INFLUENCE OF SCHOOL FEEDING PROGRAM ON THE RETENTION OF LEARNERS IN PUBLIC PRIMARY SCHOOLS IN KENYA; A CASE OF MOMBASA COUNTY

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DECLARATION

This research project report is my original work and has not been presented for examination to any other institution.

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DEDICATION

I wish to dedicate this work to my parents, Fatma Kapera and Juma Bekidusa; words cannot fully describe what I feel for you. All your sacrifices and efforts in making sure that we as a family live a healthy and satisfying life are the reasons why I have made it this far in education. Lastly, to my husband Khamis Mwinyi, the moral support that you always extended to me cannot pass unnoticed. It is my prayers that God almighty reward you all abundantly.

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ABBREVIATIONS AND ACRONYMS

ASAL	Arid and Semi-arid Lands
CBS	Central Bureau of statistics
CRC	Convention on the Rights of children
ECDE	Early Childhood Development and Education
K.I.E	Kenya Institute of Education
MDG	Millennium Development Goals
MoE	Ministry of Education
NGO	Non-Governmental Organization
SFP	School Feeding Program
SMP	School Milk Program
SPSS	Statistical Package for Social Sciences
UNICEF	United Nations Children's Fund
UNESCO	United Nations Education, Scientific and Cultural program
WFP	World Food Programme

ABSTRACT

This study was carried out to investigate the factors influencing school feeding program on the retention of learners in public primary schools in Kenya, a case of Mombasa County. This research was driven by the fact that previous studies carried out to determine factors that influence school feeding program have yielded mixed results. The County Government having the mandate of preschools in the new dispensation has strived to provide feeding programmes to all public preschools to ensure future human development in our countries. The study sought to find out how school feeding programme influence the retention of learners in public primary school; Four objectives guided this study including sustainability of feeding, alleviation of short term hunger, also quality of milk and finally the frequency of meals. The researcher employed the use of descriptive survey design. The target population of the study comprised 50 preprimary school teachers and 10 head teachers. A structured questionnaire was used to collect data. Data was analysed using descriptive statistics, which included frequency distributions, their mean and standard deviation and represented using figures and tables. The study concludes that sustainable feeding program as a school feeding program, alleviation of short term hunger , quality of milk and finally the frequency of meals as a school feeding program initiative highly influences the retention of learners in public primary schools. The study was guided by Abraham Maslow theory of basic human needs which demonstrates that once basic needs are met, people can express their other needs and Vroom Expectancy Theory of Motivation that assumes there is correlation between effort put by the employees and their performance. The study established that 26.09% of respondents were male while 73.91% were female. The research showed that 39.13% of respondents were between the age of 21 to 25 years implying that the implementers of the program are mostly young people with energy. The study found that sustainable feeding program reduces drop out hence retention of the pupils in school with 56.52% rate. Again the study findings showed that that each of the indicators of alleviation of short term hunger as a school feeding program initiative highly influenced pupil's retention in public primary schools with 55.07% rate. On the quality of milk in relation to retention of learners in public primary schools the study found that 50.72%nutritious meal encourages enrolment of more pupils in school especially lower classes thus enhancing retention of pupils and also the 52.17% of respondents agree that the frequency of meals influences the retention of learners in public primary schools. The study recommends that the ministry of education should review the School feeding Programme and extend it upper primary classes; also the county government and the ministry of education should collaborate to create structures for sustainable feeding program. Regarding the quality of milk the study recommends that nutritionist should be involved in order to give knowledge on the amount required for pupils per day so that children have a balanced diet food in schools and lastly the schools should increase the frequency of food being given to pupils in order for it to benefit more pupils.

Keywords: Sustainability, Alleviation of Hunger, Quality of Milk, Frequency of Meals, Retention

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Any child requires appropriate education to be not only more successful later in life but also for the potential for economic status of the community and the country as a whole. Education is a fundamental human right, not a privilege of the few. Parents around the world demand education for their children as their first priority meaning that it has been universally been accepted as the main ingredient for a successful life. Children themselves yearn for the opportunity to fulfill their dreams. Children who are enrolled in formal schooling do not have a guarantee that they internalize the information from the lessons they learn. The most prominent obstacles hindering the child's learning process is hunger. Among major contributors in low school enrolment in most developing countries is chronic hunger. The major problem that plagues most school going children in primary schools especially in low income area is poverty. So when there is no food in the house, going to school is not a priority. Chronic hunger can prevent students from making the most of a formal education, no matter how hard they try to ignore its effects. The sad truth is that hunger can have physical and psychological effects on young people that make learning substantially difficult. Malnutrition remains one of the major obstacles to human well-being and economic prosperity in developing countries (Ecker & Nene 2012; Stevens et al., 2012).

The international community has greatly helped in addressing the issue of hunger afflicting the developing countries and has in one way assisted in the same; an example is the World Food Programme which is one of the largest financiers of the school feeding programmes in the developing world. In 2003 alone, WFP fed more than 15 million children in schools in 69 countries. The WFP works with national governments, other international donors and local donors to make the programme successful. Food can be used to attract children to school and keep them attending (WFP, 2003). Availability of food in school increases attendance rates significantly as different researches have shown that when a school meal is provided, enrolments can double within a year (United Nations Girls Initiative, 2010). It has also been noted that WFP-assisted feeding programme has developed alongside national policies of increased student health, attendance and performance (Ministry of Education, 2003).

School feeding programmes are phenomenon implemented worldwide with the main focus on but not limited to regions which live below the poverty line. Studies show that the school feeding programmes has its origin in the 1930's, when schemes were introduced in the United Kingdom (UK) and the United States (US) with the explicit aim of improving the growth of children (Richter, 2000).In the year 1934, the United Kingdom initiated a program that subsidized milk for school children. The milk was then provided for free from 1944 onwards (Sweetnam, 1978).This initiative not only worked in the United States, but also South Africa started a program to supply free milk to white and colored schools in the early 1940s. Since then, school feeding has broadened to include the provision of fortified biscuits, nutrient supplementation or full meals. (Tomlinson, 2007).

More than 8.8 million South African students receive a cooked mid-morning meal, and those in the poorest provinces are also served lunch. Cape Verde's national school feeding program not only provides one hot meal a day to thousands of school children, it also employs more than 1,000 women from within the school communities. In Namibia, communities are expected to provide fuel, cooking utensils and storerooms. In Mali, school feeding programs have put schools at the heart of local development by promoting locally-owned meal programs. In Ghana, the government uses a digital school meals planner to develop nutritionally balanced school meals using local ingredients. In Botswana the government has successfully implemented its national school feeding program continuously for 45 years, witnessing enrollment growth and school attendance rates that are highly associated with the availability of food at school. There are a number of strengths; however, there is still room for improvement, and a need for more robust data, analysis and reporting. (Drake, Woolnough, Burbano & Bundy, 2016)

The government of Cape Verde has repeatedly shown its commitment to a policy of universal coverage of school feeding programs in public pre-primary and primary schools, and is now revising the objectives to meet the changing needs of communities. The major challenge is how to meet the demand to provide healthy meals and support the local economy and agriculture, while keeping the program affordable. In addition to increased school access, retention, and success, the school feeding program has sparked behavioral changes among children including hand washing, good eating habits, nutritional, and hygiene practices in Cote d'Ivoire. For a

sustainable program, the report calls for strengthened governance, capacity, monitoring and evaluation, as well as improving agricultural technical skills and the introduction of advanced agricultural technology and equipment. School feeding in Ghana is decentralized and outsourced, relying on caterers for food procurement, preparation and distribution. This creates jobs for the communities, and allows schools to focus on education rather than food duties. While implementation of school feeding programs need political support and commitment, the report notes it is important for the government not to politicize the program, which can affect targeting and quality.

