INFLUENCE OF SCHOOL FEEDING PROGRAM ON PUPILS' RETENTION IN PUBLIC PRIMARY SCHOOLS IN DAGORETTI SOUTH SUB-COUNTY, NAIROBI COUNTY, KENYA.

\mathbf{BY}

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A Research Project Report Submitted In Partial Fulfillment of the Requirements for the Award of the Degree of Master of Arts in Project Planning and Management of the University of Nairobi

DECLARATION

I declare this is my original work and has not been presented in any other University or college for
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DEDICATION

I dedicate this project to my beloved family members for the love and support they accorded me.

I really appreciate all my relatives for the support they have given me in the course of the study.

Special thanks to my Mother Margret Nyakeya, and relatives for their untiring support offered.

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LIST OF ABBREVIATIONS AND ACRONYMNS

FMEC Finnish Ministry of Education and Culture

GNSFP Ghana National School Feeding Program

HGSFHP Home Grown School Feeding and Health Program

MDG Millennium Development Goals

MDM Mid-Day Meal

NSNP National School Nutrition Program

RDA Recommended Daily Allowances

SFP School Feeding Program

UNICEF United Nation Children Emergency Fund

WFP World Food Program

ABSTRACT

Primary schools are considered to be providers of basic foundation to education for they provide skills in reading writing and communication which are fundamentals to communication. However, retention and completion rates in Kenya are low and this contributes to high illiteracy levels in the country. However, school feeding programs have been implemented in Kenya to incentivize the enrollment and retention in primary school. The major problem that plagues most school going children in primary schools especially in low income areas is poverty. So when food is a challenge in any house hold in the low income areas, going to school is not a priority for the children or the parent. This causes absenteeism or complete drop out of the child from school. Providing food in schools boosts access, encourages regular attendance and enhances general learning and performance. The studies have however been carried out in diverse areas and the results differ from place to place. This study therefore sought to establish the effect of school feeding programs on primary school retention in Dagoretti district. The study adopted a descriptive research design since it sought describe the state of affairs as was then. The target population was the 10 the head teachers of the public primary schools and 80 teachers in Dagoreti sub-county of the 10 school that received the School Feeding Program services. This study used census, where the entire population participated in the study. A structured questionnaire was used to collect data. Data was analyzed using descriptive statistics and represented using figures and tables. The study concludes that; alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influences pupils' retention in public primary schools; parent's motivation to enroll in school and have them regularly attend highly influences pupils' retention in public primary schools; increased community involvement in schools 'activities as a school feeding program initiative highly influences pupils' retention in public primary schools and sustainable feeding as an initiative of school feeding program highly influence the pupils' retention in public primary schools. The study reveals that there exists a high and positive significant relationship between each of; alleviation of short-term hunger; parents' motivation; community involvement; and sustainable feeding programs and pupils' retention in public primary schools, since the p-value for each was less than 0.05 and relationship was greater than 0.5. The study recommends that; the ministry of education should review the SFP to ensuring continuous and adequate supply of food in the school in poverty ridden areas, the ministry of education in collaboration with other stakeholders should create awareness campaigns to capture parents into the school feeding program, the community from poverty stricken areas should form combined effort to fully participate in the school feeding program and; ministry of education as well as the county governments should legal structures, in poverty ridden areas, to spearhead sustainable feeding program.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Access to universal primary school education has been a key policy priority for many countries trying to meet the Millennium Development Goals (MDGs). The World Bank (1999) affirmed that; when you give people a hand out or a tool, they live a little better. When you give them education they will change the world. Currently education is a fundamental right of every person due to its contribution to equity diversity and lasting peace (world education forum education for all 2000). Education is viewed as a social good because it creates opportunities and provides people with choices. It is therefore true to say, education is an end in itself and a means to an end because it helps achieve economic personal development and investment in education is considered an essential pre-condition to economic growth, United states, Japan and Korea are clear examples of what education can do. Despite lacking in natural resources, Japan and Denmark had developed rapidly economically owing to a high basic platform of education (Bishop, 1989).

According to the frame work for action Dakar 2000, education occupies a central place in human rights and is essential and indispensable for the exercise of all other human rights for development. United Nation convention on the Rights of the child 1989 article 26 sets out the right to education to which every child is entitled. Despite the fact that access to education is steadily expanding across developing countries with enrolment in higher education rising sharply, a number of obstacles such as poverty and hunger still keep about 67 million children of primary-school age out of school, of which 53% of them are girls and almost 43% of whom are in sub-Sahara Africa. Enrolment rates are slowing and being eroded by dropout, particularly in countries affected by armed conflict where over 40% of out-of-school children live. Progress in reducing the number of out of school children of primary school age has slowed down since 2005 and stagnated since 2008 at around 61 million.

In France school feeding programs exist in public schools. There is no national school lunch program in France. All lunches offered in French public schools are funded by local municipalities. Three course or even four course freshly prepared hot lunches are provided to over 6 million French children in the public school system every day. Even without national subsidies the meals

cost an average of three dollars per child and prices for low income families are subsidized. (Rebeca Plantier, 2014)

In the United States of America, the federal government promulgated the National School Lunch Program which institutionalized the feeding supplementation within all public schools in the US. The program has been successful over the years since a relationship between food and good nutrition has been attributed to the capacity of children to develop and learn (E.Pollit, M.Gersovitz, 1978).

All provinces in Canada fund school feeding programs since the provinces have a responsibility for education under the Canada constitution. Local districts in Canada have adopted a variety of food programs such as hot lunches or breakfast where every child eats free of charge (Katie Hyslop, 2014).

In the United Kingdom, all primary and middle schools provide a midday meal for any pupil who wants one. School meals are prepared freshly everyday on the same premises using high quality, locally sourced food. Each school has an individual menu that is designed in consultation with Head Teachers, pupils and parents. The catering teams are on hand throughout the lunch to encourage children to choose a healthy meal. Primary and middle schools serve a fully inclusive two course meal at a cost of 1.95 pounds. (Kirklees.gov.uk, 2014)

Globally, in South Africa since 1994 when President Mandela came into power, he established a National School Nutrition Program (NSNP) whose aims are to provide meals to the neediest learners. The meals which are provided in school are therefore, intended to give energy for mental and physical activities for the body and brain to function and to make the learners alert and receptive during lessons. Children are fed before 10:00 hrs so as to give them the energy to concentrate and be alert in class.

The objectives of the NSNP are to contribute to improving the learning capacity of children, to promote self-sustaining school food gardens and other production initiatives and to promote healthy lifestyles among learners (Education Department Republic of South Africa, 2006). Over the past four decades, World Food Program (WFP) has become the world's foremost provider of school meals to poor children especially in Tanzania. In addition to providing free midday meals, WFP provides pupils with take-home rations for the family, which encourages parents to send their

boys and girls to class. School feeding initiatives target the most food-insecure areas of Tanzania with low school enrolment, irregular school attendance, and high primary school drop-out rates. Tanzanian schools distribute nutritious food primarily to school children, particularly girls, as a means of increasing enrolment and attendance rates, decreasing drop-out rates, as well as improving children's concentration, learning and academic performance (Foreign affairs trade and development Canada, 2011).

According to (Xinhua, 2005) Nigeria launched a home-grown school feeding program aimed at improving the nutritional intake by at least 25 million children of school age in Africa's most populous country. A total of 2.5 million children or 10 percent of the total population of primary school children are expected to take part in the pilot phase of the program aimed at providing one meal per school day for every child in Nigerian schools. The program could not only increase school enrollment and completion rates particularly of children in rural communities and poor urban neighborhoods, but also stimulate local food production and boost the income of farmers. Nigeria had launched the free universal basic education in 1999 to ensure all children have an opportunity to be educated but poverty such as hungry children have become part of the problems for the execution. The school feeding program aimed at achieving access to the free universal education by children who would otherwise miss school due to hunger.

1.2 Statement of the problem

Since 1963 Kenya has had one of the most rapid educational expansions in sub-Saharan Africa Bogonko (1992). This due to the importance its government attached to education. Primary schools are considered to be providers of basic foundation to education for they provide skills in reading writing and communication which are fundamentals to communication. For any education system to be efficient there should be smooth transition of pupils from one level to another or 100% retention and completion rate (psycharopolous 1988).

Retention and completion rates in Kenya are low and this contributes to high illiteracy levels in the country. School feeding programs have been implemented in Kenya since the 1980's with varying degrees of success. Used primarily to incentivize the enrollment and retention of rural children and girls, subsidized meal programs have played an integral part in realizing the country's goal of universal primary education (Finan and Timothy 2004). The major problem that plagues most school going children in primary schools especially in low income areas is poverty.

In Kenyan scenario poverty is a deprivation of income which in turn leaves the households with no sufficient money to afford 3 basic meals in a day. Children from these low income areas especially girls would rather not go to school but stay at home and help their parents to supplement their income. Girls as young as 9years old are usually employed as nannies or house helps in their neighborhoods so that they can supplement their family income whose main goal is to afford more food. So when food is a challenge in any house hold in the low income areas, going to school is not a priority for the children or the parent. This causes absenteeism or complete drop out of the child from school. The girls end up in early marriages and they usually have children at tender ages as young as 15 years. Those girls that drop out from school usually have an average of 6.25 children compared to those who completed their studies who have an average of 2.3 children (Keppler, 2011), this creates a stubborn poverty cycle that is hard to break.

Providing food in school's boosts access, encourages regular attendance and enhances general learning and performance. WFPs school feeding program works towards achieving Millennium Development Goals (MDGs). The program addresses the goals of reducing hunger by half and achieving gender parity in education by 2015 (WFP, 2005). School feeding programs also help to expand the reach of a number of other important activities including de-worming campaigns and HIV/AIDS education.

A study by verleersch and kremer (2005) indicates that in developing countries there is noted 30% retention of pupils with introduction of feeding programs. Despite the feeding programs having been introduced in Kenya since 1980s'retention of pupils in primary public schools has been decreasing.

These studies were however carried out in diverse areas and the results could differ from place to place. This study therefore seeks to establish the effect of school feeding programs on primary school retention in Dagoretti South Sub County.

1.3 Purpose of the study

The purpose of the study was to investigate the influence of school feeding programs on pupil retention in Dagoretti South sub-county, Nairobi county Kenya

1.4 Objectives of the study

The study was guided by the following objectives:

- 1. To determine how alleviation of short-term hunger in school children influences pupils' retention in public primary schools in Dagoretti South Sub County
- 2. To establish how parent's motivation to enroll pupils in school influences pupils' retention in public primary schools in Dagoretti South Sub County
- 3. To examine how increased community involvement in schools activities influences pupils' retention in public primary schools in Dagoretti South Sub County
- 4. To access how sustainable feeding program as a school feeding program influences pupils' retention in public primary schools in Dagoretti South Sub County.

1.5 Research questions

- 1. How does alleviation of short-term hunger in school children influence pupils' retention in public primary schools in Dagorreti- South Sub County?
- 2. How does parent's motivation to enroll pupuls in school influences pupils' retention in public primary schools in Dagorreti South Sub-County?
- 3. How does increased community involvement in schools as a school feeding program influence pupils' retention in public primary schools in Dagorreti South Sub- County:

4. How do sustainable feeding programs as a school feeding program influence pupils' retention in public primary schools in Dagorreti South Sub- County?

1.6 Significance of the Study

The research might be significant in the following ways:

The findings and recommendations are hoped to be useful to all education shareholders (Ministry of education, Heads of schools, teachers, and parents) to realize the importance of pupil's retention therefore fully support the feeding programs. The study is likely to help pupils identify the effects of food provided at school therefore take advantage of it as an alternative for food provided at home. The study is hoped to guide parents, teachers and the community on ways of starting and sustaining feeding programs in their schools.

1.7 Delimitation of the study

Although there are several primary schools both private and public in Dagoretti South Sub County, the study will focused on public primary schools. This is because they are the beneficiaries of free feeding program introduced by the government of Kenya.

1.8 limitations of the study

This study faced the following limitation: the teachers were always busy especially since they were attending lessons throughout the day. This was a challenge during data collection since there was limited time to engage the staff one on one to fill the questionnaires. This was overcome through a drop and pick later method of the questionnaires that allowed the staff complete the questionnaires at their own free time.

1.9 Assumptions of the study

It is assumed that the researcher was accorded all the necessary assistance from the schools where the research is to be conducted, all respondents will be truthful in their answers, cooperative and knowledgeable enough to provide complete, reliable and authentic information. They will fill all the questions in the questionnaires and return them within a reasonable time for data analysis, and the respondents have knowledge on feeding programs.

1.10 Definition of significant terms used in the study

The following are the terms in the study;

School feeding program: In this study it is an organized program that alleviates hunger while supporting education, health and community development. It is the targeted social safety net that provide both educational and health benefits to the more vulnerable children, thereby increasing academic performance, reducing dropout rate and maintaining 100% transitional rate

Public primary school: In this study it refers to an institution owned by a country's government in which children receive the first stage of compulsory education known as primary or elementary education, usually attended by children aged 4-12 years.

Retention of pupils in public primary schools: In this study it is about students remaining in one government sponsored educational institutions and completing their studies within the required time frame and the ability of pupils being able to remain and progress in school until they complete their primary education cycle.

Sustainable feeding programs: In this study these are ways of providing meals to pupils, improving their quality lives while living within the carrying capacity eco –systems. Thereby increasing enrollment rates, reducing absenteeism, and improving food security at the household level.

Alleviation of short term hunger: In this study it is the reduction of lack of food for primary school kids for a short period that is when they are in school attending studies. Therefore, leading to increased concentration that makes them be actively involved in class hence perform highly academic wise

Parents' motivation to enroll and have pupils attend school regularly: In this study it is the encouragement parent get to send their children to school and keep motivating children to attend school without failure on school days. Due to this, there is decreased absenteeism since pupils attend regularly and it leads to increased enrollment.

Increased community involvement: In this study it is the willingness of members of the society to fully support the school feeding programs thus ensuring it doesn't fail by also monitoring it.

1.11 Organization of the study

The study is organized in five chapters, chapter one comprises of background of the study, problem statement, purpose and objectives of the study, research questions, scope, significance, basic assumptions and definition of terms. Chapter two deals with literature review on impact of feeding programs on school retention. Chapter three comprises of research methodology focusing on research design, target, sample and sampling procedures, research instruments, validity and reliability of the research instruments, data collection procedures and data analysis techniques. Chapter four constitutes data analysis and discussion of findings, while chapter five deals with the summary, conclusion recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section reviews on the existing literature on the current school feeding programs in Kenya and beyond and their impact on retention of pupils' attendance of classes and their retention in school. The chapter reviews empirical studies on pupils' retention, which were found useful to the present studies. The review of past studies was based on the concept of school feeding programs, pupils' retention and the following themes; alleviation of short-term hunger in malnourished or well-nourished and pupils' retention in public primary schools; parents motivation to enroll in school and have them regularly attend and pupils' retention in public primary schools; and sustainable feeding program and pupils' retention in public primary schools. Later, the studies reviewed theories related to the present study, which assisted in coming up with a conceptual framework.

