School Education

A Spearman's rank-order correlation was run to determine the relationship between community participation in SFP and pupils' participation in primary school education. Table 4.20, summarizes the results.

Table 4.20. Correlations of Community Participation and Pupils' Participation in Primary School Education

		Frequency of Feeding	Pupils' Participation in Education
Spearman's rho	Type of SFP Implemented	1.000	0.75
Si 2 - tailed	Pupils' Participation in Education	0.75	1.000
N	189	189	

Correlation is significant at the 0.01 level (2-tailed).

As evidenced by Table 2.20. there was a strong, positive correlation (0.75) between community participation in SFP and participation of pupils in primary school education. This implies that as community participation increased, so did participation of pupils in education, an indicator of the positive influence of parents on pupils.

4.8. Pupils' Participation in Primary School Education

The study also sought information on pupils' participation in primary education. Specifically, the study wanted to gather details of school enrolment, attendance, active participation and retention.

4.8.1. School Enrolment

Headteachers were asked to indicate school enrolment, and their responses are indicated in Table 4.21.

Table 4.21. School Enrolment

No. of Pupils	Frequency	Percent
201 – 300	1	11.1
301 – 400	1	11.1
401 - 500	3	33.3
501 - 600	2	22.2
601 - 700	1	11.1
More than 700	1	11.1
Total	9	100.0

From Table 4.21. it is evident that majority of the schools (55.5%) have between 401 and 600 pupils. This is understandable considering Samburu East as an Arid and Semi-Arid Land (ASAL), with sparse population. Moreover, harmful cultural practices play a significant role in curtailing school enrolment and retention, especially among girls. In addition, majority of the school heads (77.8%) reported that enrolment was increasing. Only one school reported a decline in enrolment.

4.8.2. School Attendance

The study further sought information from school teachers on school attendance levels. Table 4.22 presents the findings.

Table 2.22. School Attendance Levels

Level of Attendance	Frequency	Percent
51 - 75%	11	24.4
Over 75%	34	75.6
Total	45	100

As evidenced by Table 4.22, majority of the schools (75.6%) had attendance levels of over 75% which is impressive considering the geography, weather and cultural environment of Samburu East. In addition, 82.6% of the teachers considered attendance to be on the increase in their schools.

4.8.3. Status of Pupils' Participation in School Activities

The study also inquired from teachers the status of participation of pupils in classroom activities. Majority of the instructors (93.3%) indicated that pupils were active when participating in school activities.

4.8.4. School Retention Rates

The study also sought to establish the number of school pupils who had dropped out of school due to hunger related issues in the last one year. All teachers in the nine schools indicated that less than 10 pupils had stopped coming to school due to lack of food. This indicates that SFP had been successful in stemming hunger-related school dropout cases.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The overall objective of the study was to determine the influence of school feeding programmes on participation of pupils in primary school education in Samburu East Constituency, Samburu County. This chapter consists of the summary of findings, pertinent discussions as well as recommendations and suggestions for further research.

5.2. Summary of Findings

The study had four objectives and respective findings are presented thematically.

5.2.1. Types of School Feeding Programmes and Pupils' Participation in Primary School Education

The first objective of the study was to establish how types of school feeding programmes influence pupils' participation in primary school education in Samburu East Constituency. The study found out that type of SFP influences participation of pupils in primary school education. Majority of the schools (38.8%) had implemented SFP for a period of between 16 and 20 years, implying that administrators and instructors understood the influence SFP has on pupils' participation in education. The Government of Kenya was the key provider of SFP food, with WFP and other charitable organization supplementing supplies. It was also established that all sampled schools only provided on-site meals, which were more potent as incentives to school attendance and learning compared to take-home-rations. In addition, 96.3% of the headteachers and teachers regarded the form of SFP practiced in a school as a significant influence on pupils' involvement in education in schools. Spearman's product-moment correlation between type of SFP implemented in a school and the participation of pupils in primary education was found to be strong and positive (0.73) at a 0.01 level of significance.