In Kenya, the school feeding programs were introduced in the year 1966 by the school feeding council. And in 1979 school milk programs were introduced to all public primary schools in Kenya. The program was started to boost the health and diet of children and was fully funded by the government. However, these gains were eroded during the 1990s due to the introduction of cost-sharing policies which required households to contribute more towards the cost of education. Consequently, a decline in enrolment and retention was experienced at the primary and secondary school levels in the last decade. Children from poor households were most affected and many dropped out of school while others found it difficult to access education. More than 1.5 million school children are fed a hot lunch of corn and legumes each day, the only meal many of them will have. School Feeding Program have assisted the children by introducing feeding Programs in schools located in Arid and Semi Arid areas as well as schools whose catchment areas are pockets of poverty including schools which carter for Most Vulnerable Child. (MVC). According to Mugiri (1995) the main objective of the school feeding program is to increase enrolment in schools, prevent school dropouts hence retention increase level, minimize truancy, reduce disparities and increase level of participation of pupils in schools and alleviate short term hunger. There is evidence strongly suggesting that school feeding programs can increase attendance rates especially for girls(Feingold 1970).

In stable situations, school feeding programmes 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). 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 crises also tend to pull children into the workforce either as formal labour or as child soldiers. In the case of formal labour, successful school feeding programmes 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).

1.2 Statement of the problem

When hunger strikes a community it hurts children the most, draining them of their will to play and learn but instead search for food to eat. The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimates that 115 million school-aged children do not go to school. Ninety seven per cent of these children live in developing countries. For poor families the food that the child gets at school means that the family gets at least one meal a day, and in many cases this is a good enough reason to send a child to school. (UNESCO; 2005).

Kenya's school feeding program has experienced continued expansion and refinement, especially during the past decade. Since the introduction of free compulsory primary education for all Kenyan children in 2003, the WFP-assisted feeding program has developed alongside national policies of increased student health, attendance, and performance (MoE, 2003). From its inception, it has targeted food inequality in the most vulnerable areas of Kenya, including school Districts in the arid and semi arid regions and the informal urban slums of large cities such as Nairobi and Mombasa (Espejo, 2009).

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 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).

According to proponents of SFP like the WFP, School Feeding Program is an incentive for vulnerable families to invest in children's education and encourages poor households to send children to school and helps to keep them there (WFP, 2008).Most of these studies are solely based on the influence of school feeding programs on children school enrolment, retention, enhancing class attendance and lowering of student drop-out of school. Few studies have shown the effects and the influence of school milk programs on the same. This study will therefore take into account of the same argument to evaluate the influence of school feeding program (SFP) in improving the retention of learners in public primary schools in Mombasa County, Kenya.

1.3 Purpose of study

The purpose of the study was to establish the influence of school feeding program on the retention of learners in public primary schools.

1.4 Research Objectives

The research was guided by the following objectives;-

i. To examine the extent to which sustainable feeding initiative as a school feeding program influences the retention of pupils in public primary schools.

ii. To determine the extent to which alleviation of short term hunger in school children influences the retention of pupils in public primary schools.

iii. To examine the extent to which the quality of milk influences the retention of pupils in public primary schools.

iv. To assess the extent to which the frequency of meals influences the retention of pupils in pupils in public primary schools.

1.5 Research Questions

The study was guided by the following questions;-

i. To what extend does the sustainable school feeding initiative influence the retention of pupils in schools?

ii. How does alleviation of short term hunger in school children influences pupil's retention in public primary Schools?

iii. How does the quality of milk given effect retention of pupils in public primary schools?

iv. How does the relationship between meals frequency influence pupil's retention in public primary schools?

1.6 Statements of hypotheses

The study was guided by the following hypothesis:

i. H_1 There is influence of sustainability of school feeding initiative on retention of learners in public primary schools.

ii. H_1 There is influence of alleviation of short term hunger in school children and retention of pupils in public primary Schools.

iii. H_1 There is influence of the quality of milk given and retention of pupils in public primary schools.

iv. H_1 There is influence of the relationship between meals frequency and pupil's retention in public primary schools.

1.7 Significance of the study

The study findings and recommendations would be of great importance on demonstrating the importance of school feeding programs (SFP) and how they influence on the enrolment and retention of children in primary schools of Mombasa county .The study intends to provide a practical solution in improving the enrolment and retention of children in schools for areas which experience big dropout rates due to poverty.

It will help the school managers in policy implementation to ensure effective learning takes place in schools. The findings will also help the community find ways to own the SMP projects by enhancing more participation in ensuring the success of the project.

In policy, the study will inform government policy with regard to designing changes to streamline the SFP management to ensure success of the SMP projects hence achieving the overall objectives of the Millennium Development Goals 1-3 (poverty reduction, universal primary education, gender equality).

1.8 Basic assumptions of the study

The assumptions of this study were that the public primary school heads, staff and pupils in Mombasa County would be receptive, cooperative and ready to give us data and information in regard to the school feeding program projects carried out currently and the previous years. Also the community of Mombasa County would be willing to participate in the study and give honest opinions and responses during the survey, the sample chosen will represent the population and in addition the researcher also assumed that the resources allocated for this research study will be adequate in the completion of the study in the time frame provided.

1.9 Delimitations of the study

The research sought to establish the influences of school feeding program in retention of learners targeting in public primary schools in Mombasa county .The area was selected because it has several school feeding programs which are ongoing. Mombasa County was also chosen due to its proximity to the researcher who works in the area and the researcher was also familiar with the geography of the area. The study focused on collecting data on the factors that directly or

indirectly influence school feeding programs on the retention of learners in public primary schools in Mombasa County. Research data was collected from head teachers and teachers since it was believed that they have key information on the factors that influence school feeding program in the area. Open and closed ended questions were used for data collection so as to allow informants to responds in their own words and also have adequate time to give well thought out answers.

1.10 Limitations of the study

The limitations for this study were time and resources constraints as well as the collection of primary data from respondents for the study. For the above mentioned limitations the researcher borrowed funds from friends and family to facilitate on the resources needed for the study. In addition the researcher sacrificed some time from her office duties to avail more time for carrying out the research. Finally in getting primary data from the respondents, the researcher used the education office in Mombasa County in gaining access to the other respondents especially the community representatives.

1.11 Definition of significant terms

Sustainable School Feeding Programme- Programs organized by schools and education stakeholders that provide food to school going children.

Alleviation of Short term hunger-it is the reduction of lack of food for primary school children for a short period of time when they are attending studies in school.

Quality of milk-a distinctive attribute or characteristic of milk which make it nutritious and god for children to drink in school feeding program.

Frequency of Meals-how often schools children will be provided with food while in school.

Retention- Refers to all given opportunity for all pupils enrolled in schools to be in school until completion of the structured system and course work.

1.12 Organisation of the study

The study is organised into three chapters. In chapter one, the introduction of the study is contained. It has the background of the study, problem statement, purpose of the study, objectives of the study, research questions for the study, the statements of hypothesis, the significance of the study, the assumptions, limitations of the study, as well as the delimitations of the study and in addition to the organisation of the study.

Chapter two presents the literature review of the study, here concepts and terms such as school feeding program, school learner enrolment, learner retention, factors affecting the enrolment and retention of learners in public primary schools and challenges in the implementation of school feeding programs. This chapter also presents the conceptual framework of the study. Chapter three outlines the study design, the target population, methods of data collection, validity and reliability of the research instruments and data collection procedures. The chapter also includes the ethical considerations of the study, data analysis and presentation, and the operationalization of variables. Chapter four is about the research findings, data analysis presentation and interpretation while chapter five covered summary of findings, discussion, conclusion and recommendations of the same.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In order to put this research in its appropriate context, this chapter reviews concepts of school feeding programs and how various studies have shown its impact on enrollment of children in public primary school and how it affects the retention of pupils in the said schools. This will guide us in the better understanding into the research topic by giving us the history of school feeding programs and its impact on school enrollment and retention, how SFP is useful as an emergency intervention, how the SFPs influence the achievement of millennium development goals and finally what are the challenges facing the implementation of the SFP's in Kenya.