2.2 Concept of school feeding program in Kenya

School feeding program is an organized program that alleviates hunger while supporting education, health and community development (WFP, 2007). It can be provided as meals or snacks to be eaten during school hours or distributed as dry take home food ration to pupils at the end of each day, month or school term, if they attended school regularly. It is a versatile safety net that is used as platform to support children and their families in a variety of contexts. School feeding programs (SFP) are a visible social safety net used by political leaders around the world (Adelman et al; 2009).

The primary objective of a school feeding programme is to provide meals or snacks to alleviate short-term hunger, thus enabling children to learn. School feeding programs have proven effective in encouraging enrolment, increasing attention span and improving school attendance (UNICEF 2005). According to Aregawi (2012), the primary assumption of SFPs is that education and learning depend on good nutrition. However, in designing and implementing a school feeding program, a number of options are available, depending on the primary and secondary objectives of the program. SFPs can range from simple snack provision (usually fortified biscuits) to breakfast or lunch programs, to take-home rations. Often, these programs operate in conjunction with other health and nutrition initiatives to increase their success and impact.

Communities that participate in these programs can see the tangible benefits to their children, such as their children being fed regularly or families supplied with additional food, and the visibility of such programs can be attributed back to the politicians who support them. Food for Education programs are typically targeted towards populations that are food insecure, reside in areas with high concentrations of low socioeconomic status families, or that face poor attendance and enrollment (Adelman et al; 2009).

Since school children are the target of these types of interventions, children who are younger than five years old are left out. Nutritional interventions those are much more powerful in impacting upon a child's survival, health and development (Adelman et al; 2009). Due to the greater impact that pre-natal and pre-school programs may play, and due to their higher cost-benefit ratios, it has been pointed out that SFP programs should be considered (and categorized) as educational interventions and not as nutritional interventions, so as to not undermine budgetary resource allocations for nutritional interventions (World Bank, 2006).

The potential impact goal of targeting children through SFP is to increase their educational achievement so as to improve their potential future productivity and earnings. First, SFP programs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in formal education. This leads to more time spent in school and more time spent towards learning. The second is through the alleviation of short term hunger which improves children's cognitive functioning and attention span. The third path is through the improved nutritional status of children by providing them calories and nutrients in addition to their regular diet (Buttenheimet al; 2011). Thus, better nutrition indirectly improves educational achievement by increasing school attendance by children.

In stable situations, school feeding programs are often designed to enhance academic performance and cognitive development. Improved nutritional status of school-age children leads to better attention and cognition, and thus, better educational outcomes (Levinger, 2005). Keeping schools open in times of crisis provides children with a sense of normality, an unbroken routine and a friendly and structured environment (UNICEF, 2005). This is why, where at all possible, children should continue to go to school. School feeding may itself provide an incentive for keeping schools open. In line with this, the governments of many countries have initiated the Home Grown School

Feeding and Health Program (HGSFHP) in conjunction with The United Nation Children Emergency Fund (UNICEF) in order to address the gaps in basic education.

Both the developed and developing countries have been using the SFPs and lunches as a mechanism to get children into school. Therefore, the programme has become an instrument in modern times helping hundreds of millions of poor and underprivileged children around the globe to attend schools and learn. The governments around the globe have accepted the programme as an essential tool to foster growth and development. The In-school meals and lunches and Takehome rations act as magnets to attract pupils into classrooms and beyond. (WFP, 2014). School feeding programs are effective in stimulating demand for schooling, particularly in settings where school attendance is low and where children come from rural, relatively low socioeconomic backgrounds.

These programs appear to contribute to improved attendance and enrolment when there is a good collaboration between the feeding programme design and the environment in which the programme operates (Levinger 2005). The programs give pupils hope and guarantee them food to eat at school so that they need not think about what to eat. The free food serves as a motivation to children and in the long run encourages their attendance and retention in schools. It is evident that when the programs were introduced in Mali, Kenya, Chile, Laos, India, and Bhutan for the first time, they increased the attendance rate in those countries. For instance, in India has had a long tradition of school feeding program (some since the 1920s) largely by the state governments with some external assistance (Akanbi&Alayande, 2011).

According to (Recheet al;2012), School feeding programs in Kenya have been in place since 1980s, primarily to incentivize the enrollment and retention of rural children and girls, and to contribute to realization of universal primary education (Bodo, 2012). It was initiated to promote pupils' enrolment, attendance and retention in the northern regions of the country. This was to bridge the North-South divide and minimized the rural-urban migration as well. The target is to cover the entire deprived areas in the countryside in Kenya. (Buhl, 2007), According to Langinger (2011), Kenya was one of the countries to pilot NEPAD supported HGSFP in 2009 in an effort to transition toward a more sustainable and nationally integrated school feeding alternative and in particular shift the financial responsibility.

According to Ahmed (2004), various studies have reveal that SFP have indeed positive impact on school participation as measured by school enrollment, class attendance, pupil's retention, and student drop-out status (Vermeersch & Kremer, 2004). For instance, the study by Vermeersch and Kremer (2004) evaluated the impacts of School Feeding Program on school participation and achievement for children between ages of 4 and 6 who lived within walking distance of school. This study found that the SFP increased participation of children in both ages. Studies by Espejo (2009) and Finan (2010) indicate that rural schools in Kenya that provide meals show higher attendance rates and lower initial dropout rates than schools that do not (Espejo, 2009) and in event, participating families save between four and nine percent of their annual income by taking advantage of school meals and avoiding added food expenditures (Finan, 2010).

The study by Greenhalgh, Kristjansson and Robinson (2008) showed that the rationales for the implementation of the school feeding programs include the need to improve nutritional deficiencies, reduction of short term hunger, reducing absenteeism, to increase students' enrolment, to improve home diet and to improve literacy as a way of breaking cycle of poverty. Other studies have shown improvements in IQ, immunity to illness, height, and weight among participating children (Galal, 2005), and considerable effect on increasing overall student health (Galloway, 2009).

However, Greenhalgh et al; (2007) found that in the poorest countries, where school enrollment is low, school feeding may not reach the poorest people, but in these settings alternative safety net options are often quite limited, and geographically targeted expansion of school feeding may still provide the best option for rapid scale-up of safety nets. According to Greenhalgh et al; (2007) targeted take-home rations may provide somewhat more progressive outcomes. The study by Greenhalgh et al; (2007) failed to assess the longer-term relative merits of school feeding versus other social safety net instruments in these situations.

According to Buhl (2007) hunger among school pupils in the third world countries impairs enrolment and attendance. Therefore, the World Food Programme (2010) indicates that the takehome rations as part of the school feeding that girl-child education has increased in Pakistan and Cameroon. In addition, one of the regions in Pakistan recorded 247% in girl-child enrolment between 1992 -1998. The benefactors are children from poor communities and families that are unable to provide daily balanced meals for their children before, during and after school.

WFP (2010) describes that school feeding has increased the enrolment and attendance rates of Kenya pupils, especially when the meals were given to children particularly girl-children. Also, there were a greater number of children who graduated from the basic level to go to colleges in Kenya than before. There is a massive an attraction rate of schooling for girls in rural areas before the puberty but in arid and pastoralist zones in Kenya, most children do not finish primary schools and among those who do a low number of them move on to colleges. The school feeding and the take-home ration have salvaged part of this problem in Kenya thanks to adequate meals. The Kenyan school feeding programme has seen successes in children's performance since its establishment. The children in the pastoralist communities and semi-arid arid areas were able to complete their primary education since the introduction of the programme.

Aregawi (2012) confirmed that there is evidence that school feeding programs increase school attendance, cognition, and educational achievement, particularly if supported by complementary actions such as de-worming and micronutrient fortification or supplementation. A number of categories of SFPs exist, linked to the primary objectives of the program; increase enrollment and attendance and/or decrease gender disparity, alleviate short-term hunger and thereby increasing learning capacity (Aregawi, 2012).

2.3 School Feeding Programs and Pupils' Retention in Kenya

To address historical primary school absenteeism among Kenya's most impoverished and traditional communities, free meals are used as an incentive to attract school-aged children to class. Within rural communities in which food is scarce, this daily meal provision relieves much of the burden of childrearing. The beneficiaries of the program are extremely poor families that are largely unable to provide the minimum recommended daily allowances (RDA) of calories, protein, and essential micronutrients to their children.

These poor conditions may irreversibly stunt the mental and physical development of young children, resulting in wasted potentials and lifelong difficulties (Galal 2005). The nutritional importance of the school meal (usually around 700kcal) is immense, representing more than half of the consumed RDA values for 40 percent of the participating pupils. Rural schools that provide meals show higher attendance rates and lower initial dropout rates than schools that do not (Espejo 2009; Finan, 2010).

Various global, regional and local studies have confirmed the positive effects of SFP on pupils' retentions. Ahmed (2004) conducted a study in food insecure areas of Bangladesh to see the impact of School Feeding Program on school pupils' retention. The study found that School Feeding Program have statistically significant positive impacts on pupil's enrollment rates. However, this finding does not take account of other unobservable characteristics of households in the treatment area that could affect household's decision to enroll children. Therefore, it appears inconclusive to claim that the difference in enrollment between treatment and control groups was the result of the program without considering unobserved factors.

According to Buhl (2007) hunger among school pupils in the third world countries impairs enrolment and attendance. Therefore, the World Food Programme (2010) indicates that the takehome rations as part of the school feeding that girl-child education has increased in Pakistan and Cameroon. In addition, one of the regions in Pakistan recorded 247% in girl-child enrolment between 1992 -1998. The benefactors are children from poor communities and families that are unable to provide daily balanced meals for their children before, during and after school.

According to United Nations' World Food Program (WFP) (2010), in developing countries, among the poor, there is often not enough food at home, and most schools in developing countries lack canteens or cafeterias. School meals are a good way to channel vital nourishment to poor children. Having a full stomach also helps them to concentrate better on their lessons. In countries where school attendance is low, the promise of at least one nutritious meal each day boosts enrolment and promotes regular attendance.

Locally, a study by Munyiri, (2010) asserted that enrolment and attendance have increased in Kenya, Kikuyu district dramatically after introduction of SFP and children looked better and healthy in schools with the program. The performance of the schools with SFP stood tall against those schools without the program. The study concluded that there was a relationship between the SFP and learning outcomes in the district and children were attending school regularly. McEwan, (2012) showed that the Chilean School Feeding has impacted the pupils' performance since its inception.

Dheressa (2011) study revealed that School Feeding programme has been found to effectively increase class attendance because children receive the meal only when they attend school. This confirmed the findings in the study by Adelman et al; (2008).m which established that school meals encourage pupils 'attendance. The study by Akanbi and Alayande (2011) found that countriessuch as Brazil, Philippines, Cambodia, Mali, El Salvador, Indonesia, Ghana, Bangladesh, and Ecuador where school feeding program is in place, the program has also increased attendance and enrolment rates over the years. Afoakwa (2012) study showed that the GNSFP has triggered an acute increase in the attendance of pupils in schools throughout the country. At inception of the programme and its operationalization in 2005 and in 2008, there was an increase of attendance between 10 to 40% throughout the country.

Aregawi (2012) study found that SFP brought a positive and significant impact with regards to student enrollment, with an increment in enrolment. But results of the analysis indicated that SFP did not bring significant difference when it comes to student drop out. Thus efforts to improve student enrollment and reduce dropout therefore need to be based on an in-depth understanding of the specific barriers to education that reduce access to education in particular situations. When existing barriers are directly or indirectly related to unfulfilled nutritional or food related needs, the use of SFP as a food based intervention has a potential relative advantage over other access strategies.

The study by Khatete, Pendo and Oyabi (2013) findings indicate that SFP plays a major role in enhancing pupils' participation in co-curricular activities. The program plays a big role in the curriculum implementation and participation of pupils in primary education in TaitaTaveta and Nairobi Districts in Kenya. The study by Sulemana, Ngah and Majid (2013) found that the Ghana National School Feeding Program (GNSFP) affected yearly enrolment, with huge number in enrolment characterized by overstretched of situation of classrooms in the school and congested classes. The amount of pupils that a teacher has to handle in a classroom has doubled, and exceeds Ghana Education service's ratio of one teacher to thirty-five pupils due to SFP.

Salee (2013) study on the influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County revealed that school feeding programme had a positive influence on pupils' enrollment. The study by Salee (2013) revealed that SFP ion Kenya had an influence on pupils 'enrollment during the drought.

The Mwavula (2014) study findings showed that school feeding programed had positive influence on pupils' enrolment, attendance, class participation and reduced dropout. The study also established that school feeding program influenced the enrolment of pupils in primary school; the attendance of pupils in schools; enhanced active participation of the pupils in class; and influenced the dropout rate of the pupils in Garsen Division as hunger was number one reason for dropout. The study recommended that the government should increase the coverage of the areas under school feeding programme especially the regions prone to floods with the view to improving the enrolment rates; the government should ensure there is a constant supply of school meal so as to maintain the pupils attend school regularly; the government and the donors should ensure the school meal has the right nutrients so as to keep the children alert in class to actively participate in the learning process and the government should ensure that all the schools in the flood prone regions have SFP so that hunger does not force any child to drop out of school. A local study by Mohamed (2015) concludes feeding programs enhance pupils' attendance levels in the centers to a very great extent and it increase pupils' participation in class assignment duties and discussion.

2.4 Alleviation of short-term hunger in malnourished and well-nourished children and pupils' retention in public primary schools

Both acute and chronic hunger affect children's access to school, their attention span, behavior in class and educational outcomes. Studies have shown that children suffering from short-term hunger, as a result of skipping breakfast, for example, have difficulty concentrating in class and performing complex tasks (Adelman, Gilligan and Lehrer (2001). According to WFP (2006) hunger is one of the most pervasive and damaging phenomena most children, which negatively affects the brain development of children and impedes their chances of educational success later on. In which case, hunger, poverty and poor education are interdependent such that when children are hungry, chances that they would attend school are limited, and without education, their chances of breaking the poverty trap are significantly reduced.

Children from the poor homes are likely to go to school without food and if they do, they are less likely to learn. Hunger and poverty have direct a link with educational performance of the children. According to WFP (2004) about 20% of the poorest children and 50% of middle income children complete basic schools while all the children from well-to-do families do complete. WFP (2006)

further stressed that although a child may be at school, they may not pay attention to a learning task if he is hungry. As such, relieving a child's hunger may improve his/her ability to concentrate and thereby facilitate learning and the children's memory may also improve so that they are more likely to learn. Relieving a child's hunger may improve his ability to concentrate and thereby facilitate learning. Children's memory may also improve so that they are more likely to learn (Grantham-McGregoret al; 2014). The school feeding programme aids to reduce short and long term hunger which can cause absenteeism, low performance and finally school drop-out among children (WFP, 2006).

Research has indicated that both acute and chronic hunger affect children's access to school, their attention span, behaviour in class and educational outcomes. Studies have shown that children suffering from short-term hunger, as a result of skipping breakfast, for example, have difficulty concentrating in class and performing complex tasks (WFP, 2006).

WFP (2007) study examined the impact of the school meal programme in the three Northern regions of Ghana in relation to girl-child education. It reports that the feeding and the take-home rations have encouraged 85% of girl children's enrolment, attendance and retention in the three Northern regions of Ghana. In Ghana, better nourished children entered into schools and completed within the stipulated years as compare to malnourished children (WFP, 2007). This attests to the fact that good practices of school feeding programs and lunches and nutritional components improve long term sustainability of the attendance of pupils and enhances the teaching and learning processes.