5.2.2. Frequency of Feeding and Pupils' Participation in Primary School Education

The second objective of the study was to assess how frequency of feeding influences pupils' participation in primary school education in Samburu East Constituency. The study established that majority of the schools provided one meal per day to pupils, as attested to by headteachers (55.6%), teachers (60%) and pupils (56.3%). Moreover, it was established that

most headteachers and teachers (53%), cumulatively, believed that frequency of school meals influenced participation in education for primary school pupils positively, to a great extent. The relationship between frequency of feeding and pupils' participation in primary school education was found to be moderately positive at 0.41, at a 0.01 level of significance.

5.2.3. Adequacy of Food and Pupils' Participation in Primary School Education

The third objective of the study was to examine how adequacy of food influences pupils' participation in primary school education in Samburu East Constituency. It was established that the main type of food in all the sampled schools was Githeri (a mixture of maize and beans), which, when enriched with vegetables is considered a balanced diet. The study established that majority of the headteachers and teachers (94.4%) and pupils (86.7%) believed SFP food was adequate enough to promote participation in education. Despite this, most of the pupils (60.7%) preferred home food to school food, because the former came in more varieties, was more nutritious and of higher quantities. The study also found out that majority of the pupils (59.3%) were not influenced by availability of meals to attend schools as they valued learning more than the food they ate in school. This was buttressed by further assertions by majority of the pupils (58.3%) that they would not drop out of school if SFP was stopped, once again citing the opportunity to get an education as being more important than free school meals. Spearman's product-moment correlation between type of SFP implemented in a school and the participation of pupils in primary education was found to be moderately positive (0.48) at a 0.01 level of significance.

5.2.4. Community Participation in SFP and Pupils' Participation in Education

The final objective of the study was to determine the influence of community participation on pupils' participation in primary school education in Samburu East Constituency. The study established that the community participated in providing free meals to pupils in schools by fetching firewood and water, buying utensils, contributing foodstuff, offloading food from vehicles, financial contribution, attending planning meetings cooking. It was established that majority of the headteachers and teachers (55.6%) believed that community participation influenced pupils' participation to education to a large or very large extent. Pupils corroborated this information, with majority of them (82.2%) they were motivated to continue learning owing to the contributions of the members of the society to SFP. Using Pearson's Product-Moment Correlation, the study established that there was a strong, positive

(0.75) relationship between frequency of feeding and pupil's participation in primary school education.

5.3. Discussion of Findings

The study was based on four independent variables: types of school feeding programmes, frequency of feeding, adequacy of food and community participation, and how these variables affected the dependent variable – pupils' participation in primary school education.

5.3.1. Influence of Types of School Feeding Programmes on Pupils' Participation in Primary School Education

The findings of the study indicate that type of SFP influenced participation of pupils in primary school education in Samburu East Constituency, positively, to a large extent. The programme has been implemented in Samburu Primary Schools for many years and school administrators and teachers understand its importance and efficacy. The preference of on-site meals to take-home-rations was attributed to the former having a more powerful positive influence on pupils' decision to enrol and remain in school as opposed to the latter. Wekesa (2015), arrived at similar conclusions following a study in Fafi Constituency, Garissa County, especially because the pupil is forced to attend school daily to benefit from the meal, and consequently, education.

5.3.2. Influence of Frequency of Feeding and Pupils' Participation in Primary School Education

The findings also indicate that frequency of feeding influenced pupils' participation in primary school education to a moderate extent. Primary schools mainly provided one meal per day, chiefly because the rations provided by the government and donors can only suffice for a single meal. Mixed day and boarding schools were the only ones that provided more than one meal, considering their unique setups. The assertions by teachers and school heads that frequency of school meals was a crucial factor in determining participation in school offers the possibility that increasing the number of servings could further enhance this programme. However, one has to consider that more than 40% of the respondents did not agree with these claims. Chege (2013) asserts that school meals greatly influenced participation in pupils in Isiolo County, thus the need to upscale the programme in Samburu East Constituency.