2.2 School Feeding Programs and Pupils Retention in Schools

The principal institutional mechanism for developing human skills and knowledge is the formal educational system. Most Third World nations have been led to believe or have wanted to believe that the rapid quantitative expansion of educational opportunities is the key to national development: The more education, the more rapid the development. All countries have committed themselves therefore, to the goal of universal education in the shortest possible time. To achieve this, all means possible have been used to ensure education benefits all. This includes the school feeding programs which mainly benefit the poverty stricken families which cannot afford even a meal a day. The idea of school feeding program dates back from the mid-19th Century in Europe (Evans & Harper, 2009).

School feeding programs are programs which have been running for a long time in various parts of the world SFP's emerged in the 1930's in the United Kingdom (UK) and the United States of America (USA) with a focus on improving the growth of children (Tomlinson, 2007). It was done with the explicit objective of improving the physical growth of children (Richter, 2000). For instance, in the United Kingdom a programme that subsidized milk for school children was initiated in 1934 and milk was provided free from 1944 onwards (Baker, 1978). In the late 1960s and early 1970s this benefit was withdrawn from all except for those children considered to be particularly needy.

To show the importance of the school feeding programmes, the United States established the National School Lunch Act, which was passed by Congress in 1948 and it is the legislative forerunner of all child nutrition programmes in existence today (Gunderson ,2011). The Act signed into law by President Truman in 1946 brought into being the National School Lunch Programme. This act was established to provide assistance to the United States of America in the establishment, maintenance, operation, and expansion of school lunch programmes, and for other purposes (Gunderson, 2011). The Act further states that programme was declared to be the policy of Congress, as a measure of national security to safeguard the health and well-being of the children in the United States of America. It also encouraged domestic consumption of nutritious agricultural commodities and other food. The United States Department of Agriculture states that, in pursuant of this Act, the Department of Agriculture provides states within America with general and special cash assistance and donations of foods. These provisions help schools in serving children with nutritious lunches each school day.

In South Africa school milk programs started in the 1940's which then broadened to provision of nutrient supplementation or full meals. In 1994, South Africa established the Primary School Nutrition Program (PSNP) whose main objectives were to improve the health and nutritional status of South African primary school children, to improve school attendance and to improve the learning capacity of children, which would in turn lead to an improvement in the quality of education.

In Zambia, SFPs started in 2003 with the projects financed by United Nations, and Project Concern International (PCI) as the implementing partner. According to the World Food Program (2005), the program was to alleviate hunger and it was initiated by first providing food assistance to community schools in the Lusaka District of Zambia. Furthermore, World Food Program (2005) writes that school feeding programs were scaled up to reach five million more children and their families in seventeen countries namely: Bangladesh, Benin, Burundi, the Central African Republic, Ghana, Guinea, Guinea-Bissau, Haiti, Kenya, Liberia, Mozambique, Nicaragua, the Occupied Palestinian Territory, Pakistan, Senegal, Sierra Leone and Tajikistan.

This expansion was affirmed by the World Bank (2009) in their study which indicated that low-income countries are expanding school feeding programs because these programs help push them closer to reaching the Millennium Development Goals (MDGs). The realisation becomes evident when the school feeding programme draws more children, especially young girls, into the classroom.

Malawi does not have a national government-run school feeding programs. At present, school feeding is conducted and funded by the WFP and organizations like GTZ and Action Aid, which have supported the school feeding programs in emergencies. The WFP gives the most support to school feeding activities in terms of both numbers and geographical coverage. There is no direct financial contribution from the Malawi government, although the government does provide logistical staff from within various government ministries (Mark, 2007).In Ethiopia, school feeding programme has supported access to quality primary education, while developing child approach to encourage nutrition, health and environmental awareness in schools. Poverty and food insecurity were challenges that hindered efforts to have significantly improved in the past decade. The 2005-2006 new enrolment rates were 7190 (UNESCO, Education for all Global Monitoring report, 2009).

A school feeding program was first implemented in Uganda after the 1979 war, covering all schools. Recognising that Karamojong had the worst social indicators of any district in Uganda, Government and the World Food Programme started a school feeding Project 2417 in 1983, to be followed by Project 2642 between 1993 and 1998. Just how bad these indicators were is shown by the fact that in 1977 adult literacy rate was 12% for males and 6% for females. The 1991 census has 92-93 % of Karamojong children of school going age never having attended any school. In 1999, only 44% of the 68,468 girls and 68,325 boys of school going age were enrolled in school. Even this enrolment figure was plagued by high absenteeism and dropout rates. In contrast, the National literacy rate in the same period was 54%, overall, and 44.9% for females. Less than 12% of all Karamojong girls who enrolled in Primary (P) 1 completed P7, compared to the national rate of 35% (MoE Uganda, 1997).

In Tanzania, the first meeting to discuss the concept of SFP was on 15th May, 2001.In this meeting the Ministry of water and livestock development convened with a few stakeholders to discuss the possibility of introducing SFP in Tanzania. The meeting involved officials from Tetra pack, UNICEF, milk processors, Tanzania food and nutrition center and the ministry officials. It was concluded that not only will the SMP increase milk consumption and market volumes for both producers and processors but it will also promote school children attendance, intellect and performance framework of the program was developed during milk promotion week conducted in Arusha on June 2001 but the program was started in Arusha and Moshi Municipalities and officially penned on October 2002.The program was later conducted in Dar es Salaam the capital of Tanzania and in Tanga and the Coast regions.

In Kenya the SFP was started in the 1960's and by 1979 school milk was introduced to all primary schools in Kenya. President Daniel Arap Moi announced the establishment of a program for providing liquid whole milk at mid-morning break to all primary schools in the country and assigned the task of planning and implementing the program to the Ministry of basic education. (Berret, 1980).With the introduction of free primary education (FPE) in 2003, the children were given more opportunities to enter into primary schools and enrolment rates raised from 6.1 million in 2002 to 7.2 million in 2003. This also increased the Net Enrolment Rate (NER) from 77.3% to 80.4%and Gross Enrolment Rate (GER) from 88.2% to 102.8% (Vermeersch and Kremer 2005).The WFP has played a great role in the funding of the SFPs to ensure the realisation of Universal Primary Education (UPE).

In1981, WFP and the government of Kenya started a SFP, which was a joint venture. Its long term objective was to help Kenya achieve Universal Primary education in the aid and semi arid lands (ASAL). Food assistance through this programme is channeled to both the pre-schools and primary schools. The immediate objectives of this programme were to maintain regular attendance rates in the schools, increase attention span of learners through provision of school meal, increase enrollment in pre-schools and primary schools.

2.3 Sustainable School Feeding Program and Pupils Retention

School feeding programmes are a convenient means by which important nutrients can be provided for needy children in schools. Ensuring that school children have food to eat helps them to concentrate more in class than when they are hungry indicated that nutritional status and health maintain a strong positive impact on a child's educational outcome in school(Del Rosso, 1999). In stable situations, school feeding programmes 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). 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. Therefore, the school feeding programme is well placed to address these challenges.

To address historical primary school absenteeism among Kenyans most impoverished and traditional communities, free meals are used as an incentive to attract school aged children to class. With rural communities in which food is scare, this daily meal provision relieves much of the burden of childbearing. The beneficiaries of the program are extremely poor families that are largely unable to provide the minimum recommended daily allowances of calories, protein and essential micronutrients to their children. These poor conditions may irreversible stunt medical and physical development of young children resulting in wasted potentials and lifelong difficulties (Galal, 2005).The nutritional importance of school meal 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).

In conditions of extreme poverty, seasonal difficulties (drought), or events such as HIV/AIDS, families generally consider it a low priority to get their children to attend school. So it's promising to see that a number of studies have found that school feeding programs lead to an increase in enrolment, attendance and even retention (Agarwal, Upadhyay and Tripathi 1987; Ahmed and del Ninno, 2002; IOCC, 2002).