Adelman, et al; (2008) found that school meals alleviate short term hunger of school children during the school day by providing more nutrients to the child, providing the child with a meal when he or she would have not otherwise have had one, or replacing a meal that would have been received after school with one during school hours (Ahmed, 2004). Thus this aspect of nutrition targets for short term impact and enables a child concentrate and learn more. Rathore (2008) study revealed that loss of livelihood as a result of drought had an effect on pupils' participation in schools. The study did not however establish how loss of livelihood affected pupils' retention in schools hence the need for the current study.

The study by Bundy et al;(2009) found that a combination of factors such as shortage of food, loss of income, pupils' involvement in household activities affect pupils' access in school. It found that in Namibia, during drought in 2010, school attendance dropped by 28 percent boys and 22 percent girls. Reasons associated with the drop in school access to education included lack of food, children involvement in family economic activities. While girls accompanied their mothers in search of water, boys accompanied their fathers in search for pasture for cattle.

According to Garram Children's School (2010) school feeding contributes to the education and well-being of children. A hungry child does not grow, cannot learn as well and faces many health risks in the future. School feeding can bring children into school and out of hunger. From the study SFP also facilitates education, leads to improved food security, health and nutrition, the effects of which all contribute to ending hunger. It can relieve immediate short-term hunger which is very beneficial for learning. Alleviating short-term hunger among children at school helps to improve performance on school tests and promote normal progression from grade to grade in completing a basic education.

Olusanya (2010) study found that malnutrition has continued to be a public health problem in developing countries where the poor socio economic condition has continued to work in synergy with malnutrition. Apart from the adverse effect of malnutrition on the cognitive achievement of school children, malnutrition is also likely to result in poor attendance at school, low health status which will invariably lead to high withdrawal rate.

Huho, Ngaira and Ogindo (2010) study on Drought severity and their effects on rural livelihoods in Laikipia District, Kenya revealed that availability and adequacy of food supplies affected pupils' participation in schools. However, the study did not establish how availability of food affected pupils' retention in schools hence the need for this study.

Mhurhu, et al; (2010) study found out that the breakfast consumption supports children's attendance and mental development at early stages. The result shows 95% attendance as the breakfast was introduced to the school pupils. The study concluded that the school breakfast has significant correlation with attendance, achievement and nutrition in all the selected schools. The study established that he New Zealand school breakfast has a significant impact on the children's performance because of the fortified grains which enrich mental development.

According to Muntenyo (2010), an estimated 120 million school going children in India have benefited from the Mid-Day Meal (MDM) each day. This has improved the attendance in the public schools (Winch, 2009). Winch (2009) recounts that the SFP has increased pupils' performance in Mali, from 10% in 2006 to 23% in 2007. The World Bank (2012) indicates that there is a significant impact of the programme in some African countries in the world especially, in Liberia and Togo in West Africa. In Liberia the school feeding programme has induced massive enrolment after its introduction. In the same vein, in Togo, it has been expanded to cover over 92 schools because of its tremendous impact on school enrolment.

The Finnish Ministry of Education and Culture [FMEC] (2012) estimated that almost 850,000 pupils and students are enjoying the free meal throughout schools in the country. The free snacks form part of the free lunch in Finnish schools and about 47,000 children are taken in them before, during and after school. The (FMEC) asserts that the free meal and snacks have induced attendance in schools throughout Finland since the burden of what to eat at school has been totally eradicated.

Mondal and Paul (2012) state that the Mid-Day Meal (MDM) programme in Burdwan, in Bengal, in India has had a significant impact on enrolment and school attendance as McEwan (2013) indicates that in Chile, the introduction of the feeding programme and its deworming components have doubled the enrolment from grade one to grade eight. This is evidence to the fact that pupils' families believe that their wards could be fed in schools at least one nutritious meal a day. The children have no problem to worry about what to eat in schools in the sense that the burden has been solved by the free feeding programs and lunches (World Bank, 2012).

World Bank (2012) indicates that properly designed and effectively implemented SFPs can alleviate short-term hunger in malnourished or otherwise well-nourished school children. This helps to increase the attention and concentration of students producing gains in cognitive function and learning (Yunusaet al; 2012). Yunusaet al; (2012) further stressed that SFP address specific micronutrient deficiencies in school-age children in that there are iodine and iron, which directly affect cognition. Meeting the iron and iodine needs of school-age children can translate into better school performance (WFP, 2014).

Galgallo (2014) study concluded that household's loss of live hood affected on pupils' retention levels in public primary schools in drought emergency zones. The study concluded that pupils'

involvement in household economic activities effected on pupils' retention levels in public primary schools in drought emergency zones. It was concluded that conflict also affected pupils' education because it brought enmity between the pupils from different background.

School feeding program increase pupils' participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the center are always active and perform well in the exam and a feeding program is important than other factors towards the improved performance. According to Nkata 2010, free primary education was introduced in 1994, in Malawi, with the aim of providing quality education or all children in the country. This increased attendance and access to primary education; however, there was still a big challenge to have the desired quality education. Hunger was one of the many external factors that affected quality education leading to absenteeism, high dropout and high repetition rates due to poor attendance. When food is scarce in the country, parents or guardians often decide to take their children out of school to help out around the home as the guardians search for food.

Recognizing the importance of school feeding program and its contribution to quality education, in 1999 the Ministry of Education with its collaborating partners introduced SFP to provide breakfast meals at primary schools. This then, alleviated short term hunger and increased enrolment, attendance and led to better learning and more girls attending school (Nkata, 2010)

2.5 Parent's motivation to enroll in school and have them regularly attend and pupils' retention in public primary schools.

In developing countries, children are prevented from attending school by due to poverty and made to care of the family vegetable garden, care for young siblings or fetch firewood and water. The World Food Program (WFP, 2000) indicates that, out of 300 million poor and chronically hungry children in the world, 130 million of them do not attend school. In addition, roughly about 150 million children of primary school age begin school but drop out before completing four years of education, (WFP, 2000).

The food given attracts pupils to school, retain them in school and is to serve as an incentive for families to release their ward for schooling, especially children from vulnerable groups and poor

families. School feeding program is expected to directly tackle gender inequalities by attracting girls to schools. Also SFP generates opportunities for assisted pupils to share a nutritious meal regardless of their status or social class Children in poor health start school later in life or not at all.

When parents realize that there is an extra benefit children get at school apart from education, they are motivated to not only send their child but send them at early age. Provision of food at school helps children's a nutrition needs and help poor parents get an alternative way of getting their children alleviate hunger. Blum (2005) study revealed that in southern China and north-eastern Thailand, households' income levels were affected by drought. Apart from loss of income, households were not able to pay school fees for their children hence causing low enrollment in schools.

Adelman et al;(2008) study show that school meals affect the age at entry in different ways. The provision of food offsets the cost of educating children by making available additional income for households, and consequently raising the benefits of attending school. When this income effect is large, it can cause households to send their children to school at a relatively younger age thereby minimizing the possibility of late entry. World Bank (2009) indicate that SFP may also serve as incentives for poor households to send their children to school. Attendance rates are lowest for children from poor households and providing school meals to children in qualifying families can be the equivalent of adding an extra 10% to average household incomes.

WFP (2010) indicates that Parents are motivated to send their children to school instead of keeping them at home to work or care for siblings). The WFP also believes that in the poorest parts of the world, a school meal program can double primary school enrolments in one year. Among the key beneficiaries are girls who otherwise may never be given the opportunity to learn. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Moock and Leslie, 1986).

In Ghana malnourished children entered school at a later age and completed fewer years of school than better nourished children (Glewwe and Jacoby, 1994). The number of days that a child attends school is related to cognition and performance (Ceci, 1995; Jacoby, Cueto and Pollitt,). There are a number of studies that have established a link between school feeding and attendance. The

Campbell review on school feeding, is most comprehensive and rigorous review of impact evaluations to date. It comprises 18 studies, 9 from lower income countries and 9 from higher income countries. Amongst the 18 studies, 7 used randomised controlled before and after studies and 2 School Feeding Programme and school attendance 14interrupted time series (Its). In low income countries, children who were fed at school attended school more frequently than the children in control group, (Kristiansen et al; 2007). Another study conducted by Cornejo in Chile found out the attendance level increased after introduction of meals in schools. This targeted disadvantaged pupils in primary education and school feeding was found to be more cost effective than others in reducing absenteeism and dropouts, (Cornejo, B et al; 2003).).

It is reported that the northern part of Ghana had the lowest attendance rates of pupils of school going age in the country. The possibility that a child enrolled would complete was barely 50% compared to a national average of over 74%. Since 1997 through USAID, resources had targeted the northern regions in a bid to increase enrolment and attendance especially girls. Each child in a program school was entitled to a hot lunch a day and the girls who were able to make a monthly attendance of 85% or more were given a take home ration. In terms of attendance, the average attendance rate in ESP schools during EY97 was 56%. This had increased to an average of 89% as of then. So far, 274,200 children in 1,096 primary schools attend school and receive hot lunch every day (USAID/CRS, 2010).

The study by Pansiri and Pansiri (2011) show that Some barriers of parental participation in both PTAs and education of their children include negative attitude and lack of abilities of parents, poor work and health conditions, and weak leadership knowledge and skills of school heads and teachers and rurality and remoteness of the communities (Pansiri, 2008). The study discovered little participation by parents in poverty stricken location in urban area (Pansiri&Pansiri, 2011). The study by Huho and Mugalavai (2010) showed that parents were not able to pay school levies hence making it difficult for children to learn. Yunusa et al; (2012) showed SFPs and other school-based nutrition and health programs can also motivate parents to enroll their children in school and to see that they attend regularly. When programs effectively reduce absenteeism and increase the duration of schooling, educational outcomes (performance, dropout, and repetition) improve.

Pansiri and Bulawa (2013) study showed that there is minimal parental support especially in rural and remote areas and in boarding primary school system in Botswana and therefore recommends for the creation of a parent education programme, a policy for the support and participation of parents of children in boarding schools, and further research to tap on the voices of the parents. Salee (2013) indicated that parents were not able to pay school levies for the children as any form of income is taken up by food and parents were not able to pay school due to high cost of food during drought season

A study by Oganga (2013) show that parents and teachers considers school feeding as an effective tool to make students enroll in primary school; students' perception is that school feeding is not an effective factor to make them enroll or to prevent dropout. The study recommends policy options and more areas that need further research. Namukwaya and Kibirige (2014) study found that withdrawing children from school to attend to crops was explained to be critical due to the harsh environment whereby the district suffers from chronic food insecurity. Parents would thus prioritize food security over sending children to attend school. This finding could also explain why some children enrolled in school in order to access food at school.

2.6 Increased Community Involvement in Schools activities and Pupils' Retention in public primary schools

Communities around the school play an important role in the implementation and process of school feeding programs. Lack of community participation may lead to a failed program for the case of Afghanistan where the school based bakery failed due to lack of management capacity and community participation (State of school feeding worldwide, 2013). The school feeding programs that respond to community needs are locally owned, and that incorporate some form of parental or community contribution, whether cash payment or in kind.

Through donated food or labour, the programs tend to be stronger and most likely to make a successful transition from donor assistance. Adelman et al; (2008) study indicates that community effect resulting from School Feeding Program may also influence the age at entry. That means the act of households to send their children to school earlier with the commencement of School

Feeding Program would create a social pressure and prompt similar action on the part of those who haven't enrolled their children yet.

Yunusaet al; (2012) shows that properly designed and effectively implemented SFPs can increase community involvement in schools, particularly where programs depend on the community to prepare and serve meals to children. Schools with their communities behind them are more effective than schools with less community involvement. Yendaw and Dayour (2015) study discovered that the GSFP has contributed significantly to pupils' enrolment, attendance and retention compared to the period before the programme's implementation. There was a statistically significant relationship was established between school meals quality/quantity and school attendance among pupils and two, a strong linkage was found between the implementation of school feeding programmes and pupils' retention in schools. What this means is that the strategic policy direction of stakeholders involved in running the programme needs to take into account the above key findings contained in the current investigation. The study, therefore, recommends that government and other stakeholders' in-charge of the programme should remain committed to providing the needed resources for the smooth running of the programme so as to improve the educational infrastructure of rural communities.

In Malawi, the community is responsible for cooking, bring firewood, store keeping and serving of meals (Chikuni, 2010). While in Namibia the community members prepare meals at school, construct cooking shelters, construct store rooms, protect the school premises, organize at least three meetings per annum to discuss the activities in connection to national school feeding programmes, organize fundraising activities, assist with the school vegetable gardens and parents provide plates and spoons (WFP September, 2012).

According to Ahmed (2004), meals prepared and served on time will be able to alleviate short term hunger and increase concentration of pupils. Thus the school feeding programme brings about harmony among the community, teachers and pupils hence smooth learning (Abdullahi, 2012). Therefore, parent would retain their children in a school whose relationship is good with them.

2.7 Sustainable Feeding Programs and Pupils' Retention in public primary schools

The introduction of school feeding program can be traced back to the mid nineteenth century (19th century) when the Paris guards in France established a fund for providing needy children with the school lunches. Most of the early feeding activities were privately financed, for example, in Japan in 1889, a Buddhist priest initiated it with food as alms and later a nationally funded project was started. In the U.S. SFP was started in 1946 under the national school lunch Act (Kanno 1981). International organization such as UNICEF, WFP and FAO have been involved in the SFP showing that school feeding program is a major concern worldwide (Kiman, 1985).

In the 1990s in the Ethiopian regions of Amhara and Tigray the government started to distribute food to pupils with the help of WFP. This increased enrolment by 50 percent between 1994 and 1995. It has been noted that in many developing countries, SFPs have led to an increase in the number of those enrolled in school (Ngome, 2002). It is therefore vital that SFP be provided in school so as to retain and enroll schools. Schools that depend on the community to organize and implement school feeding programs offer certain advantages. These advantages include: increasing the contact, and hence communication, between parents and teachers, officials and others; giving parents the opportunity to become more aware of what goes on at schools; and serving to raise the value of education the school for parents and the whole community. For example, school canteens are viewed as an important feature of education policy in Nigeria. Since 1978 WFP and the government have supported school feeding. The programs have strong government and community support and are viewed as part of a necessary package of inputs for improving education.

Food for Education programs are typically targeted towards populations that are food insecure, reside in areas with high concentrations of low socioeconomic status families, or that face poor attendance and enrollment. In developing countries, SFP is usually not set up to target specific children at a school, but rather all students attending a school are recipients of the program. This may reduce the cost effectiveness of the program if not all students receiving the food from the program belong to families who are food insecure or of low socioeconomic status (Adelman et al. 2009). The take home ration programs, on the other hand can be more easily targeted to specific

families, such as those of lower socioeconomic or food security status or to families with girls. Both programs, however, may not be able to target all the children who are facing food insecurity.

Since school children are the target of these types of interventions, children who are younger than five years old are left out. This is considered one of the limitations of FFE programs as a nutritional safety net. It is now well established that the first one thousand days of a child's life, from conception until the second birthday, is the most vital period during which under nutrition may have its largest impact. Nutritional interventions that occur within this time line are much more powerful in impacting upon a child's survival, health and development (Adelman et al; 2009). Due to the greater impact that pre-natal and pre-school programs may play, and due to their higher cost-benefit ratios, it has been pointed out that FFE programs should be considered (and categorized) as educational interventions and not as nutritional interventions, so as to not undermine budgetary resource allocations for nutritional interventions (World Bank, 2006).