5.3.3. Influence of Adequacy of Food and Pupils' Participation in Primary School Education

While headteachers, teachers and pupils believed that Githeri, the main food under SFP, was adequate to keep them in school, it is also significant that majority of the children do not prefer school food. Evidently, the lack of variety in school, the amount served and the nutritional value of the food are to blame for this dislike of school food vis-à-vis home food. Moreover, unlike the beliefs of teachers, pupils did not consider food the main incentive for schooling, with most of them valuing education to the extent of wanting to attend school even if SFP food was not available. Chege (2013) arrived at similar conclusions in a study in Isiolo Central, Isiolo County. Consequently, adequacy of food, both quantitatively and qualitatively, is an aspect of SFP that needs to be improved if the programme is to have the envisioned impact of keeping more children in school. Wekesa (2015) observed that the government needs to increase the amount of food supplied to schools in Fafi, Garissa County, to boost SFP effectiveness.

5.3.4. Influence of Community Participation in SFP and Pupils' Participation in Education

The participation of the community, especially parents, in SFP has been established as a key stimulus to effectiveness of the programme in promotion of primary education. In the study, there emerge a clear positive influence of community participation in pupils' participation in learning. Githuku (2015), in a study carried out in Mbeere, Embu County, arrived at similar conclusions. However, in the case of the study in Mbeere, parents were contributing financially to the programme and would sometimes default on payment. Wekesa (2015), on the other hand, concluded that community participation enhanced harmony between pupils, teachers, administrators and the community, thus impacting retention positively.

5.4. Conclusions

A number of conclusions emerge from this study. It is evident that SFPs influence participation of pupils in primary school education in Samburu East Constituency positively. Provision of onsite meals continues to be the main form of SFP, with great influence on learning. It is effective because a child has to attend school to get lunch, thus boosting all aspects of school participation – enrolment, attendance, active participation and retention. Moreover, the number of times children feed in a school is crucial to participation in education. In this case, provision on lunch, especially for children attending school daily from

home is important in boosting their capacity to remain in school and learn. In addition, adequacy of food influences pupils' participation in primary education moderately. It is significant that the beneficiaries of SFP (pupils) mostly prefer food prepared at home, and most of them believe that getting an education is more important than getting a meal daily. In essence, even if SFP was withdrawn, more than half of the pupils would still attend school. Also crucial is the fact that the community must participate actively in SFP for children to be influenced to continue learning. Participation encompasses both material and financial contribution. From the findings of this study, community participation, type of SFP, adequacy of food and frequency of feeding influence pupils' participation in learning positively in that order.

5.5. Recommendations

The study recommends the following measures on implementation of SFPs in primary schools:

- i. Diversifying the menu for children to offer more types of food but with high nutritional content.
- ii. Increasing the amount of food supplied to school as this will result in larger portions of food for children.
- iii. Serving more than one meal, preferably fortified porridge during mid-morning break, lunch and a snack later in the afternoon.
- iv. Schools should lobby for more food donors to avert overreliance on government supplies.
- v. Encouraging local production (through irrigated agriculture) of food items that the schools use as this will improve local economies and increase goodwill with the rest of the community.

5.6. Suggestions for Further Research

This study was limited to four objectives, yet SFP is a diverse and differentiated programme, with many areas worth studying. Further research can be carried out in the following aspects:

- i. A duplication of this study in another county or sub-county, which would yield crucial data for comparison.
- ii. Similar studies but with the dependent variable being enrolment, attendance, active participation, dropout/retention rates or performance.

- iii. A study on challenges facing school administrators in implementing SFP.

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APPENDICES

Appendix 1: Letter of Transmittal for Data Collection

Rael Kajuju

P.O. Box 82

Isiolo

5th April 2017

Dear Respondent,

RE: RESEARCH STUDY DATA COLLECTION

I am a Master of Arts (Project Planning and Management) student at the University of Nairobi. I am carrying out a research on ‘Influence of School Feeding Programmes on Pupils’ Participation on Primary School Education in Samburu East Constituency, Samburu County.’