UNESCO (1990) says that in many developing countries especially in Africa, children's school attendance is mainly affected by extreme poverty. Instead of attending school they are made to take care of their domestic obligations such as cattle rearing, attending to the farm, taking care of the younger siblings, fetching water and firewood. It is estimated that about 300 million children are chronically hungry in the world and 130 million of them do not go to school. Without adequate education, most will never break out of the cycle of hunger and poverty. WFP (2000) Report says that the few children who are lucky to attend school are often not much better off. Majority of pupils in developing countries especially the urban poor go to school without taking any meal in the morning. Learning on an empty stomach becomes a real challenge as their concentration is easily eroded by hunger. The children could be in school but learning may not be very effective. The Report further noted that providing breakfast or lunch to children at school can solve the problem.

In most cases where food is provided in schools in form of SFPs, the parents/guardian of the children weighs the net benefit of the sending their children to school with the program compared to the direct cost they will incur and the expected benefit they will get from schooling. If they feel that the net expense is greater than the benefit from the SFPs, then it is rarely for them to send their children to school. The availability of subsidized in-school meals will increase school enrollment if the program changes the household's schooling decision for some children who would not have been enrolled in school otherwise. In other words, households usually compare the size of the transfer relative to the size of the cost-benefit gap and these comparisons ultimately determine the magnitude of the increase in enrollment rates. (Adelman, et al. 2008). When food is available in school, enrollment and attendance rates are enhanced significantly. Parents are more willing to send their children to school if they know they will get a solid meal and children can stop worrying about food and concentrate on their lessons.

The provision of food at school provides the basis for bridging the gap between the enrolment of boys and girls at school (World Food Programme, 2005). This results also in the empowerment of the girl-children when they have been marginalised, leading to the attainment of their freedom

and being able to break away from the poverty trap. With regard to enrolment, much of the focus of SFPs is on increasing the enrolment of girls, who in times of economic crisis or food emergency are usually the first to be withdrawn from school in order to assist with sibling care and to generate income. The benefits of increasing the enrolment and retention of girls are enormous. It has been shown how girls who go to school are likely to marry later, and have on average 2.9 children, as opposed to 6.5 for uneducated girls (Bennett, 2003). For every year of additional schooling for a girl, there is a resulting 5–10% decrease in mortality among her children (World Food Programme, 2001). In fact, the best evidence for the effectiveness of SFPs is in terms of increasing enrolment (Bundy, 2005; Jamison and Leslie, 1990).

Moreover, education, especially girls' education, has a direct and proven impact on the goals related to child and reproductive health and environmental sustainability (Bastia, 2007). According to the Department of Education (2010), basic education provides girls and women with an understanding of basic health, nutrition and family planning, giving them the choices and the power to make their own choices regarding their own lives and bodies. The Department of Education (2010) further mentions that women's education directly leads to better reproductive health, improved family health and economic growth, not only for their immediate families but also for the society in which they live. It also helps to minimize the rate of child mortality, malnutrition and also becomes instrumental in the fight against the spread of HIV & AIDS.

Since school children are targeted of these types of interventions, children who are younger than five years are left out. This is considered one of limitations of FFE programs as a nutritional safety net. It is now well established that the first one thousand days of a child life from conception until second birthday, is the most vital period during which under nutrition may have its largest impact. Nutritional interventions that occur within this timeline are much more powerful in impacting upon a child survival, health and development (Adelman et al; 2009).

2.4 Short Term Hunger Alleviation and Pupils Retention

Hungers affect children 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 from

skipping breakfast for example have difficulty in concentration in class and performing complex activities (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 development and 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 chances of breaking poverty are significantly reduced.

Children from poor homes are likely to go to school without food and if they do, they are likely less to learn .Hunger and poverty have direct link on 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 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 learning if they are hungry. Thus relieving a child's hunger may improve their performance as their ability to concentrate increases hence facilitate learning and improves child's memory. Children memory may also improve so that they are more likely to learn(McGregoret, 2014).The school feeding program aids to reduce short and long term hunger which may cause absenteeism, low performance and finally school dropout among children(WFP 2006).

Schoolchildren are particularly vulnerable to short-term hunger, especially where diets of poor quality are consumed. Factors such as the long distances children walk to school, having to complete chores before going to school and poor quality and quantity of meals consumed at home, contribute to hunger in schoolchildren. Children who come to school hungry have diminished attentiveness, a greater likelihood of becoming distracted and a lack of interest in learning, resulting in failure, low achievement and repetition (WFP,2005). Food diversification aims to increase dietary availability, regular access and consumption of vitamin-and mineral-rich foods in at-risk micronutrient deficient groups. It involves the changes in dietary behaviour of the group (WFP, 2004). Food modification is primarily a strategy to improve either the amount of food in the diet or its bioavailability (Mannar, 1999). The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in school

children: The long distances children have to travel to school, cultural meal practices that include no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply alleviating this hunger in school children helps them to perform better in school. In Jamaica providing breakfast to primary school students significantly increased attendance and arithmetic scores, the children who benefited most were those who were wasted, stunted, or previously malnourished (Simeon& McGregor, 1989).

When children feed well, the brain will function well and enable them achieve academically (Alabi, 2003). Many studies on nutrition have shown that under nutrition in children stunts their growth and affect their mental development which affects their academic performance. Irregular school attendance of malnourished and unhealthy children is one of the key factors for poor academic performance. In addition, school feeding programme would best improve the performance of pupils when coupled with adequate learning materials, physical facilities and teacher motivation (Uduku, 2011). Learning ability is affected greatly by hunger due to skipped meals. Many factors contribute to hunger among school children, these include long distances children have to travel to school, cultural meal practices that include no or small breakfasts due to a lack of family time and resources to provide adequate meals to children before and/or during the school day (Berliner,2009).

Many cultures do not provide breakfast and this means the child's last meal is in the evening. The possibilities of long travelling time mean the child starts the school day hungry and is unable to concentrate. The provision of even a small snack at the start of the day or mid-morning alleviates the short-term hunger and has been linked to increased awareness, activity and learning capacity (Briggs, 2008).Improving Nutritional Status in learners is also another major objective. The physical growth of a child is a result of a number of interconnected variables, especially in areas where poverty is endemic. Environmental factors, genetics, food consumption patterns, health and illness, hygiene practices, lack of sanitation and the onset of puberty are but a few. Even though data collection on these variables has been inconsistent, some research indicated that undernourished children do benefit from school feeding programs (Bundy, Burbans, Grosh, and Geli, Jukes & Drake, 2009). The school supplementary feeding

programmes help to improve the nutritional status and health status of schoolchildren, as they learn better if they are not hungry (King & Burgess, 1995)

2.5 Effect of Quality of Milk and Children Retention

Healthy eating habits among children play a key role in their mental and physical development and also promote growth and reduce many risks associated with both immediate and long-term health problems (Bordi et al., 2002). Appropriate nutrition is a basic human need that remains unmet for a vast number of children; the trend of malnutrition in sub-Saharan Africa is disturbing. For the region as a whole, no progress has been made in reducing the prevalence of child malnutrition over the past 15 years, and there are some indications that the situation has worsened. Ethiopia and Nigeria are countries in the Sub-Saharan Africa with the very high rate of malnutrition (Getahun et al., 2001; Adewara and Visser, 2011). Unfortunately the diets commonly offered to young children are of low quality and often lack variety, which is the key to specific nutrient adequacy. They are usually of low energy and nutrient density and as a result, multiple nutrient deficiencies are common in this age group (Ogbimi and Ogunba, 2011).