The potential impact goal of targeting children through Food for Education programs is to increase their educational achievement so as to improve their potential future productivity and earnings. However, improvement in educational achievement due to serving food in SFPs is thought to occur through three pathways. First, FFE programs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in formal education. This leads to more time spent in school and more time spent towards learning. The second is through the alleviation of short term hunger which improves children's cognitive functioning and attention span. The third path is through the improved nutritional status of children by providing them calories and nutrients in addition to their regular diet. This leads to better health and better resistance to infectious diseases and illnesses that would keep children from attending school (Buttenheim Alderman, Friedman & Arnold, 2011). Thus, better nutrition indirectly improves educational achievement by increasing school attendance by children. situations, school feeding programs are often designed to enhance academic performance and cognitive development. Improved nutritional status of school-age children leads to better attention and cognition, and thus, better educational outcomes (Levinger, 2005; Glewwe, Jacoby & King, 1996).

The objectives of school feeding have also been expanded to include food security, providing an income transfer to caregivers and reducing the opportunity cost for parents of sending children to school (Hicks, 1996). Improved nutrition and school attendance, however, present particular challenges in the context of crisis and conflict. School feeding can improve attentiveness in class by reducing short-term hunger many children come to school on an empty stomach, yet they remain surrounded by the distracting and disturbing facets of the crisis. Although school feeding can provide an incentive for increased school attendance, such crisesalso tend to pull children into the workforce either as formal labour or as child soldiers. In the case of formal labour, successful school feeding programs in emergency situations should constitute an income transfer sufficiently large enough to outweigh an alternative income that children might earn elsewhere (Glewwe, Jacoby & King, 1996).

Being tied to education, school feeding has the potential to preserve a generation of human capital, an advantage measurably more important in complex emergencies than in normal situations. In situations when other social support structures may be broken down, school feeding could also enhance the role of schools as social support structures for children. It may then be possible for educational, nutritional and Psychological gains to emerge from this existing school infrastructure with benefits accruing synergistically. Various studies have reveal that SFP have indeed positive impact on school participation as measured by school enrollment, class attendance, and student drop-out status. Within rural communities in which food is scarce, this daily meal provision relieves much of the burden of childrearing. The beneficiaries of the program are extremely poor families that are largely unable to provide the minimum recommended daily allowances (RDA) of calories, protein, and essential micronutrients to their children. These poor conditions may irreversibly stunt the mental and physical development of young children, resulting in wasted potentials and lifelong difficulties (Galal, 2000).

The nutritional importance of the school meal (usually around 700kcal) is immense, representing more than half of the consumed RDA values for 40 percent of the participating students (Finan, 2010). According to field studies, the "magnet effect" of the meal programs has greatly increased school attendance rates especially among young children. Rural schools that provide meals show higher attendance rates and lower initial dropout rates than schools that do not (Espejo, 2009). The immediate financial and nutritional benefits provided by schooling attract parents struggling to

support their children on low yielding subsistence farming. On average, participating families save between four and nine percent of their annual income by taking advantage of school meals and avoiding added food expenditures (Finan, 2010). Additionally, many rural parents have been able to utilize schooling as a form of subsidized childcare, which gives them more time to engage in household chores, farming, or other income-generating activities. The short and long-term benefits to the child are even more pronounced.

Studies tracking the impact of school feeding have shown improvements in IQ, immunity to illness, height, and weight among participating children (Galal, 2005). Micronutrient fortification, malaria treatment, and annual de-worming initiatives have been implemented alongside school meal programs and have had considerable effect on increasing overall student health (Galloway, 2009). No longer distracted by hunger and the crippling effects of extreme malnutrition, the students are better able to concentrate, understand new material, and socialize with both teachers and peer. Though significant gains have been achieved throughout the country in terms of educational expansion and accessibility, rural Kenyans continue to lag far behind their urban counterparts. Between the years 2002 and 2007, although Kenya's net primary school enrollment increased from 77 percent to 92 percent, enrollment in the ASAL increased from 17 percent to 29 percent (Finan, 2010).

The feeding program is credited with helping to maintain high enrollment and attendance and encouraging community participation in education. School cooperatives support the school canteens and parents associations assist with the transportation of food aid (WFP, 1993). If the schools have land, they could have their own gardens whereby food is grown on the land to supplement with supplies that are offered by the government or technical partners such as UNICEF or WFP. In growing own food, schools would have a sustainable institutional program. This also ensures that the pupils in such schools can eat fresh food such as vegetables and fruits that has been grown locally. This ensures that the children get the best nutrition possible while at the same time the school attempts to be self-reliant from the food grown on the school land.

2.8 Theoretical framework

The study is guided by **Vroom Expectancy Theory of Motivation** advocated by Vroom (1964) **and Epstein's theory**. According to Vroom Expectancy Theory of Motivation, the intensity of a tendency to perform in a particular manner is dependent on the intensity of an expectation that the performance will be followed by a definite outcome and on the appeal of the outcome to the individual. Tolman (1932) attributed the results of reinforcement to learning but not regarding reinforcement as a necessary condition for learning to take place. The pupils who mainly faced hunger and starvation due to will be motivated to continue with the learning process with the hope of receiving hunger pangs.

However, in Vroom's theory, valence is the emotional orientations toward particular outcomes (rewards) or is the value the person attaches to the outcome. Therefore, it is the attractiveness or performance for a particular outcome of an individual. The school feeding programme is an incentive to attract children to school and enable them to learn. Expectancy is a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome (the belief that better efforts will result to better performance).

Then instrumentality that good performance will lead to valid outcome. To the pupils, expectancy is the (internal) beliefs that going to school (regularly) will enable them acquire quality education and the education empowers them to be free from the pains of hunger and flood in future. In this case SFP is some kind of incentive that can attract pupils to school. On the other hand, expectancy is the perception people have on the degree of the probability that the choice of a particular action will lead to the desired outcomes. For this case the desired outcome would be increase in completion rates, reduction in dropout, stabilization in attendance and increasing participation of children in schools which in turn leads to retention of pupils

2.8.1 Epstein's theory

Epstein's (1995) theory of the three spheres of influence; school, family and community' emphasizes building partnerships, relatedness/connections and the recognition of the overlapping of these spheres. The theory identifies these three as 'major contexts' in which children learn and grow. Schools can either communicate very effectively to reach out to both the families and the community separately or could establish high-quality communications and interaction systems to bring the spheres closer together. Epstein generated two models for this theory namely the external and internal. In the external model, she argues that school, family and community have practices where each could remain separate and influence children's learning and growing separately. On the other hand, the internal interaction model functions when the interaction takes place within each of the spheres. For example, at family levels, there is interaction between individuals which affect the child. The same occurs at school and at community levels. It is, however, fundamental in this theory that a child (who is learning and growing) remains at the center of school, family and community relationship. These spherical relationships could be defined in terms of their social, economic and emotional characteristics. For example, issues of poverty, parenting, and culture will always affect the child. As such, this theory helps this study to interrogate and navigate issues of parental participation.

2.9 Conceptual framework

The study will be guided by the following conceptual frame work:

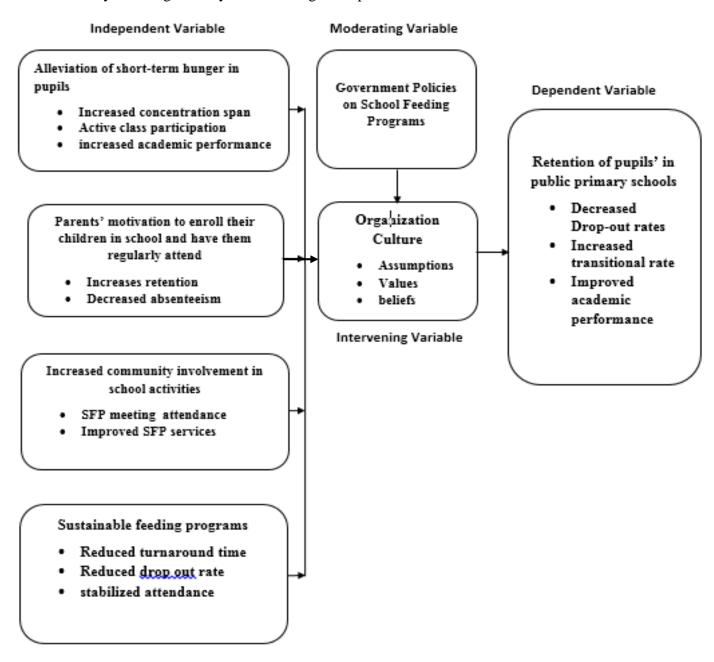


Figure 1 Conceptual Framework

Table2.1: Summary of Empirical Studies and Research Gaps

Variable	Author (Year)	Title of study	Findings	Knowledge gap
Alleviation of	Adelman, et al. (2008)	The Impact of Alternative	School meals alleviate short term	The studies did not show how
short-term hunger		Food for Education Programs	hunger of school children during the	short-term hunger in
in malnourished		on Learning Achievement and	school day which enables a child	malnourished or well-nourished
or well-nourished		Cognitive Development in	concentrate and learn more.	school in school feeding
school in school		Northern Uganda.		program relates to pupils
feeding program		Impact of Feeding Children in		retentions in public schools. This
	Ahmed (2004)	School: Evidence from		study will seek to bridge this gap
		Bangladesh		
	Galgallo (2014)	Factors Influencing Retention	Pupils' involvement in household	There was no clear relationship
		of Pupils in Public Primary	economic activities due to hunger	between alleviation of hunger
		Schools in Drought Prone	effected on pupils' retention levels in	and pupils retention in public
		Zones of North – Horr District,	public primary schools in drought	schools
		Marsabit County, Kenya	emergency zones.	
	Garram Children's	Proposal for a grant of \$65,000	SFP contributes to the education and	Alleviating short-term hunger
	School (2010)	for school feeding program	well-being of children and it can bring	among children at school would
			children into school and out of hunger.	influence the brought children to
			Alleviating short-term hunger among	school it was not clear how
			pupils in school helps to improve	influenced the pupils retention in
			performance on school tests and	public schools
			promote normal progression from	
			beginning to completing education.	

Variable	Author (Year)	Title of study	Findings	Knowledge gap
Alleviation of	World Food Program	Ghana Home-Grown School	SFP in Ghana led to better nourished	Although SFP was shown to lead
short-term hunger	[WFP] (2007)	Feeding field case study:	children, who entered into schools and	to pupils retention it was not
in malnourished		Home-Grown School	completed within the stipulated years	subjected to alleviating short-term
or well-nourished		Feeding Project	as compare to malnourished children	hunger. This study will seek to fill
school in school				this gap.
feeding program				
Parents	Blum (2005)	Drought resistance, water-	Southern China and north-eastern	There was no aspect of parent
motivation to		use efficiency and yield	Thailand, households income levels	motivation resulting from SFP
enroll in school		potential – are they	were affected by drought. Apart from	which would have solved the
and have them		compatible, dissonant or	loss of income, households were not	irregular school attendance. This
regularly attend		mutually exclusive	able to pay school fees for their	study will seek to fill this gap
influence			children hence causing low enrollment	
			in schools.	
	Adelman et al. (2008)	The Impact of Alternative	SFP affect the age at entry in different	SFP can cause households to send
		Food for Education	ways and offsets the cost of educating	their children to school at a
		Programs on Learning	children by making available	relatively younger age thereby
		Achievement and Cognitive	additional income for households, and	minimizing the possibility of late
		Development in Northern	consequently raising the benefits of	entry nut was not shown to lead to
		Uganda.	attending school.	pupils' retention.

Variable	Author (Year)	Title of study	Findings	Knowledge gap
Parents	Pansiri and Bulawa	Parents' Participation in	There is minimal parental support	Parent were not motivated to
motivation to	(2013)	Public Primary Schools in	especially in rural and remote areas	ensure retention of pupils in public
enroll in school		Botswana: Perceptions and	and in boarding primary school	school
and have them		Experiences of Head	system in Botswana and therefore	
regularly attend		teachers	recommends for the creation of a	
influence			parent education programme, a policy	
			for the support and participation of	
			parents of children in boarding	
			schools.	
	Yunusaet al. (2012)	School Feeding Program in	SFPs can motivate parents to enroll	They study clearly showed that
		Nigeria: A Vehicle For	their children in school and to see that	parent were motivated by SFP to
		Nourishment Of Pupils	they attend regularly. When programs	ensure pupils enroll and attend
			effectively reduce absenteeism and	school regularly. However, it did
			increase the duration of schooling,	not mention other factors such as
			educational outcomes (performance,	poverty alleviation as influencing
			dropout, and repetition) improve.	pupils retentions
Community involvement in schools in school feeding program	Adelman et al. (2008)	The Impact of Alternative Food for Education Programs on Learning Achievement and Cognitive	Community effect resulting from School Feeding Program may also influence the age at entry. So, households send their children to school earlier with the commencement	Although community involvement owing to SFP was shown play part in school enrolment it not shown to influence pupils retention. In fact the participation of
		Development in Northern Uganda.	of SFP would create a social pressure and prompt similar action on the part of those who haven't enrolled their children yet.	community (role of community) in SFP was not mentioned in the study. This study will seek to fill this gap.

Variable	Author (Year)	Title of study	Findings	Knowledge gap
Community	Yunusa et al. (2012)	School Feeding Program in	properly designed and effectively	
involvement		Nigeria: A Vehicle For	implemented SFPs can increase	
in schools in		Nourishment Of Pupils	community involvement in schools,	
school			particularly where programs depend	
feeding			on the community to prepare and serve	
program			meals to children. Schools with their	
			communities behind them are more	
			effective than schools with less	
			community involvement.	
	Yendaw and Dayour (2015)	Effect of the National School	GSFP has contributed significantly to	The study showed the importance
		Feeding Programme on Pupils'	pupils' enrolment, attendance and	of community participation but
		Enrolment, Attendance and	retention through stakeholders	failed to address the status of
		Retention: A Case Study of	involvement. It helps in the smooth	pupils retention owing to this
		Nyoglo of the Savelugu-	running of the programme would	participations
		Nantong Municipality, Ghana.	improve the educational infrastructure	
			of rural communities.	
Sustainable	Vermeersch and Kremer	School Meals, Educational	The SFP increases participation of	The study dwelt on preschools and
feeding	(2004)	Achievement and School	both children who were previously	hence may not have much
program in		Competition: Evidence from a	enrolled and children who would have	relevance for primary school
school		Randomized Evaluation	gone to school in absence of the	children. Besides preschoolers are
			program.	

feeding				relatively free of duties that could
program				keep them away from school.
	Garram Children's School	Proposal for a grant of \$65,000	SFPs help keep children in school It	No relationship between
	(2010)	for school feeding program	reduces malnutrition	Sustainable feeding program and
				pupils retention. This study will
		Effect of the National School		seek to bridge this gap
	Yendaw and Dayour (2015)	Feeding Programme on Pupils'	The SFP contributes significantly to	
		Enrolment, Attendance and	pupils' enrolment, attendance and	
		Retention: A Case Study of	retention and reduction in school	
		Nyoglo of the Savelugu-	dropout rate and ultimately reduce	
		Nantong Municipality, Ghana	rural poverty levels in the country.	