As part of my research, I am supposed to collect data from headteachers, teachers and pupils in primary schools in Samburu East Constituency. I am therefore requesting you to assist me by filling in this questionnaire as accurately and honestly as possible. The data I will collect will be used purely for academic purposes and will be treated confidentially.

Thank you for your cooperation.

Rael Kajuju

Adm. No: L50/85239/2016

Appendix 2: Questionnaire for Headteachers

Preamble

My name is Rael Kajuju, a Master of Arts in Project Planning and Management student at the University of Nairobi. I am conducting a research study titled ‘Influence of School Feeding Programmes (SFPs) on Pupils’ Participation on Primary School Education in Samburu East Constituency, Samburu County.’ Kindly help me achieve my objectives by filling in this questionnaire. Please be assured that the information you give will be used for academic purposes only, and will be treated with a lot of confidentiality. This questionnaire is divided into six parts: I, II, III, IV, V, V & VI.

Instructions

- ❖ Do not write your name on the questionnaire.
- ❖ Please answer all questions where applicable.
- ❖ Please tick [√] from any of the alternatives provided.

PART I: RESPONDENT’S PERSONAL INFORMATION

1. Your Gender
 - a. Male () Female ()
2. Your age (in years)

Below 30	()	31-35	()
36-40	()	41-45	()
46-50	()	51 and above	()
3. How long have you been a headteacher?

Below 1 year	()	1-5 years	()
6-10 years	()	11-15 years	()
16-20 years	()	over 20 years	()
4. What is your highest level of education?

Untrained	()	PI	()
SI/SII	()	Graduate	()
5. Please indicate your school type

Boys’ Boarding	()	Boys’ Day	()
Girls’ Boarding	()	Girls’ Day	()
Mixed Boarding	()	Mixed Day	()

PART II: TYPE OF SCHOOL FEEDING PROGRAMMES

6. For how long has SFP been implemented in your school?
.....years
7. Who donates the food you offer to pupils? (You can indicate more than one answer)
- a. GoK ()
 - b. WFP ()
 - c. NGOs ()
 - d. Religious organizations ()
 - e. Other (please specify).....
8. Which of the following types of School Feeding Programmes (SFPs) do you implement in your school?
Take-Home-Rations () On-Site Meals () Both ()
9. To what extent do the type(s) of School Feeding Programme(s) you implement influence participation of pupils in education (i.e. school enrolment, school attendance, pupil’s active participation in school and school’s retention of pupils) positively?
Very great extent () Large extent () Moderate extent ()
Small extent () No Extent at all ()
10. Please explain your answer in Question 8 (above)
.....
.....
.....

PART III: FREQUENCY OF SCHOOL FEEDING PROGRAMMES

11. How many meals do you give pupils in a day?
Once () Twice () Thrice ()
More than thrice (Please specify).....
12. Why do you serve the number of times you do?
.....
.....
.....
13. What is the time duration between meals?
14. To what extent does the number of times you serve and the duration between meals influence participation of pupils in education (i.e. school enrolment, school

attendance, pupil's active participation in school and school's retention of pupils) positively?

Very great extent () Large extent () Moderate extent ()
Small extent () No Extent at all ()

15. Please explain your answer in Question 14 (above)

.....
.....
.....

PART IV: ADEQUACY OF MEALS UNDER SCHOOL FEEDING PROGRAMME

16. Please describe the type of food your serve your pupils

.....
.....
.....

17. Please fill the following table based on the times and quantity of food you serve to pupils.

	Meal Time	Meal Type	Quantity of Food
i.	Morning		
ii.	Midday		
iii.	Afternoon		
iv.	Evening		
v.	Other (specify the time)		

18. To what extent do the quantity and quality of meals influence participation of pupils in education (i.e. school enrolment, school attendance, pupil's active participation in school and school's retention of pupils) positively?