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 (Olusanya, 2010). Malnutrition has been identified to affect the cognitive development of children (Pollitt, 1995; McGregor & Ani, 2001). 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 (Olusanya, 2010). Children should be given right nutrients to enhance their growth, development and survival in the community. He also argued that the frequency of the meals should be noted. Food should be served regularly and the schools set good designs and programs to affect this. He also said that there should be a design or department to deal with this issue within the school. Providing proper nutrition and promoting stimulation of a child's sense are vital components of children in the sense that they enhance the development and organization of the brain.

Food is a basic biological need, Maslow (1970) has emphasized that human beings have a hierarchy of needs ranging from lower level needs of food survival and safety to higher needs.

So this should be provided before we can ask the children to be motivated to learn. Nutrients in food are like food that functions in a number of ways to keep the body healthy. The body should receive enough of each nutrient because foods also vary in their chemical composition (K.I.E 1998). Workshop on child Health, nutrition and school participation held in November 1990, through deliberation and exchanges between those in education and health, it was suggested that possible problems hindering children educational participation and suggested possible intervention measures such as in attendance, performance, repetition and drop outs may be influenced by common health and nutrition problems especially in the disadvantaged areas of the country.

Research on school age children investigating the relationship between health, nutrition and school performance indicated that children who are healthy and well-nourished had better peers academic performance than their peers who are sick and poorly nourished (Nkinyangi, 1991). There is an effect of feeding on development of the body and brain (KIE, 1990). No child can develop his or her brain to the maximum without feeding properly. Proper nutrition in the first years increases potentials for doing well in school and having a successful life. Notably, a child has contentious individualized process of change in complex levels of cognitive, emotional, social and body movement and speech if the diet of a child is of nutritious value (Magers, 1985). Over the past few years there has been an accumulation of research findings from different countries documenting association between nutrition, health and children school participation. A number of prevalent nutrition and health conditions are shown to affect school participation and educational outcomes e.g. recent studies from Kenya and a number of other countries report significant findings on the relationship between poor health, nutrition and school outcomes. Consequently, better nutritional history and present nutritional status are associated with higher cognitive test scores or better school performance .Nutritionally stunted children are found to enroll later and drop out earlier than their normal size peer.

2.6 Effect on Meals Frequency and Children Retention

School feeding programs are targeted as social safety nets that provide both educational and health benefits to the most vulnerable children, thereby increasing enrolment rates, reducing absenteeism, and improving food security at the household level. This has linked both food and

education for poor and vulnerable children living in highly food-insecure areas. Feeding programs in schools can increase attendance rates especially for girls (Kasina, 2016).Therefore food for education programs ensures that children spend more time in schools and specifically to learning activities. Students who experienced food insufficiency are likely to fail a grade in school and experience tardiness or absences from school which may affect their academic performance . Some of the research also shows that students with iron deficiency anemia are at a disadvantage in their school performance. Their cognitive performance also seems to get better with iron therapy. Food insufficiency is a serious problem affecting student's ability to learn. Some studies indicate that school breakfast programs seem to improve enrolment rates and decrease delay in starting school. Even for those who are suffering with severe under nourishment, school breakfast programs seem to improve school performance as well as cognitive functioning (Taras,2005).

The impact of the provision of school meals cannot be under estimated. Empirical studies indicate that school feeding programmes plays a critical role in school participation. A study conducted in Kenya by Vermeersch and Kremer (2004) showed that the provision of school meals led to increased participation among preschoolers. Similarly, the World Food Programmed (WFP 2008) posits that school Feeding Programme serves as an incentive for vulnerable families to send their children to school. Provision of school meals with positive effects such as increased school participation and retention, improvement of child's cognitive abilities, increased attention span and reduction of vulnerability of infectious diseases that negatively affect school attendance (Buttenheim ,2011).

2.7 Theoretical Framework

This study will be guided by two theories i.e. the Abraham Maslow Theory and the Vroom Expectancy theory of Motivation.

2.7.1 Abraham Maslow's Theory

The proposal is based on Abraham Maslow's (1954) theory of basic human needs which demonstrates that once basic needs are met, people can express their other needs. He proposes a hierarchy of needs forming the famous paradigm of self-actualization. These basic needs (food,

shelter, and clothing) are followed by other equally important needs such as safety needs, love needs, self esteem needs and finally self actualization. The basic needs include food, shelter and clothing. Maslow argues that if a person's basic needs are not met, that person spends time and energy trying to meet them, usually at the expense of crucial developments and self-actualization need. The needs are satisfied in a hierarchical fashion. This means that human beings focus on the basic needs first, and then, direct their energy to other needs which are more exclusive.

Therefore, if pupils lack basic needs, in this study food, they will be unable to fulfill their potential as well as participate in their education. In order for a particular need to be achieved and thereby guide a person's behavior, the lower needs in the Maslow hierarchy, which in this study are the basic needs such as food, must be met first. This means that, if children are not able to get right food rations, they are not able to learn properly. In addition, the poverty level in this region is quite high hence parents are unable to meet the basic needs of their children.

The theory is relevant to this study as it sheds light on the importance of meeting the basic need of food to hungry pupils through the SFP. It highlights the importance of food provision. It means that, developing countries like Kenya must also struggle to provide food especially amongst vulnerable groups such as pupils from the ASAL regions and even slums in cases of urban centers.

The basic or physiological needs include food, shelter and clothing. Maslow argues that if a person's basic needs are not met, that person spends time and energy trying to meet them, usually at the expense of crucial developments and self-actualization need. The needs are satisfied in a hierarchical fashion. This means that human beings focus on the basic needs first, and then, direct their energy to other needs which are more exclusive. Therefore, if pupils lack basic needs, in this study food, they will be unable to fulfill their potential as well as participate in their education. In order for a particular need to be achieved and thereby guide a person's behavior, the lower needs in the Maslow hierarchy, which in this study are the basic needs such as food, must be met first.

2.7.2 Vroom Expectancy Theory of Motivation

Vroom Expectancy Theory of Motivation advocated by Vroom (1964).According to this theory 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 to the individual. Vroom focuses on outcomes and not on needs. The theory states that employees' motivation is an outcome of how much an individual wants a reward (valence), the assessment that the likelihood that the effort will lead to expected performance (expectancy) and the belief that performance will lead to a reward (instrumentality).

Tolman (1932) attributes the results of reinforcement to learning but not regarding reinforcement as a necessary condition for learning to take place. Hungry pupils will come to school to be free from hunger pangs and at the same time acquire education. Therefore the school feeding program is an incentive to attract children to school to enable them to learn.