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an explanation of the research design and the methodology that will be applied in carrying out the research study and justification for using a particular research design. It also describes the characteristic of the population which will be used in the study, detailed description of sampling methods to be used and procedures, data collection instruments and the procedure of data collection, validity, reliability, data analysis, operational definition of variables and ethical issues.

3.2 Research Design

Orodho (2003) defines research design as the scheme, outline or plan that is used to generate answers to research problems. The study adopted descriptive survey research design since it will describe the state of affairs as it will be. Kerlinger (1969) points out that descriptive studies are not only restricted to fact findings but may result in the formulation of important principles of knowledge and solution to significant problems. This particular design is ideal since the research shall entail collecting and comparing data from the phenomena at the same time of study. Descriptive survey design is also ideal because it seeks to describe the characteristics of certain groups, estimate the proportion with certain characteristics and make predictions. This specific design also has the ability to ensure minimization of bias and maximization of the reliability of evidence so collected

3.3 Target Population

Dagoretti Sub County has 17 public primary schools; only 10 have received the SFP services. The target population therefore was the 10 head teachers of the public primary schools, 80 class teachers of the 10 schools that received the SFP services. The unit of analysis in the study was the 90 respondents as shown in the table below.

Table 3.2: Target population

Category of stakeholders	Target population
Head teachers	10
Class teachers	80
Total	90

3.4 Sampling size and sampling Procedure

This section describes the sample size and sampling procedure used in the study

3.4.1 Sample Size

A sample size is a subset of the total population that is used to give the general views of the target population (Kothari 2004). The sample size for this study is 90 respondents drawn from the target population. Determination of sample size will be important to the researcher since it will be useful to bringing out credible representation of the population.

3.4.2 Sampling Procedures

This study used census which will enable the researcher to gather more information to assist in analysis and arriving at accurate results. The 90 respondents will be more than the threshold of 30 in a descriptive study (Kombo & Tromp, 2006) and so the entire target population will participate in the study. Since the target population is accessible and manageable study will use census, where the entire target population will participate in the study as respondents.

3.5 Research instruments

This study utilized a questionnaire as a primary tool for data collection. The questionnaire were structured (with closed ended questions) with 6 sections. The questions were systematic and predetermined and are presented with exactly the same wording and in the same order to all respondents. Section A captures questions on the demographic characteristics of respondents, Section B entails questions on alleviation of short-term hunger in malnourished or well-nourished pupils, Section C captures questions on parents motivation to enroll in school and have pupils regularly attend section D contains questions on increased community involvement in schools, Section E will contain questions on Section F has questions on the dependent variable.

3.5.1 Pilot-testing of the Research Instrument

A pilot study on the questionnaire was carried out two weeks prior to the main study. Allan and Emma (2011) pointed out that research outcome quality is determined by instruments quality. Based on the Mugenda theory, the study used a 10% sample size to do piloting in a different sub county with the same characteristics but not ones in the study. The pretest sample was therefore 9 respondents who were different the actual respondent.

The primary purpose of pilot-testing of the research instrument is to construct an initial picture of test validity and reliability, help elicit appropriate responses to the study and determine if questions in the questionnaire are relevant and appropriate. Pilot testing also helps to check on the clarity and suitability of the wording.

3.5.2 Validity of the Research Instrument

Validity helps the researcher to be sure that questionnaire items measure the desired constructs. Donald and Delno (2006) define instrument's validity as the appropriateness, meaningfulness and usefulness of inferences a researcher makes based on data collected. Mugenda (2003) agrees with this assertion that validity has to do with how accurately the data obtained in the study represents the variables. This study employed content and construct validity. Construct validity is appropriate to the research paradigm since it seeks to unearth the finer details in project performance through phrasing and constructing clear questions that can be clearly understood by respondents and avoiding vagueness. Construct validity enhances completion rate of questionnaires. Content validity will be utilized by ensuring that the questionnaire will have the questions that will enable the research objectives and research questions to be answered. This will be achieved by giving the questionnaire to my supervisor for scrutiny.

3.5.3 Reliability of the Research Instrument

According to Franke et al (2008) instrument reliability refers to the consistency of the results obtained for each individual from one administration of the instrument to another and from one set of items to another. In this research the spilt half method was used. The instrument was administered to a test sample group. The total score for the odd items and even items was correlated using the person's moment product correlation co-efficient. The reliability co-efficient was calculated using spearman –Brown prophesy formula as indicated below

Reliability of Overall Tests =
$$\frac{2 + \text{Reliability for } \frac{1}{2} \text{ Test}}{1 + \text{Reliability for } \frac{1}{2} \text{ Test}}$$

A reliability value of 0.8 was obtained which was above 0.7 considered as the minimal acceptable by Nunnail (1978)

3.6 Data Collection Procedures

The study used primary data. Primary data refers to that which will originally be collected for the first time for the purposes of this study. The use of primary data is supported by (Saunders et al, 2007). The type of data to be collected shall be shall be informed by the objectives of the study as supported by Teddlie (2010). After successfully defending the proposal, the researcher will seek to obtain a research permit from NACOSTI. The researcher shall undertake data collection by using two fronts. In the first instance, the researcher shall physically visit the project sites and hand deliver questionnaires. This approach shall accord the researcher an opportunity to meet the respondents. The researcher will then collect the questionnaire for analysis after a week to allow the respondents to answer the questionnaire in their free time.

3.7 Data Analysis Techniques

Data analysis was done following the four phases normally used in research, these include: data clean up, reduction, differentiation and explanation. Data clean up shall involve editing, coding and tabulation in order to detect anomaly.

The researcher uses descriptive statistics to analyze data by utilizing means, modes and standard deviation as per the research objectives. Correlation analysis will be used to determine the strength between independent variables and dependent variables. The results of data analysis are presented in form of tables for interpretation. Also, researcher uses Statistical Package for Social Sciences (SPSS) Version 20 and Ms Excel software tools to aid in carrying out descriptive analysis from the quantitative data collected using questionnaires.

3.8 Ethical Issues

In this study, ethical considerations shall be made on the basis of the basic concepts and aspects identified as important components of social considerations in social science research (Oliver, 2008) first, the researcher shall obtain a research permit from the National Commission of Science, Technology and Innovation at the Ministry of Education, Science and Technology. Secondly, the researcher shall write a letter of transmittal of data collection instruments to inform respondents in the research process that the research shall purely be for academic purposes only. The respondents will further be assured that information gathered through this research will not be shared with their colleagues. Respondents shall further be requested not to indicate their names anywhere on the questionnaire and shall also be implored to provide the requested information truthfully and

honestly. Participants will not be asked to approve data or otherwise do anything beyond the questionnaire completion. The researcher is expected all times to respect the individual participant and ensure all inquiries are answered to the best of their knowledge. Lastly, no personal questions or details will be asked of the participants finally, the findings from this study shall be communicated to concerned parties including interested stakeholders upon request.

3.9 Operationalization Definition of variables

The operational definition of variables has been analyzed in the table below

Table 3.2: Operational Definition of Variables

objective	Variable	Indicator	Measurement scale	Toolsof analysis
	Independent variables			
Alleviation of short term hunger in malnourished or well- nourished children	Alleviation of short term hunger	 Increased concentration span Active class participation High academic performance 	ordinal	Table percentage
Parents motivation to enroll in school and have them regularly attend influence	Parents motivation	 Increased enrollment Decreased absenteeism Frequent attendance 	ordinal	Table percentage
Community involvement in schools in school feeding program	Community involvement	 SFP meeting attendance Provision of services like cooking 	ordinal	
Sustainable feeding program in school feeding program	Sustainable feeding program	Reduced turn around timeStabilized attendance	Ordinal	Table percentage
	Dependent variable Retention of pupils in public primary	 Decreased dropout rate Increased academic performance 100% transitional 	Ordinal	Descriptive statistics
	schools	rate		

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS.

4.1 Introduction

This chapter contains the results obtained after analyzing data collected using a questionnaire. This includes; the presentation of these results using of tables and figures for ease of understanding; and interpretations on these results in form of narrative. These data was analyzed quantitatively, using SPSS software. The chapter contains; pilot testing results, response rate, descriptive and inferential statistics. The response simply show the number of respondents who participated with respect to the sample population. In the descriptive the results are arranged in the order of the dependent variable and then the study objectives. The inferential derives the study model.

4.2 Questionnaire Return Rate

This section contains the results on questionnaire response return rate show of the different categories of respondents, who participated in the study data collection. The study targeted a sample size of 90 respondents from which 71 filled in and returned the questionnaires making a response rate of 78.8%. Table 4.1 shows the response rate as per every targeted group.

Table 4.1: Analysis by Questionnaire Return Rate

Category	Sample Population	Response	% Response Rate
Head Teacher	10	10	100
Class Teacher	80	61	85.91
Total	90	71	78.88

Although the questionnaires were administered to 90 respondents, the results in table 4.1 show that only 71 (78.89%) responded. This implies that the remaining 26.04% did not consent to participate in the research data collection. Other details in Table 4.1 show that 100% of the head teachers responded, 85.91% of the class teachers responded. The questionnaire response rate of 78.89% was considered by the present study as being very good and suitable to yield accurate results as per Mugenda and Mugenda (2003), a response rate is of above 69% is very high and would lead to producing accurate results.

4.3 General Information about the Respondents

The study requested the respondents' to provide their general background information found useful to the study, based on; gender, age, level of education, their positions and time involved in school feeding program. The results obtained are presented in table 4.2

Table 4.2 General information about respondents

Description		
Position held in school	Frequency	Percent
Head teacher	10	14.08
Class teacher	61	85.92
Total	71	100
Period in current positions		
1-5 years	19	26.76
6-10 years	30	42.25
11-15 years	17	23.94
16-20 years	3	4.23
Over 20years	2	2.82
Total	71	100
Length involved in school		
feeding programme		
Less than 5 years	12	16.90
5to 10 years	19	26.76
Over 10 years	40	56.34
Total	71	100
Gender		
Male	41	57.74
Female	30	42.25
Total	71	100
Age group		
21-25 years		7.04
26-30 years	5	8.45
31-35 years	6 8	11.26
36-40 years	10	14.08
41-45 years	11	15.49
46-50 years	10	14.08
51-55 years	11	15.49
Over 55 years	10	14.08
Total	71	100
Level of education		
High school	4	5.6
Certificate	9	12.6
P1	22	30.98
Bachelor's degree	30	42.25
Post graduate	6	8.45
Total	71	100

The results in table 4.1 show that most of respodents (42.25%) indicated that they had been in their positions for between six(6) to 10 years. As 26.76% indicated that they had been in their positions for between One(1) and five(5) years, 23.94% indicated that they had been in their positions for between 11 and 15 years. From these resuts, 4.23% indicated that they had been in their positions for between 16 and 20 years as 2.82% indicated that they had been in these positions for over 20 years This implies that majority of the respondents had been in their current positions for a considerable period of time which implies according to their experience they were in a position to give credible information relating to this study.

From table 4.1 a majority of 56.34% indicated that they had been involved in school feeding program for over 10 years. As 26.76% showed that they had been in involved in school feeding program between 1 and 5 years, 16.90% indicated that they had been involved in school feeding program for less than five (5) years. Based on experience, these head teachers and teachers, therefore, had good information school feeding programme on pupils" retention rates in public primary schools in Dagoretti Sub-county of Nairobi County in Kenya.

As shown in table 4.1, the research revealed that, majority of the respondents at 57.74% were males whereas 42.25% of the respondents was females. This implies both genders were fairly engaged in this research and therefore the findings of this research did not suffer from gender biasness.

Results obtained from age group distribution reveled that most of the respondents as shown by 7.04% were aged between 21 to 25 years, 8.45% of the respondents were aged between 26 to 30 years, 11.26% of the respondents were aged between 31to 35 years, 14.08% of the respondents were

aged between 36 to 40 years, 15.49 % of the respondents were aged between 41 to 45 years, 14.8% of the respondents were aged 46 to 50 years, 15.49% were aged 51-55, whereas 14.8% of the respondents were aged above 55 years. This implies that respondents were fairly distributed across age groups.

From the research findings, the study revealed that most of the respondents as shown by 5.6% held secondary school level, 12.6% of the respondents held college certificates, 20.98 were P1 diploma holders, 42.25% of the respondents indicated university degrees whereas 8.45% of the respondents indicated post graduate level. The overall planning of public primary school feeding programmes is vested in the hands of teachers and head teachers. It is, therefore, imperative that head teachers and teachers be persons with good education and sufficient practical knowledge IN educational planning this showed that majority of respondents were well educated which implies that they had good knowledge on school management and were in a position to comprehend the research question and attend to them with less difficulty.

The study the sought to analyze the obtain data capturing the study objectives, explained by the how the independent variable influence the dependent variable, as well as the dependent variable. The questionnaire had questions measured on a 5 point Likert Scale (1, 2, 3, 4 and 5). The results obtained from the data collected were measured on a 5 point Likert scale (1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree).

The results on the assessment of the study objectives were captured in sections; 4.4, 4.5, 4.6 and 4.7, while the results on status of the dependent variable were captured in section 4.8

4.4 Alleviation of Short-Term Hunger in Malnourished or Well-Nourished Pupils

The first objective of the study was to determine how alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative influence pupils' retention in public primary schools in Dagorreti sub county, the study sought to assess the influence of alleviation of short-term hunger in malnourished or well-nourished school (as the independent variable) on pupils' retention in public primary schools the dependent variable using a Likert scale of 1-5where:5=strongly agree,4=agree,3=neutral,2=disagree and 1=strongly disagree. The results obtained are in table 4.3

Table 4.3 Alleviation of Short-Term Hunger in Malnourished or Well-Nourished Pupils and pupils' retention in public primary schools

Parameters						mea	Std
	5	4	3	2	1	n	dev
Well-fed students have got high concentration span which	21	31	16	3	0	3.7	0.93
leads to improved academic performance enabling retention	(29.60)	(43.7)	(22.5)	(4.2)	0	7	
of pupils in school							
Alleviation of short-term hunger in malnourished or well-	23	31	13	43	0	3.7	0.97
nourished pupils enables pupils to actively participate in	(5.6)	(18.3)	43.7	(2.4)	0	7	
learning activities hence retention							
Alleviation of short-term hunger in malnourished or well-	26	23	12	6	0	3.8	1.01
nourished pupils leads to improved academic performance	(36.6)	(32.4)	(22.5)	(8.5)	0	7	
Alleviation of short-term hunger in malnourished or well-	18	31	20	2	0	3.7	0.87
nourished pupils decreases dropout rates therefore enhancing	(25.4))	(43.7)	(28.2)	(2.8)	0	6	
retention of pupils in schools							

The results in table 4.3 shows that most of the respondents agreed that well-fed students had high concentration span which led to improved academic performance enabling retention of pupils in school (43.70%) as 29.60% indicated that agreed that well-fed students had high concentration span which led to improved academic performance enabling retention of pupils in school. As 22.50% showed that they were neutral on the statement that "Well-fed students have got high concentration span which leads to improved academic performance enabling retention of pupils in school", 4.20% disagreed to the same statement. It was also shown 43.7% agreed that alleviation of short-term hunger in malnourished or well-nourished pupils enabled pupils to actively participate in learning activities hence retention and 32.40% strongly agreed to this. However, 18.30% were neutral to the statement "Alleviation of short-term hunger in malnourished or well-nourished pupils enables pupils to actively participate in learning activities hence retention", 5.60% disagreed to the statement.