Very great extent () Large extent () Moderate extent ()
Small extent () No extent at all ()

19. Please explain your answer in Question 18 (above)

.....
.....
.....

PART V: COMMUNITY PARTICIPATION IN SCHOOL FEEDING PROGRAMME

20. Please indicate in the following table the ways in which the community participates in SFP in your school (You can tick more than one answer):

How community participates in SFP in your school √

- Providing / fetching firewood / fuel
- Fetching water
- Constructing the kitchen and other structures for SFP
- Sorting and cooking food
- Serving pupils
- Washing utensils
- Monetary contribution
- Attending meetings to discuss how SFP is to be implemented
- Other (Please specify)

21. To what extent does community participation in SFP activities influence participation of pupils in education (i.e. school enrolment, school attendance, pupil's active participation in school and school's retention of pupils) positively?

- Very great extent () Large extent () Moderate extent ()
- Small extent () No extent at all ()

22. Please explain your answer in Question 21 (above)

.....
.....
.....

PART VI: PUPILS PARTICIPATION IN PRIMARY SCHOOL EDUCATION

23. How many pupils do you have in your school currently?

Less than 100 () 100 – 200 () 201 – 300 () 301 – 400 ()
401 – 500 () 501 – 600 () 601 – 700 () More than 700 ()

24. How would you describe the current enrolment in your school?

Declining () Static () Increasing () Don't Know ()

25. Please give a general rating of attendance in your school

Below 50% () 51% - 75% () Over 75% ()

26. How would you describe current school attendance?

Declining () Static () Increasing () Don't Know ()

27. How would you describe pupils' participation in school activities?

Active () Passive () Unpredictable ()

28. Please give an estimate of the number of pupils that have dropped out of your school this year due to hunger related issues.

Less than 10 () 11 – 20 () 21 – 30 () More than 30 ()

THANK YOU

Appendix 3: Questionnaire for Teachers

Preamble

My name is Rael Kajuju, a Master of Arts in Project Planning and Management student at the University of Nairobi. I am conducting a research study titled ‘Influence of School Feeding Programmes (SFPs) on Pupils’ Participation on Primary School Education in Samburu East Constituency, Samburu County.’ Kindly help me achieve my objectives by filling in this questionnaire. Please be assured that the information you give will be used for academic purposes only, and will be treated with a lot of confidentiality. This questionnaire is divided into six parts: I, II, III, IV, V, V & VI.

Instructions

- ❖ Do not write your name on the questionnaire.
- ❖ Please answer all questions where applicable.
- ❖ Please tick [√] from any of the alternatives provided.

PART I: RESPONDENT’S PERSONAL INFORMATION

1. Your Gender

b. Male () Female ()

2. Your age (in years)

Below 30	()	31-35	()
36-40	()	41-45	()
46-50	()	51 and above	()

3. How long have you worked in your current station?

Below 1 year	()	1-5 years	()
6-10 years	()	11-15 years	()
16-20 years	()	over 20 years	()

4. What is your highest level of education?

Untrained	()	PI	()
SI/SII	()	Graduate	()

5. Please indicate your school type

Boys’ Boarding	()	Boys’ Day	()
Girls’ Boarding	()	Girls’ Day	()
Mixed Boarding	()	Mixed Day	()

PART II: TYPE OF SCHOOL FEEDING PROGRAMMES

6. For how long has SFP been implemented in your school?
.....years
7. Which of the following types of School Feeding Programmes (SFPs) do you practice in your school?
Take-Home-Rations () On-Site Meals () Both ()
8. To what extent do the type(s) of School Feeding Programme(s) you implement influence participation of pupils in education (i.e. school enrolment, school attendance, pupil's active participation in school and school's retention of pupils) positively?
Very great extent () Large extent () Moderate extent ()
Small extent () No Extent at all ()
9. Please explain your answer in Question 8 (above)
.....
.....
.....