2.8 Conceptual Framework

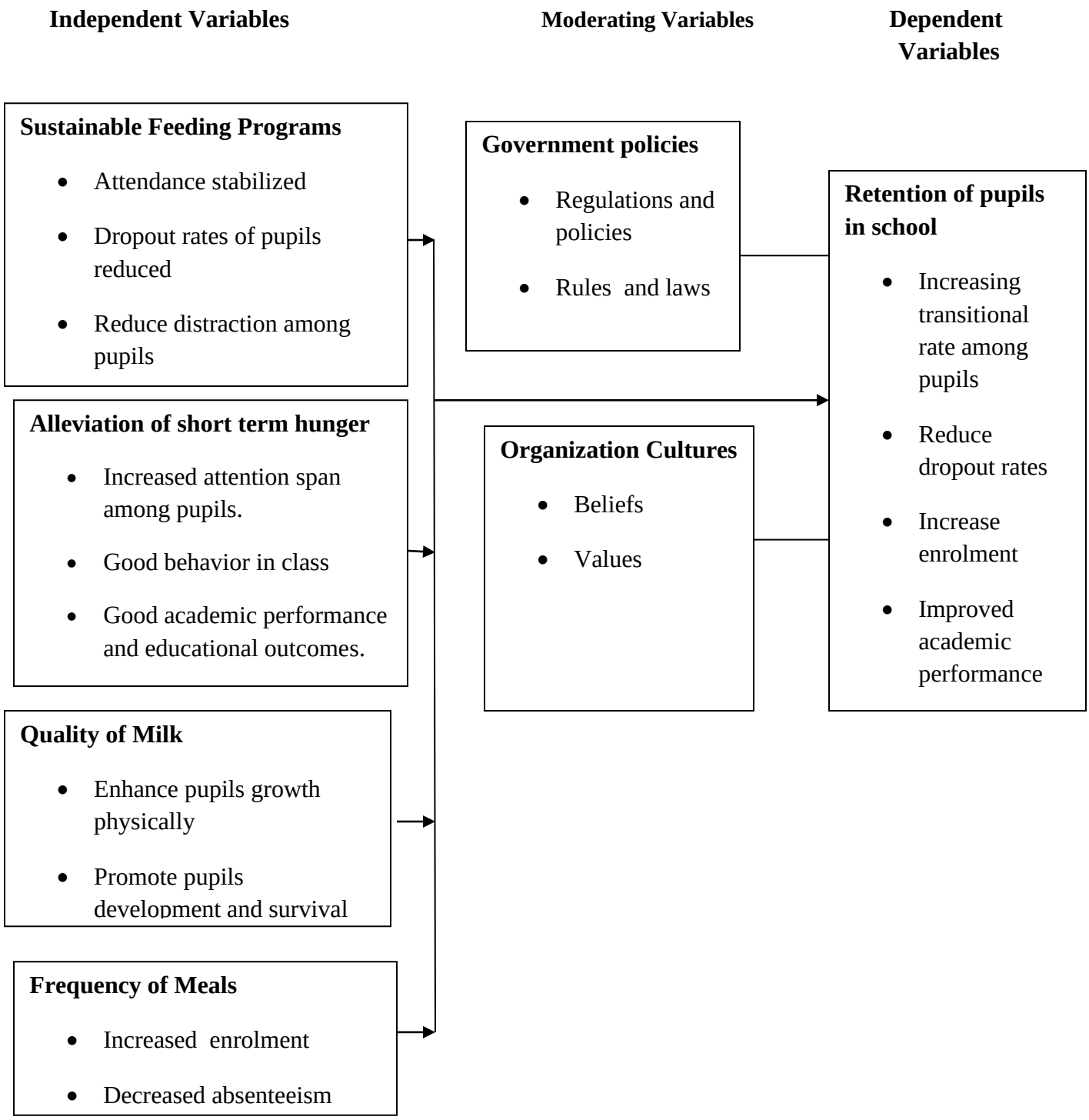

Figure 2.8.1.Conceptual framework of the study.

Conceptual framework refers to a model of representation where a researcher represents relationship between variables in the study and depicts it diagrammatically or graphically (Orodho, 2005).

Figure 2 above explains the relationship between school feeding programme as Independent variable and children's retention which is the dependent variable. Various factors such as sustainability of the feeding program, alleviation of short term hunger, quality of milk and even frequency of the meals given are able to contribute to positive children's participation. These factors form the inputs that interact in absence of implementation of school milk programme. These inputs will undergo various educational processes through school feeding programme to produce positive educational outcome. Once school feeding programme is implemented the education output will be positive on children's participation in terms of improved attendance, increase enrolment changes in the activity levels of children, improve academic performance and even reduce dropout rate and this leads to improved cognitive ability. If the interaction of these inputs is healthy, then the output will turn out to be positive as shown by the impact of school feeding programme.

2.9 Knowledge Gaps

Table 2.9.1 Knowledge Gap

Objective	**Author**	**Findings**	**Knowledge Gap**	**Focus of the Current Study**
Sustainability of school feeding initiative influences the retention of pupils in public primary schools,	Del Rosso(1999) Espejo (2009)	SFP are a convenient means by which important nutrients can be provided for needy children in schools.	There is no clear relationship between the important nutrients mentioned and retention of pupils in schools.	To establish how reliable initiatives can retain pupils in schools.

		Rural schools that provide meals show higher attendance rates and lower initial dropout rates.	The study did not reveal about urban schools which also have school feeding programs and how the attendance is.	
Alleviation of short term hunger and pupils retention in public primary schools.	Adelman et el (2008) WFP(2006)	Hunger affects children access to school, their attention span, behavior in class and educational outcome. Although a child may be at school they may not pay attention to learning if hungry.	The study is not clear on how alleviation of hunger is going to change educational outcome of pupils and hence their retention in schools. Although SFP was shown to lead to pupils retention but it did not show how to attract the pupil's attention.	To investigate whether break time snack and lunch time food can assist in retention of learners.
Effect of quality of milk and pupils retention in public primary schools	Bordi et el (2002)	Healthy eating among children plays a key role in their mental and	The study did not show how healthy eating leads to retention of pupils	To investigate whether the amount of

	Nkinyagi (1991)	physical development. Children who are healthy and well nourished had better peer's academic performance than their peers who are sickly.	in public primary school. There is no clear relationship between academic performance and retention of pupils in schools.	milk given to pupils affects their retention.
Effect on meals frequency and retention of learners in public primary schools	Kasina (2016) WFP (2008)	Feeding programs can increase attendance especially for girls. School feeding program serves as an incentive for vulnerable families to send their children to school.	The study is not clear if the increase in attendance for girls leads to retention of the girls in schools. There is no aspect which shows vulnerable families send their children to school because of food, other might be sending them simple to get education.	To establish if the recurrent meals given to pupils affect their school going habits.

2.10 Summary of Chapter

To a hungry child going to school is not as important as having enough food to eat. The assurance of at least one nutritious meal each day attracts children to school. This boosts enrolment and encourages regular attendance to enhance general performance. Therefore, the World Food Program and other humanitarian agencies such as UNICEF assisted the needy children by introducing School Feeding Programs in schools.

In Kenya, the SFP was started in 1966 by National Feeding Council. In 1979, school milk was introduced to all schools in the country. The program was short lived because of the poor economic situation in the country and of transparency in running the milk program. The long-term objectives of School feeding programs were to help the Kenyan Government among others to achieve Universal Primary Education. The main objectives of Feeding Programs in Kenya were to increase enrolment, prevent dropout rates and increase retention rate, minimize truancy and stabilize attendance, reduce disparities in enrolment and attendance rates, increase level of participation and concentration in pupils and to alleviate short term hunger in schools (Mugiri, 1995).

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter aimed to examine the research design, population, sample size, data collection methods and procedures, validity and reliability of research instruments, ethical considerations, data presentation and analysis techniques to be used and the operational definition of variables. It will describe in detail what will be done and how it will be done.

3.2 Research Design

This study was conducted through a descriptive survey research design. A descriptive survey is a present oriented methodology used to investigate populations by selecting samples to analyze and discover occurrences (Oso & Onen, 2008). According to Kothari (2003) the main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening. In this study the research variables have already occurred and thus they cannot be deliberately arranged and manipulated through intervention of the researcher; it is the glue that holds all elements in this research project together.

This study involved dealing with variables such as school feeding programs, school enrollment, attendance, dropout rates and performance of pupils among others. These variables cannot be manipulated by the researcher but can only be studied and conclusion drawn based on factual information. A design will be used to structure the research, to show how all major parts of research project work together to try to address the central research questions. It was used to provide numeric descriptions of some part of the population. It was described and explained events as they occurred. The design was purposively selected for this study because of the economy of the method and the ability to understand the selected population from a particular part of it.

3.3 The Target Population

According to Mugenda and Mugenda (2003) target population is the members of a real or hypothetical set of people, events or objects the researcher wishes to generalize results of the

research. There are 94 Early Childhood Development Centres in Mombasa County. Therefore ,the target population will consist of all head teachers and teachers in charge of school feeding programme which comprises of 94 head teachers and 94 teachers in charge of school feeding programme to participate in the study . Therefore the study targets 188 head teachers and teachers whose ECD's are direct beneficiaries of the school milk program.