The results showed that 36.60% the respondents strongly agreed that the provision of alleviation of short-term hunger in malnourished or well-nourished pupils led to improved academic performance as 32.40% agreed to it and 22.50% were neutral to the statement "Alleviation of short-term hunger in malnourished or well-nourished pupils leads to improved academic performance". However, 8.50% indicated that they disagreed to the statement "Alleviation of short-term hunger in malnourished or well-nourished pupils leads to improved academic performance"

As 43.70% of the respondents agreed that alleviation of short-term hunger in malnourished or well-nourished pupils decreased dropout rates therefore enhancing retention of pupils in schools. 25.40% strongly agreed that alleviation of short-term hunger in malnourished or well-nourished pupils decreased dropout rates therefore enhancing retention of pupils in schools. From these

results, 28.20% were neutral on the statement "Alleviation of short-term hunger in malnourished or well-nourished pupils decreases dropout rates therefore enhancing retention of pupils in schools" and 2.80% disagreed to the statement "Alleviation of short-term hunger in malnourished or well-nourished pupils decreases dropout rates therefore enhancing retention of pupils in schools".

On average, it was indicated that 40.88% of the respondents agreed that alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program highly influenced pupils' retention in public primary schools; 31.00% strongly agreed that alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program highly influenced pupils' retention in public primary schools; 22.88% were neutral and 5.28% strongly disagreed to the Alleviation of short-term hunger as influencing pupils retention.

4.5 Parents' Motivation to Enroll Their Children in School and Have Them Regularly Attend

Study objective 2 was; to establish how parent's motivation to enroll in school and have them regularly attends influence pupils' retention in public primary schools in Dagorreti Sub County. The study then sought to assess the influence of parent's motivation to enroll in school and have them regularly attend (the independent variable) on the pupils' retention (dependent variable) using a Likert scale of 1-5where:5=strongly agree, 4=agree, 3=neutral, 2=disagree and 1=strongly disagree. The results obtained are presented in table 4.4

Table 4.4: Parents' motivation to enroll their children in school and have them regularly attend

5	4	3	2	1	mea	Std
					n	dev
21	28	14	8	0	3.87	0.97
(29.6)	(39.4)	(19.	(11.	0		
		7)	3)			
8	15	37	11	0	3.28	0.87
(11.3)	(21.1)	(52	(15.	0		
		1)	5)			
21	26	19	5(7)	0	3.79	0.96
(29.6)	(36.6)	(26.		0		
		8)				
7	20	36	8	0	3.37	0.82
(9.9)	(28.2)	(50.	(11.	0		
		7)	3)			
12	22	17	20	0	3.30	1.06
(16.9)	(31)	(23.	(28.	0		
		2)	2)			
	21 (29.6) 8 (11.3) 21 (29.6) 7 (9.9)	21 28 (29.6) (39.4) 8 15 (11.3) (21.1) 21 26 (29.6) (36.6) 7 20 (9.9) (28.2) 12 22 (16.9) (31)	21 28 14 (29.6) (39.4) (19. 7) 8 15 37 (11.3) (21.1) (52 1) 21 26 19 (29.6) (36.6) (26. 8) 7 20 36 (9.9) (28.2) (50. 7) 12 22 17 (16.9) (31) (23.	21 28 14 8 (29.6) (39.4) (19. (11. 7) 3) 8 15 37 11 (11.3) (21.1) (52 (15. 1) 5) 21 26 19 5(7) (29.6) (36.6) (26. 8) 7 20 36 8 (9.9) (28.2) (50. (11. 7) 3) 12 22 17 20 (16.9) (31) (23. (28.	21 28 14 8 0 (29.6) (39.4) (19. (11. 0 7) 3) 33 33 11 0 (11.3) (21.1) (52 (15. 0 (11.3) (21.1) (52 (15. 0 (29.6) (36.6) (26. 0 (29.6) (36.6) (26. 0 8) 0 0 (9.9) (28.2) (50. (11. 0 7) 3) 12 22 17 20 0 (16.9) (31) (23. (28. 0	21 28 14 8 0 3.87 (29.6) (39.4) (19. (11. 0 3.87 8 15 37 11 0 3.28 (11.3) (21.1) (52 (15. 0 0 1) 5) 0 3.79 (29.6) (36.6) (26. 0 0 8) 0 3.37 (9.9) (28.2) (50. (11. 0 7 3) 3.30 12 22 17 20 3.30 (16.9) (31) (23. (28. 0

Table 4.4 results show that the respondents indicated that 39.40% agreed that the parents were motivated to enrol their children in school and have them regularly attend increases pupils retention. While 29.60% strongly agreed to the statement" Parents' motivation to enroll their children in school and have them regularly attend increases pupils retention', 19.70% showed that they were neutral to it and 11.30% indicated that they disagreed to the statement. The results showed that 52.10% respondents indicated that they were neutral on the statement "Parents' motivation to enroll their children in school and have them regularly attend decreases pupils absenteeism rates." And 21.10% indicated that they agreed that Parents' were motivated to enroll their children in school and have them regularly attend decreases pupils absenteeism rates. However, 15.50% disagreed to the statement "Parents' motivation to enroll their children in school and have them regularly attend decreases pupils absenteeism rates." as 11.30% strongly agreed that Parents' were motivated to enroll their children in school and have them regularly attend decreases pupils absenteeism rates.

Further results on parent motivation showed that 36.60% the respondents indicated that the parents were motivated to enroll their children in school and have them regularly attend increases pupils academic performance. As 29.60% strongly agreed to the statement "Parents' motivation to enroll their children in school and have them regularly attend increases pupils academic performance.", 26.80% were neutral on the same statement. However, 7.00% disagreed to the statement that "Parents' motivation to enroll their children in school and have them regularly attend increases pupils academic performance.' As majority of 50.70% of the respondents agreed that the parents were motivated to enroll their children in school and have them regularly attend decreases dropout rate hence retention of pupils, 28.20% showed that they were neutral to the statement "Parents' motivation to enroll their children in school and have them regularly attend decreases dropout rate

hence retention of pupils". It was shown that 11.30% indicated that they disagreed to the statement "Parents' motivation to enroll their children in school and have them regularly attend decreases dropout rate hence retention of pupils." And 9.90% strongly agreed that parents were motivated to enroll their children in school and have them regularly attend decreases dropout rate hence retention of pupils. It was shown that 31.00% indicated that they agreed that parents had motivation to enroll their children in school and have them regularly encourage to pay school levies towards school feeding program which causes the pupils to continue enrolling and remain in school throughout the term of primary school. The results showed that 28.20% disagreed to the statement "Parents' motivation to enroll their children in school and have them regularly encourage to pay school levies towards school feeding program which causes the pupils to continue enrolling and remain in school throughout the term of primary school as 23.90% were neutral to it. However, 16.90% indicated that they strongly agreed that that parents had motivation to enroll their children in school and have them regularly encourage to pay school levies towards school feeding program which causes the pupils to continue enrolling and remain in school throughout the term of primary school. On average, the results show that 34.64% of the respondents indicated that parent's motivation to enroll in school and have them regularly attend moderately influenced pupils' retention in public primary schools. As 31.26% agreed that parent's motivation to enroll in school and have them regularly attend influenced pupils' retention in public primary schools, 16.93% strongly agreed to it and 15.50% disagreed to the statement.

4.6 Increased community involvement in school's activities and pupils' retention in public primary schools

Objective three was to examine how increased community involvement in schools 'activities as a school feeding program influence pupils' retention in public primary schools in dagorreti sub county using a Likert scale of 1-5where:5=strongly agree, 4=agree,3=neutral,2=disagree and 1=strongly disagree.. The results obtained are presented in table 4.5

Table 4.5 increased community involvement in school's activities and pupils' retention in public primary schools

Parameters	5	4	3	2	1	mea	Std
						n	dev
Increased community involvement in school's activities	38	9	13	11		3.34	0.96
reduces dropout rate	(53.5)	(12.7)	(18.3)	(15.5)			
Increased community involvement in school's activities	19	27	21	4		3.77	0.91
enhance pupils' transitional rate	(26.8)	(38)	(29.6)	(5.6)			
Increased community involvement in schools activities	17	36	9	9		3.48	1.00
improves provision of school feeding program services	(23.9)	(50.7)	(12.7)	(12.7)		00	1.00
	1.0	26	11	8		2.40	0.07
Increased community involvement in schools activities and	16	36	11			3.49	0.97
advocacy on school feeding program encourages all pupils	(22.5)	(50.7)	(15.5)	(11.3)			
to remain in school until they complete school							
Increased community involvement in schools activities	17	33	19	2		3.72	0.87
creates a social pressure for parents to enroll and retain their	(23.9)	(46.5)	(26.8)	(2.8)			
children to school							

The results in table 4.5, show 53.5% of the respondents indicating that they strongly agreed on the statement that "Increased community involvement in school's activities reduces dropout rate " as 18.3% were on increased community involvement in school's activities reduced dropout rate, 15.50% disagreed to the statement "Increased community involvement in school's activities reduces dropout rate' and 12.70% agreed that increased community involvement in school's activities reduced dropout rate. The results showed that 38.00% of the respondents agreed that increased community involvement in school's activities enhanced pupils' transitional rate as 29.60% disagreed to the statement "Increased community involvement in school's activities enhance pupils' transitional rate". From the results, 26.80% strongly agreed to the statement "Increased community involvement in school's activities enhance pupils' transitional rate" and 2.60% strongly disagreed to the same statement.

From these results, it was shown that a majority of 50.70% of the respondents agreed that increased community involvement in schools activities improved provision of school feeding program services and 23.90% strongly agreed to this assertion. As 12.70% showed that they were neutral on the statement "Increased community involvement in schools activities improves provision of school feeding program services", another 12.70% showed that they disagreed to the statement.

As a majority of 50.70% of the respondents indicated that the they agreed that increased community involvement in schools activities and advocacy on school feeding program encouraged all pupils to remain in school until they complete, 25.50% strongly agreed to this statement. From these results, 15.50% showed that they were neutral on the statement "Increased community involvement in schools activities and advocacy on school feeding program encourages all pupils to remain in school until they complete school" and 11.30% indicated that they disagreed to the statement. Most of the respondents (46.50%) agreed that Increased community involvement in

schools activities created a social pressure for parents to enroll and retain their children to school as 26.80% showed that they were neutral on the statement "Increased community involvement in schools activities creates a social pressure for parents to enroll and retain their children to school" and 23.90% strongly agreed to the statement. However, 2.80% disagreed to the statement "Increased community involvement in schools activities creates a social pressure for parents to enroll and retain their children to school".

The results showed that on average, 46.48% of the respondents indicated that increased community involvement in schools 'activities as a school feeding program initiative highly influenced pupils' retention in public primary schools, and 24.28% showed that indicated that increased community involvement in schools 'activities as a school feeding program initiative very highly influenced pupils' retention in public primary schools. As 21.15% showed that indicated that increased community involvement in schools 'activities as a school feeding program initiative moderately influenced pupils' retention in public primary schools, 8.10% showed that indicated that increased community involvement in schools 'activities as a school feeding program initiative did not influence pupils' retention in public primary schools

4.7 Sustainable Feeding Programs and pupils' retention in public primary schools

The fourth objective was; to access how sustainable feeding as a school feeding program influence pupils' retention in public primary schools in dagorreti Sub County. The study sought to assess the influence of sustainable feeding program initiative (as the independent variable) on pupils' retention in public primary schools the dependent variable using a Likert scale of 1-5where:5=strongly agree, 4=agree,3=neutral,2=disagree and 1=strongly disagree.. The results obtained are presented in table 4.6

Table 4.6 Sustainable Feeding Programs and retention of pupils

Parameters	5	4	3	2	1	mean	Std
							dev
Sustainable feeding programs reduces dropout rate hence enhance	16	36	9	10		3.44	1.00
retention of pupils	(22.5	(50.	(12.	(14.1)			
)	7)	7)				
Sustainable feeding programs reduces turnaround time which	8	19	32	12		3.32	0.89
helps in retention of pupils	(11.3	(26.	(45.	(16.9)			
)	8)	1)				
Sustainable feeding program improves academic performance	15	34	18	4		3.62	0.88
pupils transitional rate	(21.1	(47.	(25.	(5.6)			
)	9)	4)				
Sustainable feeding programs stabilizes attendance due to high	11	12	42	6		3.39	0.85
admissions of pupils school and regular school attendance	(15.5	(16.	(59.	(8.5)			
)	9)	2)				
Sustainable feeding programs in schools ultimately reduces	15	38	15	3		3.59	0.87
poverty levels as it encourages all pupils to remain in school until	(21.1	(53.	(21.	(4.2)			
they complete school)	5)	1)				

The results in table 4.5, show that a majority of 50.70% of the respondents indicated that they agreed that sustainable feeding programs reduced dropout rate hence enhance retention of pupils and 22.50% strongly agreed that sustainable feeding programs reduced dropout rate hence enhance retention of pupils. These results show that 14.10% disagreed to the statement that "Sustainable feeding programs reduces dropout rate hence enhance retention of pupils" and 12.70% indicates that they were neutral on the statement "Sustainable feeding programs reduces dropout rate hence enhance retention of pupils".

Although 45.10% were neutral on the statement "Sustainable feeding programs reduces turnaround time which helps in retention of pupils", 26.80% indicated that they agreed to the statement. However, 16.90% disagreed to the statement "Sustainable feeding programs reduces turnaround time which helps in retention of pupils and11.30% strongly agreed to it. It was shown that 47.90% agreed that sustainable feeding program improved academic performance pupils transitional rate and 25.40% were neutral on the statement "Sustainable feeding program improves academic performance pupils' transitional rate". However, 21.10% strongly agreed that sustainable feeding program improved academic performance pupils' transitional rate and 5.60% disagreed to this statement

The results showed that a majority of 59.20% of the respondents were neutral on the statement "Sustainable feeding programs stabilizes attendance due to high admissions of pupils school" and 16.90% agreed to the statement. As 15.50% of the respondents strongly agreed that Sustainable feeding programs stabilized attendance due to high admissions of pupils' school, 8.50% disagreed to this statement. However a majority of 53.50% agreed that sustainable feeding programs in schools ultimately reduced poverty levels as it encouraged all pupils to remain in school until they complete school. As 21.10% strongly agreed that sustainable feeding programs in schools

ultimately reduced poverty levels as it encouraged all pupils to remain in school until they complete school, another 21.10% were neutral on the statement "Sustainable feeding programs in schools ultimately reduces poverty levels as it encourages all pupils to remain in school until they complete school". However, 4.20% disagreed to the statement "Sustainable feeding programs in schools ultimately reduces poverty levels as it encourages all pupils to remain in school until they complete school".