PART III: FREQUENCY OF SCHOOL FEEDING PROGRAMMES

10. How many meals do pupils take in a day?
Once () Twice () Thrice ()
More than thrice (Please specify).....
11. Why do you serve the number of times you do?
.....
.....
.....
12. What is the time duration between meals?
13. To what extent does the number of times you serve and the duration between meals influence participation of pupils in education (i.e. school enrolment, school attendance, pupil's active participation in school and school's retention of pupils) positively?
Very great extent () Large extent () Moderate extent ()
Small extent () No Extent at all ()
14. Please explain your answer in Question 14 (above)
.....
.....
.....

PART IV: ADEQUACY OF MEALS UNDER SCHOOL FEEDING PROGRAMME

15. Please describe the type of food you serve your pupils

.....

16. Please fill the following table based on the times and quantity of food you serve to pupils.

	Meal Time	Meal Type	Quantity of Food
vi.	Morning		
vii.	Midday		
viii.	Afternoon		
ix.	Evening		
x.	Other (specify the time)		

17. To what extent do the quantity and quality of meals influence participation of pupils in education (i.e. school enrolment, school attendance, pupil’s active participation in school and school’s retention of pupils) positively?

Very great extent () Large extent () Moderate extent ()
 Small extent () No extent at all ()

18. Please explain your answer in Question 18 (above)

.....

PART V: COMMUNITY PARTICIPATION IN SCHOOL FEEDING PROGRAMME

19. Please indicate in the following table the ways in which the community participates in SFP in your school (You can tick more than one answer):

How community participates in SFP in your school	
Providing / fetching firewood / fuel	√
Fetching water	
Constructing the kitchen and other structures for SFP	

Sorting and cooking food

Serving pupils

Washing utensils

Monetary contribution

Attending meetings to discuss how SFP is to be implemented

Other (Please specify)

20. To what extent does community participation in SFP activities influence participation of pupils in education (i.e. school enrolment, school attendance, pupil's active participation in school and school's retention of pupils) positively?

Very great extent () Large extent () Moderate extent ()

Small extent () No extent at all ()

21. Please explain your answer in Question 21 (above)

.....
.....
.....

PART VI: PUPILS PARTICIPATION IN PRIMARY SCHOOL EDUCATION

22. How many pupils do you have in your school currently?

Less than 100 () 100 – 200 () 201 – 300 () 301 – 400 ()
401 – 500 () 501 – 600 () 601 – 700 () More than 700 ()

23. How would you describe the current enrolment in your school?

Declining () Static () Increasing () Don't Know ()

24. Please give a general rating of attendance in your school

Below 50% () 51% - 75% () Over 75% ()

25. How would you describe current school attendance?

Declining () Static () Increasing () Don't Know ()

26. How would you describe pupils' participation in school activities?

Active () Passive () Unpredictable ()

27. Please give an estimate of the number of pupils that have dropped out of your school this year due to hunger related issues.

Less than 10 ()

11 – 20 ()

21 – 30 ()

More than 30 ()

THANK YOU

Appendix 4: Questionnaire for Pupils

Questions

1. What is your gender?
Male () Female ()
2. What class are you in? Standard
3. What type of meals do you get in school?
.....
4. How many meals do you take in school per day?
One Time () Two Times () Three Times ()
More than three times ()
5. What time do you eat school meals?
Morning () Midday () Afternoon ()
6. Do you think the food you are served in school is enough to keep you attentive and active during learning?
Yes () No ()
7. Which is better between school food and home food?
School Food () Home Food ()
8. Why?
.....
.....
9. If no meals were served in school, would you come to school every day without failing? YES () NO ()
10. Why?
.....
.....
11. Do you think getting free meals in school can make you remain in school and not drop out? Yes () No ()
12. Why did you answer 'Yes' or 'No' in Question 11 (above)?
.....
.....
13. How do adult members of the community help with the feeding programme?
.....
14. Does the work of the community in school feeding make you feel you need to continue studying? YES () NO ()

THANK YOU