3.4 Sampling Technique and Sample size

The survey focused on 60 out of the 188 head teachers and teachers who are beneficiaries of school milk program in all the six sub counties in Mombasa i.e. Mvita, Kisauni, Likoni, Nyali, Jomvu and Changamwe.This gives 31.9 % of the total number of participants in this project. To obtain the study sample according to Gay cited in Mugenda and Mugenda (1999), for descriptive studies 10% of the accessible population is enough. Simple random and purposive sampling procedures were used in this research. Simple random sampling was used to select the ECD Centers head teachers and teachers in charge of school milk programmes. A random sample produce a good chance of having a sample that represents the population in every characteristic (Lindgren,1981). Every ECD Centre head teacher and teacher therefore had an equal chance to be selected. Purposive sampling is a technique that allows the researcher to use cases that have the required information with respect to the objective of the study (Mugenda & Mugenda , 2003). For this study, all the 60 head teachers and teachers in charge of school feeding programme were purposely selected because they are informative and poses the required characteristics.

Table 3.4.1 Sample Size

Population category	Target population	Sample Size Frequency	Percentage %
Head Teachers	94	10	16.67
Teachers	94	50	83.33
Total	188	60	100

3.5 Research Instruments

These are tools used for data collection. Questionnaires were used to collect data from the total population. These were structured into 4 chapters and every chapter focused on one objective using both open ended and closed ended questionnaires to collect the relevant data for this study. The questions were developed to address the specific objectives of the study as stated in chapter one and discussed in the literature review. Questionnaires were found appropriate in enabling the researcher gather a large amount of data from many respondents in the most economical way. Questionnaires are mostly appropriate for the descriptive survey design and are also useful instruments of collecting primary data since respondents can read and then give responses to each item and they can reach a large number of subjects (Orodho, 2004). Furthermore, using the questionnaires provides greater anonymity through coding and discrete analysis of the respondent personal details (Kombo & Tromp, 2006).

3.5.1 Validity of the Instrument

Validity is the degree to which results obtained from analysis of the actual data represent the phenomena (Mugenda, 2003). Questionnaires were piloted in schools outside the considered sample to establish whether the questions arc measuring what they are intended, whether wording is clear, whether the questions are ambiguous and whether the questions provoke response (Orodho, 2005). To enhance external validity therefore the study endeavored to draw a representative sample that was randomly selected from the stratified target population of the schools that participated in the SFP as outlined in the sampling procedures.

Content validity is the extent to which research instrument measure what they are intended to measure (Mugenda and Mugenda, 1999). To establish validity, the instruments were given to two experts to evaluate the relevance of each item in the instrument to the objectives and rate each item on the scale of very relevant (4), quite relevant (3), somewhat relevant (2), and not relevant (1). Validity was determined using Content Validity Index (C.V.I). C.V.I = items rated 3 or 4 by both judges divided by the total number of items in the questionnaire. This was represented in a formula as n¾ / N

3.5.2 Reliability of the instrument.

Reliability of a research instrument concerns the extent to which instrument yields the same results on repeated trials (Mugenda&Mugenda, 2003). The researcher used two pilot schools randomly selected from those that were not included in the sample size. Two teachers were selected from each of the two schools making a total of 4 participants and the reliability of the instrument was pretested with before the actual data collection. Test retest technique was used to ascertain the reliability of the instrument. According to Mugenda&Mugenda (2003) a coefficient of 0.80 or more will imply a high degree of reliability. Pearson Product Moment Correlation formula was used to compute the correlation coefficient.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2]\,[n(\sum y^2) - (\sum y)^2]}}$$

Where

r - The degree of reliability

x - The score obtained during the first test

y - The score obtained during the second test

Σ - Means summation

n - The number of scores within each distribution, Orodho (2009).

The reliability value of 0.8 was obtained which was above 0.7 thus considered as the minimal acceptable.

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 purpose of this study. The use of primary data is supported by (Orodho, 2009) .After successfully defending the proposal; the researcher physically visited the respondents and delivered questionnaires. The researcher then collected the questionnaire for analysis after one week .The researcher engaged a research assistant to give support on the technical areas.

3.7 Data analysis techniques

Raw data from the field was collected and cross checked to ensure uniformity and then coding was done according to objectives and research questions. This helped to organize and reduce the data into manageable summaries. Both qualitative and quantitative data analysis technique was used to analyze the data. Data was analyzed using descriptive and inferential statistics with the help of Statistical Package for Social Scientist Software (SPSS). On the other hand, thematic analysis techniques was used to analyze qualitative data collected in the open ended questions. Descriptive statistics such as means, frequencies, and percentages was used to summarize data. Data was organized and presented in form of frequency tables and figures. Qualitative data was grouped in themes and use words for explanation. Chi Square was used to test the hypothesis.

3.8 Ethical Considerations

The researcher explained the objectives of the study to all the head teachers and the teachers who were taking the survey. It was clarified that participants will not be exposed to any kind of risk or exploitation by participating in this survey. The researcher communicated with the respondents using a courteous and respectful language at all times during the collection of data. It was also be communicated that this survey is for academic purposes and voluntarily, therefore it will not attract financial benefits or any other kinds of benefits. All the participants were treated with respect and assured of anonymity and confidentiality of their responses as their names or the names of their schools will not be exposed and in fact not be required in the questionnaire.

3.9 Operationalization of Variables.

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

Table 3.8 Operationalization of Variables.

Objectives	Variables	Indicators	Scale	Instruments Used
Examine the extent of sustainable feeding program	Independent	• Attendance stabilized • Dropout rates of pupils reduced • Reduce distraction among pupils	Likert	Questionnaire
Determine the extent of alleviation of hunger	Independent	• Increased attention span among pupils. • Good behavior in class • Good academic performance and educational outcomes.	Likert	Questionnaire
Examine the extent of quality of milk	Independent	• Enhance pupils growth physically • Promote pupils development and survival	Likert	Questionnaire
Assess the extent of frequency of	Independent	• Increased enrolment • Decreased absenteeism	Likert	Questionnaire

meals				
Retention of pupils in pupils in public primary schools.	Dependent	• Increasing transitional rate among pupils • Reduce dropout rates • Increase enrolment	Likert	Questionnaire

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETION

4.1 Introduction

This chapter provides analysis, presentation and interpretation of the data collected using a questionnaire. This includes; the presentation of the results using tables and figures for ease of understanding; and interpretation on these results in form of narrative. These data was analyzed quantitatively using Statistical Package for Social Sciences SPSS software. This 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 study objectives.

4.2 Questionnaire Return Rate

This section contains the results on questionnaire response rate show of the different categories of respondents, who participated in the study and data collection. The study targeted a sample size of 60 respondents from which 46 filled and returned the questionnaire making a response rate of 76.67%. Table 4.1 below shows the response rate as per every targeted group.

Table 4.1 Questionnaire Return rate

Respondents	Questionnaire Issued	Questionnaire Returned	% Questionnaire Returned
Head Teachers	10	10	100
Teachers	50	36	72
Total	60	46	76.67

This implies that the remaining 23.33%did not consent to participate in the research data collection. Table 4.1 also shows that 100% of the head teachers responded while 72% of the teachers responded to the study. The questionnaire response of 76.67% 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 Demographic Characteristics of Respondents Information

In order to establish the influence of demographic characteristics of the respondents, the study obtained responses gender, age, education qualifications and time involved in school feeding program.

4.3.1 Gender of Respondents

In order to establish the composition of the program by gender, the study asked respondents to indicate their gender groups and the response were analysed as Table 4.2 below.

Table 4.2: Gender Response

Respondents Gender	Frequency	Percentage %
Male	12	26.09
Female	34	73.91
Total	46	100

Table 4.2 above shows that out of the 46 respondents interviewed 12 were male which is represented by 26.09 % and 34 were female represented by 73.91%. This shows more women are involved in the school feeding program compared to men.

4.3.2 Age of Respondents

The study respondents were also asked to give details of the age and below are their responses.