Overall 36.28% of the respondents indicated that sustainable feeding highly influenced pupils' retention as 37.70% showed it moderately influenced pupils' retention and 17.25% showed that it very highly influenced pupils' retention. However, 8.80% indicated that sustainable feeding did not influence pupils' retention.

4.8 pupils' retention in public primary school based on SFP

Lastly, the study sough to assess the pupils' retention due to the school feeding program using a Likert scale of 1-5where:5=strongly agree, 4=agree,3=neutral,2=disagree and 1=strongly disagree. The results obtained are presented in table 4.7

Table 4.7: Analysis by retention of pupils' retention in

Parameters	5	4	3	2	1	me	Std
						an	dev
There is decreased pupils dropout rates in public primary schools	8	19	27	15	2	3.2	1.0
as a result of introduction of school feeding programs	(11.3	(26.8)	(38)	(21	(2.8	3	0
as a result of materials of sensor resulting programs)	(20.0)	(20)	.1))		
Transitional rates have increased in public primary schools due to	7	8	28	18	10	2.6	1.1
the introduction of school feeding	(9.9)	(11.3)	(39.	(25	(14.	3	6
the introduction of school recumg	(5.5)	(11.5)	4)	.4)	1)		
There is increased retention of pupils in public primary due to	6	19	34	12	1)	2.9	1.0
sustainable feeding programs	(8.5)	(26.8)	(47.	(16		6	5
sustainable receining programs	(0.5)	(20.0)	9)	.9)			
A stable food supply in school feeding program is the major	8	6	28	21	8	2,6	1.1
	(11.3	(8.5)	(39.	(29	(11.	9	4
attraction to pupil's retention in the school	(11.5	(8.3)	`	`	`	9	4
)	20	4)	.6)	3)	2.7	0.0
Continuous school feeding program ultimately reduces poverty	14	28	27	2		2.7	0.8
levels as it encourages all pupils to remain in school until they	(19.9	(39.4)	(38)	(2.		5	1
complete school)			8)			
Regular feeding in the school feeding program encourages pupils	8(11.	8	27	21	7	2.7	1.1
to regularly attend school up to completion of the school program	3)	(11.3)	(38)	(29	(9.9	6	4
to regarding account of the sensor program				.6))		
				.0)	,		

The results in table show that 38.00% of the respondents were neutral on the statement "There is decreased pupils dropout rates in public primary schools as a result of introduction of school feeding programs" 26.80% agreed that there was decreased pupils dropout rates in public primary schools as a result of introduction of school feeding programs, and 21.10% disagreed that there was decreased pupils dropout rates in public primary schools as a result of introduction of school feeding programs. As 11.30% showed that they strongly that there was decreased pupils dropout rates in public primary schools as a result of introduction of school feeding programs, 2.80% showed there was not decreased pupils dropout rates in public primary schools as a result of introduction of school feeding programs at all.

As 39.40% of the showed that they were neutral on the statement "Transitional rates have increased in public primary schools due to the introduction of school feeding", 25.40% disagreed to the statement and 14.10% strongly disagreed to this. However, 11.30% agreed that transitional rates increased in public primary schools due to the introduction of school feeding and 9.90% strongly agreed that transitional rates increased in public primary schools due to the introduction of school feeding. From the results, 47.90% were neutral on the statement on the statement "There is increased retention of pupils in public primary due to sustainable feeding programs", 26.80% agreed that there was increased retention of pupils in public primary due to sustainable feeding programs, and 16.90% disagreed that agreed that there was increased retention of pupils in public primary due to sustainable feeding programs. However, 8.50% strongly agreed that there was increased retention of pupils in public primary due to sustainable feeding programs.

Most of the respondents (39.40%) were neutral on the statement on the statement "A stable food supply in school feeding program is the major attraction to pupil's retention in the school" and 29.60% showed that they disagree that a stable food supply in school feeding program was the

major attraction to pupil's retention in the school. As 11.30% strongly disagree that a stable food supply in school feeding program was the major attraction to pupil's retention in the school, another strongly agreed that a stable food supply in school feeding program was the major attraction to pupil's retention in the school and 8.50% agreed that a stable food supply in school feeding program was the major attraction to pupil's retention in the school.

From the results, 39.40% of respondents showed they were neutral on the statement "Continuous school feeding program ultimately reduces poverty levels as it encourages all pupils to remain in school until they complete school" and 38.00% disagreed that "Continuous school feeding program ultimately reduces poverty levels as it encourages all pupils to remain in school until they complete school". When 19.70% strongly agreed that continuous school feeding program ultimately reduces poverty levels as it encourages all pupils to remain in school until they complete school, 2.80% strongly disagreed to this statement.

It was shown that 38.00% disagreed to the statement "Regular feeding in the school feeding program encourages pupils to regularly attend school up to completion of the school program", when 29.60% were neutral to the statement and 9.90% strongly disagreed to it. As 11.30% of the respondents agreed that regular feeding in the school feeding program encouraged pupils to regularly attend school up to completion of the school program, another 11.30% strongly agreed to the statement. Overall results it was established that 39.08% of the respondents indicated that the status of pupils' retention due to school feeding program was moderate, 30.63% indicated that the status of pupils' retention due to school feeding program was low, 16.58% showed that the status of pupils' retention due to school feeding program was high, 7.78% showed that the status of pupils' retention due to school feeding program was very high and the remaining 6.00% indicated that it was never available at all.

CHAPTER FIVE SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter contains a summary of findings, conclusions made based on the study findings, policy recommendations based on the findings and area for further study. The responses were based on the objectives of the study

5.2 Summary of Findings

The study summarized the findings based on the study objective to; determine how alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program influence pupils' retention in public primary schools in Dagorreti sub county, establish how parent's motivation to enroll in school and have them regularly attend influence pupils' retention in public primary schools in Dagorreti sub county, examine how increased community involvement in schools 'activities as a school feeding program influence pupils' retention in public primary schools in Dagorreti sub county; access how sustainable feeding program as a school feeding program influence pupils' retention in public primary schools in Dagorreti Sub County..

5.2.1 Alleviation of short-term hunger in malnourished or well-nourished and pupils' retention in public primary schools in Dagorreti sub county

The study found that each of the indicators alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influenced pupils' retention in public primary schools. That is, 29.6% strongly agreed and 43.7% agreed that well-fed students had high concentration span which led to improved academic performance enabling retention of

pupils in school, alleviation of short-term hunger in malnourished or well-nourished pupils highly enabled pupils to actively participate in learning activities hence retention, and alleviation of short-term hunger in malnourished or well-nourished pupils highly led to improved academic performance. 43.7% response agreed that the alleviation of short-term hunger in malnourished or well-nourished pupils highly decreased dropout rates therefore enhancing retention of pupils in schools. Overall, it was found that alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influenced pupils' retention in public primary schools.

5.2.2 Parent's motivation to enroll their children in school and have pupils regularly attend and pupils' retention in public primary schools in Dagorreti sub county,

It was found that on overall, parent motivation to enroll in school and have them regularly attend highly influenced pupils' retention in public primary schools was high. The study found that; 39.4% response argued that parents were highly motivated to enroll their children in school and have them regularly attend increases pupils retention.52.1% of the respondent noted that parents were moderately motivated to enroll their children in school and have them regularly attend decreases pupils absenteeism rates. Further at 9.9% it was found that; parents' motivation to enroll their children in school and have them regularly attend decreases dropout rate hence retention of pupils was moderate. The study found that parents had high motivation to enroll their children in school and have them regularly encourage to pay school levies towards school feeding program which causes the pupils to continue enrolling and remain in school throughout the term of primary school.

5.2.3 Increased community involvement in schools activities and pupils retention in public primary schools in Dagorreti sub county;

The study found that the increased community involvement in school's activities highly reduces dropout rate at response rate of 53.5% strongly agreeing. Increased community involvement in school's activities 50.7% response agreed enhanced pupils' transitional rate and increased community involvement in schools activities highly improved provision of school feeding program services. A 59.2% response rate noted that sustainable feeding programs stabilize attendance due to high admission of pupils and regular school attendance. It was found increased community involvement in schools activities and advocacy on school feeding program highly encouraged all pupils to remain in school until they complete school.46.5% indicated that increased community involvement highly created a social pressure for parents to enroll and retain their children to school. Overall, the study found that increased community involvement in schools 'activities as a school feeding program initiative highly influenced pupils' retention in public primary schools.

5.2.4 Sustainable feeding program as a school feeding program influence pupils' retention in public primary schools in Dagorreti Sub County

50.7% of the respondents noted that sustainable feeding programs reduced dropout rate hence highly enhanced retention of pupils and Sustainable feeding programs moderately reduced turnaround time which helps in retention of pupils. The study found that sustainable feeding program highly improved academic performance pupils' transitional rate at a 47.9% response rate and Sustainable feeding programs moderately stabilized attendance due to high admissions of

pupils' school and regular school attendance. However at 53.5% response rate, it was found that sustainable feeding programs in schools ultimately highly reduced poverty levels as it encouraged all pupils to remain in school until they complete school. Overall the study found that that sustainable feeding highly influenced pupils' retention.

5.2.5 Findings Relationship between the IVs and the DV

The study sought to establish whether the independent variables; alleviation of short-term hunger, parents' motivation, community involvement and sustainable feeding programs were predictors of dependent variable, pupils' retention in public primary school of Kenya. In this exercise, the study tested for existence of significant relationship between the IVs and the DV by carrying out correlation test. In order to achieve this, the study used the mean of mean to obtain indices for all the study variables. A mean of means was obtained from all the indicator of each variable to get the index for that variable. The results of correlation analysis are shown in table 8.

Table 4. 3: Correlation Analysis Results

Correlations

			Correlations			
		Pupils' Retention	Alleviation of short- term hunger	Parents' Motivation	Community Involvement	Sustainable Feeding Programs
Pupils' Retention	Pearson Correlation	1	.504**	.599**	.599**	.613**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	71	71	71	71	71
Alleviation of short-term	Pearson Correlation	.504**	1	.560**	.627**	.578**
hunger	Sig. (2-tailed)	.000		.000	.000	.000
	N	71	71	71	71	71
Parents' Motivation	Pearson Correlation	.599**	.560**	1	.734**	.775**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	71	71	71	71	71
Community Involvement	Pearson Correlation	.599**	.627**	.734**	1	.859**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	71	71	71	71	71
Sustainable Feeding	Pearson Correlation	.613**	.578**	.775**	.859**	1
Programs	Sig. (2-tailed)	.000	.000	.000	.000	
	N	71	71	71	71	71

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The results in table 8 show that there exists a significant relationship between each IVs and DV and this was high because the correlation coefficient (r) for each comparison between an IV and DV was greater 0.5. The result show that sustainable feeding programs had the highest relationship (r = .613), followed by both parents' motivation (r = .599) and community involvement (r = .599) and lastly alleviation of short-term hunger (r = .504). The results of correlation analysis in table 8 also show that all the IVs; alleviation of short-term hunger, parents' motivation, community involvement and sustainable feeding programs were significantly related to pupils' retention in public primary school of Kenya, since the p-value for each was less than 0.05. From the results; sustainable feeding programs had the highest relationship (r = .613, p-value = .000), parents' motivation (r = .599, p-value = .000), community involvement (r = .599, p-value = .000) and alleviation of short-term hunger (r = .504, p-value = .000), were significantly related to pupils' retention in public primary school of Kenya.

5.3 Discussions

The study carried out discussions on the findings, based on the research objective, and relating it to the literature reviewed. The study used the empirical review to justify the findings and indicating the gaps filled.

5.3.1 Alleviation of short-term hunger in malnourished or well malnourished children and Pupils' Retention

The study established that alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influences pupils' retention in public primary schools. From the total respondents 43.7% agreed that alleviation of short-term hunger in malnourished or well malnourished children influenced pupils' retention in public primary schools. This was confirmation of the study by Nkata (2010) which found that when food scarcity seemed to force children out of school, the government of Malawi introduced SFP to provide meals at primary schools. This in turn alleviated short term hunger and increased enrolment, attendance. The eventual outcome was better learning and more girls attending school. Grantham-McGregor et al. (2014) later confirmed that alleviation of a child's hunger improves concentration, which might also improve child's memory and hence facilitate learning. At 29.60% response, the study revealed that well-fed students had high concentration span which led to improved academic performance enabling retention of pupils in school, which agreed to the findings in the study by Adelman et al.; (2008). Adelman et al.; (2008) study found that school meals alleviate short term hunger through the SFP ensured provision of more nutrients to the child, which enables a child concentrate and learn more. Rathore (2008) study capped it all by revealing that opposite, malnutrition, affected pupils' participation in schools, which

negatively affected pupils' retention in schools. The study therefore concluded that properly designed and effectively implemented SFPs can alleviate short-term hunger in malnourished or otherwise well-nourished school children. This helps to increase the attention and concentration of students producing gains in cognitive function and learning.

5.3.2 Parents' Motivation to enroll their children in school and have them attend regularly and Pupils' Retention

WFP (2010) indicates that the availability of school meal program through the SFP motivates parents to send their children to school. The findings were established in the present study, with 39.4% agreeing that parent's motivation to enroll in school and have them regularly attend highly influences pupils' retention in public primary schools. It also confirmed the findings of a study by Adelman *et al.* (2008) which established that provision of food at school relieved poor household of the cost of educating children acting as an incentive to the poor households, therefore parents are motivated to send their children to school which increases school attendance. As a confirmation, the present found that SFP motivates parents to enroll their children in school and to see that they attend regularly. Specifically, the present established that the SFP s highly motivates parents to enroll their children in school and to ensured that they attend regularly

29.6 % strongly agreed that parents' motivation to enroll their children in school and have them attend regularly and pupils' retention this concurred with Namukwaya and Kibirige (2014) who found that the due to chronic food insecurity, parents opt to prioritize food security and therefore send their children to a school to access food at school. All in all, these studies, including the present study confirm that the parents are motivated to take their children to school to access the

food provided through the SFPs. The study then concluded that as parents are motivated by feeding programs to enroll and have their children attend school, rention is achieved.

5.3.3 increased Community Involvement in school activities and Pupils' Retention

The study sought to establish how community involvement in school activities influenced pupils' retention: it was found that 53.5% strongly agreed to the statement and mentioned that communities around the school play an important role towards the success of SFPs and as such, lack of community participation might lead to failed programs as witness in Afghanistan (State of school feeding worldwide, 2013). The findings by State of school feeding worldwide (2013) support the findings in the present study.50.7% agreed that increased Community Involvement in school activities and advocacy on the program encourages pupils to remain in school until completion. This was a confirmation of Abdullahi (2012) who established that for parent to retain their children in a school, there should exists a good relationship between the school and community. Ahmed (2004) also indicates that to able to alleviate short term hunger and increase concentration of pupils, the SFP should be harmony among the community and the school (Abdullahi, 2012).

The present study established that community involvement improved the school feeding program infrastructure to the point of highly enhancing pupil's retention in the school. This was confirmation of the findings in Yendaw and Dayour (2015).the study therefore concluded that there should be commitment of stakeholders to providing the needed resources that would improve the educational infrastructure for the smooth running of the programme. The community would therefore be involved and responsible for providing prepare meals at school, bring firewood, store keeping and serving of meals, construct cooking shelters, protect the school premises, organize

meetings, organize fundraising activities, assist with the school vegetable gardens and parents provide plates and spoons

5.2.4 Sustainable Feeding Programs and Pupils' Retention

At a 22.5% response the present study found that sustainable feeding highly influenced pupils' retention, the respondents noted that adequacy of a stable food supply in school feeding program was the major attraction to pupil's retention in the school. This confirmed Finan (2010), who established that pupils under SFPs are no longer distracted by hunger and the crippling effects of extreme malnutrition. Hence, the pupils are better able to concentrate, understand, and socialize. WFP (2010) established that the promise of at least one nutritious meal each day boosts enrolment and promotes regular attendance.

It was found that adequacy of a stable food supply in school feeding program was the major attraction to pupil's retention in the school, which agreed to World Bank's (2012) findings that the pupil have no problem to worry about what to eat in schools in the sense that the burden has been solved by the sustainable free school feeding and lunches. The present further confirmed that consistent supply of all meals in school feeding program moderately led to high admissions of pupils in to school and have them regularly attend school and that regular feeding in the school feeding program highly encourages pupils to regularly attend school up to completion of the school program. All these findings are in confirmation that the pupils have no more worries after assurance that there is food at school as established by World Bank's (2012).

Other findings confirming the findings by World Bank's (2012) are that the consistent supply of all meals in school feeding program leads to high admissions of pupils school and have them

regularly attend school and regular feeding in the school feeding program highly encourages pupils to regularly attend school up to completion of the school program.

53.5% of the respondents noted that continuous school feeding program ultimately reduces poverty levels as it moderately encouraged all pupils to remain in school until they complete school. It was found that pupils were always ready to attend school regularly due to the assured presence of the school feeding program, a confirmation of Finan (2010) that participating families save significantly of their annual income by taking advantage of school meals and avoiding added food expenditures. Studies by Garram Children's School (2010) and Yendaw and Dayour (2015) established that the SFP contributes significantly to pupils' enrolment, attendance and retention and reduction in school dropout rate and ultimately reduce rural poverty levels in the country.

5.2.5 Status of Pupils Retention

The study established that the status of pupils' retention due to school feeding program was moderate. This was characterized by all the indicators of pupil's retentions being moderate for instance 38% were neutral on the statement that there is decreased pupils dropout rate in primary schools as aresult of introduction of school feeding programs. The study found that the indicators of pupils' retention were; retaining the same pupils admitted throughout the course of their learning; pupil reluctance to drop out of school; pupils staying in school long hours, on holidays and weekends; pupils eager to enter school, learn and remain in school; and pupils from poor households attending and remaining in school for full course period. These findings supported earlier studies. For instance, the study by Dheressa (2011) revealed that SFP effectively increase class attendance by pupils as the study by Adelman *et al.* (2008) established that school meals

encourage pupils' school attendance. The study by Akanbi and Alayande (2011) found that SFP increased school attendance and enrolment rates as Afoakwa (2012) study showed that the SFP triggered an acute increase in the attendance of pupils in schools.

Aregawi (2012) study found that SFP had a positive and significant impact on increment of student enrollment as Khatete *et al.* (2013) study established that SFP enhanced pupils' participation in co-curricular activities. Meanwhile, studies by Sulemana *et al.* (2013) and Salee (2013) revealed that SFP led to increase in enrolment. A study by Mwavula (2014) showed that SFP enhanced Kenyan pupils' enrolment, attendance, class participation and reduced dropout as Mohamed (2015) study concludes SFP highly enhance pupils' attendance and increased pupils' participation in class assignment duties and discussion.

5.3 Conclusions

The study concludes that alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influences pupils' retention in public primary schools. Certain indicators contribute to alleviation of short-term hunger in malnourished or well-nourished school as a school feeding program initiative highly influencing pupils' retention in public primary schools. These include; well-fed students which improved academic performance; enabling pupils to actively participate in learning activities hence retention; frequent feeding; improved academic performance due to alleviation of short-term hunger in malnourished and decreased dropout rates due to alleviation of short-term hunger in malnourished.

The study concludes parent's motivation to enroll in school and have them regularly attend highly influences pupils' retention in public primary schools and it's characterized by various indicators. These indicators include; parents ensuring that they attend regularly; regularly attendance decreasing pupils absenteeism rates through parent motivation, parents motivation ensuring regular attendance that increases pupils academic performance parent motivation enhancing regular attendance that decreases dropout rate hence retention of pupils and parent encouraged to pay school levies towards school feeding program

The study concludes that increased community involvement in schools 'activities as a school feeding program initiative highly influences pupils' retention in public primary schools. The indictors of increased community involvement in schools 'activities as a school feeding program initiative that lead to high influence are enumerated as; participation in reducing dropout rate, enhancing pupils' transitional rate, provision of school feeding program services, advocacy on school feeding program encourages all pupils to remain in school until they complete school and creating a social pressure for parents to enroll and retain their children to school.

The study concludes that sustainable feeding as an initiative of school feeding program highly influence the pupils' retention in public primary schools. The factors enhancing this include the sustainable feeding programs; reducing dropout rate hence enhance retention of pupils, reducing turnaround time which helps in retention of pupils, improves academic performance pupils transitional rate, stabilizing attendance due to high admissions of pupils school and regular school attendance, and ultimately reducing poverty levels as it encourages all pupils to remain in school until they complete school.

The study reveals that there exists a high and positive significant relationship between each of; alleviation of short-term hunger; parents' motivation; community involvement; and sustainable feeding programs and pupils' retention in public primary schools, since the p-value for each was less than 0.05 and relationship was greater than 0.5.

5.4 Recommendations

The study made policy recommendation based on the findings and study objectives.

- 1. The study recommends that the ministry of education should review the SFP continuous and extend it in the school in poverty ridden areas. They should prioritize supply of school meals to these areas by ensuring that there is always; continuous provisions of nutritious food, assured adequacy of food supplies, regular breakfast consumption, frequent feeding, and assurance of daily food for the pupils in the school. They should set up boards to manage the SFP in these areas for the effectiveness of the programs. To ensure successful delivery of the programs, the ministry should have storage points conveniently located for ease delivery.
- 2. Secondly, the study recommends that the parents of the school, especially in poor areas, should be sensitized to take the frontline in supporting the SFP. They should be made to know that they are they owners of the program and not spectators. The ministry of education in collaboration with the county governments should create awareness campaigns to explain the role of the parents in the SFP programme for the sake of parents' participations.
- 3. Thirdly, the study recommends that the ministry of education, local administration and county governments, especially in poverty stricken areas, should form combined effort to

accelerate the SFP. They should from local school committee, including the ministry officials, county government officials and the community, to steer the SFP. The community should actively participate in the Parent Teacher Association committees, specially set for managing the SFP. The community should be given the responsibility toe create advocacy on SFP

4. Lastly, the study recommends that the ministry of education should actively collaborate with the county governments by creating legal structure, in poverty ridden areas ,to spearhead the SFP for a sustainable feeding program. The structure should be provided with adequate resources such as funding and institutional strengths to ensure; stable food supply, consistent supply of all meals, regular feeding and assured presence of the school feeding program. The structures should have program be focused to continuously reduce poverty levels within the SFP.

The expected outcome, from implementation of the recommendations is; Retaining the same pupils admitted throughout the course of their learning, increased admissions in public primary schools due to SFP; Pupil reluctance to drop out of school; pupils staying in school long hours, on holidays and weekends; pupils eager to enter school, learn and remain in school; and pupils from poor households attending and remaining in school for full course period.

5.5 Areas for further study

- 1. The present study established that the status of pupils' retention was moderate. This implies that the SFP has not hit the targets as yet, if pupils in a county classified as economically stable, are not fully enjoying the services of the SFP. So other studies should be done to establish the challenges facing the SFP that hinder the achievement its objectives.
- 2. The study established that all factors of SFP; alleviation of short-term hunger, parents' motivation, community involvement, and sustainable feeding programs, highly influenced the and at the same time the pupils' retention in Kenyan primary school was moderate. This explains that there are other factors which influence the pupils' retention in Kenyan primary school. So other studies should be done to establish the other factors that influence the pupils' retention in Kenyan primary school.
- 3. The study was conducted in Dagoretti Sub County, which was a very small representative of the entire Nairobi County, so other studies should conducted to investigate the influence of school feeding programs on pupil retention in Nairobi county as well as the entire Kenyan Republic.

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APPENDICES

APPENDIX I: LETTER OF TRAMSMITIAL

Esther Mongina Nyakundi

P.O Box 600-40502 Nairobi,

Kenya.

10/04/2017.

Dear Respondent,

RE: influence of school feeding program on pupils' retention in public primary school in

Dagoretti South sub-county, Nairobi county Kenya.

I am a Master's student at the School of Continuing and Distance Education at the

University of Nairobi currently conducting a research study as entitled above.

You have been selected as one of the respondents to assist in providing the requisite data

and information for this undertaking. I kindly request you to spare a few minutes and

answer the attached questionnaire. The information so obtained will be used for academic

purposes only, will be treated with utmost confidentiality and will not be shared with

anyone whatsoever. Do not write your name anywhere on the questionnaire.

I therefore beseech you to respond to all questions with utmost honesty.

Thanking you most sincerely for your support.

Yours Sincerely,

ESTHER NYAKUNDI

0726556011

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APPENDIX 1I: QUESTIONNAIRES

QUESTIONNAIRES FOR CLASS TEACHERS AND HEAD TEACHERS

INTRODUCTION

This questionnaire is a research instrument designed to collect information on the influence of school feeding program on retention of pupils in public primary schools. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing feeding program performance. The information collected will be handled with confidentiality and with academic professionalism. *Kindly fill in the information as directed in the various sections provided.*

	ION A-GENERAL INFORMATION What is your Gender? {Please tick one $()$
	Male Female
2)	What is your Age Group? {Please tick one ($$) 21 – 25 years 26 – 30 years 31 – 35 years 36 – 40 years
	41 – 45 years

4) What is your highest level of education? {Please tick one $()$
High School Certificate Diploma
Bachelor Degree Post Graduate Degree Other (specify)
4). for how long have you been in the current position1-5 years
1-5 years
6-10 years
11-15 years
16-20 years
Over 20 years
5). For how long have you been involved in the school feeding program
Less than 5 years
5-10years
Over 10 years

SECTION B: ALLEVIATION OF SHORT-TERM HUNGER IN MALNOURISHED OR WELL-NOURISHED PUPILS

Kindly rate the following factors / statements using a scale of Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; and Strongly Disagree=1 regarding alleviation of short-term hunger in malnourished or well-nourished pupils.

Parameters	Strongly	Agree	Agree	Neutral	Disagree	Strongly Disagree
Well-fed students have got high concentration span which						
leads to improved academic performance enabling retention						
of pupils in school						
Alleviation of short-term hunger in malnourished or well-						
nourished pupils enables pupils to actively participate in						
learning activities hence retention						
Alleviation of short-term hunger in malnourished or well-						
nourished pupils leads to improved academic performance						
Alleviation of short-term hunger in malnourished or well-						
nourished pupils decreases dropout rates therefore enhancing						
retention of pupils in schools						

SECTION C: PARENTS' MOTIVATION TO ENROLL THEIR CHILDREN IN SCHOOL AND HAVE THEM REGULARLY ATTEND

Kindly rate the following factors / statements using a scale of Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; and Strongly Disagree=1 regarding parents' motivation to enroll children in school and have them regularly attend.

Parameters	Strongly	Agree	Agree	Neutral	Disagre	Strongly	Disagre
Parents' motivation to enroll their children in school and							
have them regularly attend increases pupils retention							
Parents' motivation to enroll their children in school and							
have them regularly attend decreases pupils absenteeism							
rates.							
Parents' motivation to enroll their children in school and							
have them regularly attend increases pupils academic							
performance.							
Parents' motivation to enroll their children in school and							
have them regularly attend decreases dropout rate hence							
retention of pupils.							
Parents' motivation to enroll their children in school and							
have them regularly encourage to pay school levies towards							
school feeding program which causes the pupils to continue							
enrolling and remain in school throughout the term of							
primary school.							

SECTION D: INCREASED COMMUNITY INVOLVEMENT IN SCHOOL'S ACTIVITIES

Kindly rate the following factors / statements using a scale of Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; and Strongly Disagree=1 regarding increased community involvement in school's activities.

Parameters							
	Strongly	Agree	Agree	Neutral	Disagree	Strongly	Disagree
Increased community involvement in school's activities							
reduces dropout rate							
Increased community involvement in school's activities							
enhance pupils' transitional rate							
Increased community involvement in schools activities							
improves provision of school feeding program services							
Increased community involvement in schools activities and							
advocacy on school feeding program encourages all pupils to							
remain in school until they complete school							
Increased community involvement in schools activities							
creates a social pressure for parents to enroll and retain their							
children to school							

SECTION E: SUSTAINABLE FEEDING PROGRAMS

Kindly rate the following factors / statements using a scale of Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; and Strongly Disagree=1 regarding sustainable feeding programs.

Strongly	Agree	Agree	Neutral	Disagree	Strongly	Disagree
-	,	,	, ,	,		, ,
	Strongly	Strongly Agree	Strongly Agree Agree	Strongly Agree Agree Agree	Strongly Agree Agree Agree Agree Disagree	Strongly Agree Agree Agree Agree Disagree

SECTION F: PUPILS' RETENTION IN PUBLIC PRIMARY SCHOOLS.

Kindly rate the following factors / statements using a scale of Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; and Strongly Disagree=1 regarding retention of pupils in public primary schools.

Parameters	Strongly	Agree	Agree	Neutral	Disagree	Strongly Disagree
There is decreased pupils dropout rates in public primary	<u> </u>		7			
schools as a result of introduction of school feeding						
programs						
Transitional rates have increased in public primary schools						
due to the introduction of school feeding						
There is increased retention of pupils in public primary due						
to sustainable feeding programs						
A stable food supply in school feeding program is the major						
attraction to pupil's retention in the school						
Continuous school feeding program ultimately reduces						
poverty levels as it encourages all pupils to remain in school						
until they complete school						
Regular feeding in the school feeding program encourages						
pupils to regularly attend school up to completion of the						
school program						

THANK YOU

APPENDIX III: INTRODUCTION LETTER



UNIVERSITY OF NAIROBI

COLLEGE OF EDUCATION AND EXTERNAL STUDIES SCHOOL OF CONTINUING AND DISTANCE EDUCATION DEPARTMENT OF EXTRA-MURAL STUDIES NAIROBI EXTRA-MURAL CENTRE

Your Ref:

Our Ref:

Telephone: 318262 Ext. 120

Main Campus Gandhi Wing, Ground Floor P.O. Box 30197 NAIROBI

8th August 2016

REF: UON/CEES/NEMC/24/079

TO WHOM IT MAY CONCERN

RE: ESTHER MONGINA NYAKUNDI - REG NO L50/70151/2013

This is to confirm that the above named is a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra- Mural Studies pursuing Master of Arts in Project Planning and Management.

She is proceeding for research entitled "influence of school feeding program on pupil's retention in Public Primary School in Dagoretti South Sub- County, Nairobi County Kenya.

Any assistance given to her will be appreciated.

CAREN AWILLY
CENTRE ORGANIZER
NAIROBI EMC

APPENDIX IV: RESEARCH PERMIT

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