Table 4.3: Age of Respondent

Age of Respondents	Frequency	Percentage %
21- 25	18	39.13
26- 30	8	17.39
31- 35	8	17.39
36- 40	4	8.70
41- 45	2	4.35
Over 50	6	13.04
Total	**46**	**100**

Results obtained from age group distribution reveled that most respondents were aged between 21 to 25 years represented by 39.13%, while the age group of 26 to 30 years and 31 to 35 years shared the same percentage of 17.39% each, 8.7 of the respondents were aged between 36 to 40 years while 4.35% of the respondents were between the age of 41 and 45 years while 13.04% of the respondents were over the age of 50 years .This implies that the respondents were distributed across all age groups. This showed that the teachers handling the pupils were young and can easily convince the pupils to be in the feeding program because they can relate well with them.

4.3.3 Education Level of Respondents

The level of education of the respondent was another factor which was investigated and the analysis of the respondents was as summarized in Table 4.4 below.

Table 4.4: Education Level of Respondents

Education Level of Respondents	Frequency	Percentage %
Primary School	1	2.17
High School	2	4.35
Certificate	14	30.43
Diploma	20	43.48
Degree	9	19.57
Total	**46**	**100**

From the research findings, the study revealed that most of the respondents as shown by 2.17% held primary school level, 4.35% of the respondents had attained secondary school level, 30.43% of the respondents held college certicate,43.48% of the respondents indicated they are diploma holders, 19.57% of the respondents indicated university degrees.

The overall planning of school feeding program in public primary schools is the responsibility of the teachers and head teachers therefore it is important for them to be persons with good education and sufficient practical knowledge in educational planning. The study has revealed majority of respondents are well educated which implies that they had good knowledge on school feeding program hence were in a position to comprehend research question.

4.3.4 Knowledge on School Feeding Program

The knowledge on school feeding program was another factor which was investigated and the analysis of the respondents was as summarized in Table 4.5 below.

Table 4.5: Knowledge of School Feeding Program

Knowledge of School Feeding Program	Frequency	Percentage %
Less than 5 years	6	13.04
5 to 10 years	20	43.48
Over 10 years	20	43.48
Total	**46**	**100**

From table 4.5 above a majority of 43.48% indicated that they had been involved in school feeding program from between 5 to years and also the same percentage have known about school feeding program for more than 10 years,13.04% have knowledge about school feeding program for less than 5 years. Based on the experience of these teachers and head teachers, therefore they had good information on school feeding program on pupil's retention in public primary school.

4.4 Sustainable Feeding Program and Pupils Retention in Public Primary School

The first objective was to examine the extent to which sustainable feeding program as a school feeding program influences the retention of pupils in public primary schools in Mombasa County. The study sought to examine sustainable feeding program as the independent variable on pupils retention in public primary schools the dependent variable using a Likert scale of 1- 5 where 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree .The results obtained are presented in Table 4.6

Table 4.6 Sustainable Feeding Program and Pupils Retention in Public Primary School

	Mean	Std. Deviation
Sustainable Feeding Program Stabilises Regular attendance of Pupils.	3.39	0.85
Sustainable Feeding Program Reduces Pupils Dropout rate.	3.44	1.00
Sustainable Feeding Program Improves Academic Performance.	3.62	0.88
Sustainable Feeding Program Encourages Transitional Rates.	3.32	0.89

From the study findings most respondents strongly agreed with statement that sustainable feeding program as a school feeding program initiative stabilises regular attendance of pupils as shown with a mean of 3.39 and a standard deviation of 0.85, also respondents strongly agree that sustainable feeding program reduces pupils dropout rates as shown with the mean of 3.44 and standard deviation of 1.00.Also Majority of respondents strongly agreed that sustainable feeding program improves academic performance of pupils with a mean of 3.62 and standard deviation of 0.88 , furthermore respondents agree that sustainable school feeding program encourages transitional of pupils in public primary schools as shown with a mean of 3.3 and standard deviation of 0.88 hence influencing retention of learners.

4.5 Alleviation of Short Term Hunger in Pupils

The study sought to assess the influence of alleviation of short term hunger in malnourished school as an independent variable on pupils retention in public primary school as the dependent variable using a Likert scale of 1- 5 where 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree .The results obtained are presented in Table 4.7.

Table 4.7 Alleviation of Short term Hunger in Pupils

	Mean	Std.Deviation
Well fed pupils have got increased attention span leading to improved class participation.	3.7	0.93
Concentration of pupils in class affects their interest in learning hence improving academic performance.	3.7	1.01
Alleviation of short term hunger in schools decreases the dropout rates among pupils.	3.7	0.87

From the study findings most respondents strongly agreed with statement that well fed pupils have got increased attention span leading to improved class participation as shown with a mean of 3.7 and a standard deviation of 0.93, also respondents strongly agree that concentration of pupils in class affects their interest in learning hence improving academic performance as shown with the mean of 3.7 and standard deviation of 1.01.Also Majority of respondents agreed that alleviation of short term hunger in schools decreases the dropout rates among pupils with a mean of 3.7 and standard deviation of 0.87 .

4.6 Effect of Quality of Milk

Food quantity and quality should be looked into. Children should be given right nutrients to enhance their growth, development and survival in the community. The study sought to assess if the quality of milk as an independent variable affects pupils retention in public primary school as the dependent variable using a Likert scale of 1- 5 where 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree .The results obtained are presented in Table 4.8.

Table 4.7 Effect of Quality of Milk

	Mean	Std.Deviation
Nutritious meal and quality of milk affects the retention of pupils.	3.30	1.06
Nutritious meal encourages enrolment of more pupils in school especially lower classes.	3.37	0.82
Milk quality influences age entry of pupils to enhance enrolment in primary education.	3.79	0.96

From the study findings most respondents agreed with statement that nutritious meal and quality of milk affects the retention of pupils as shown with a mean of 3.30 and a standard deviation of 1.06, also respondents agreed that nutritious meal encourages enrolment of more pupils in school especially lower classes as shown with the mean of 3.37 and standard deviation of 0.82.Also majority of respondents agreed that milk quality influences age entry of pupils to enhance enrolment in primary education with a mean of 3.7 and standard deviation of 0.87 .

4.7 Frequency of Meals

The study sought to assess if the frequency of meals as an independent variable affects pupils retention in public primary school as the dependent variable using a Likert scale of 1- 5 where 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree .The results obtained are presented in Table 4.9

Table 4.9 Frequency of Meals

	Mean	Std.Deviation
Frequency of meals influences the retention of pupils in public primary schools	3.87	0.97
Frequency of meals decreases the dropout rates among pupils in school hence retention of pupils	3.28	0.87
Frequency of meals improves regular attendance of pupils hence retention of pupils.	3.7	0.96

From the study findings most respondents agreed with statement that frequency of meals influences the retention of pupils in public primary schools as shown with a mean of 3.87 and a standard deviation of 0.97, also respondents strongly agreed that frequency of meals decreases the dropout rates among pupils in school hence retention of pupils as shown with the mean of 3.28 and standard deviation of 0.87.Also majority of respondents strongly agreed that frequency of meals improves regular attendance of pupils hence retention of pupils with a mean of 3.7 and standard deviation of 0.96 .

4.8 Test of Significance on the Four Study Variables

The study further sought to indicate the relationship between variables under study; sustainable school feeding program, alleviation of short term huger, quality of milk and frequency of milk. The study guided by hypothesis applied the Chi-square test to test the hypothesis at 95% confidence interval. The results obtained were then used as a basis of accepting or rejecting the hypothesis had earlier been stated.

4.8.1 Test of Significance Between Sustainability of School Feeding Program and Retention of Learners in Public Primary Schools

H0: There is no influence of sustainability of school feeding program on retention of learners in public primary schools.

H1: There is influence of sustainability of school feeding program on retention of learners in public primary schools.

4.8.2 Test of Significance Between Alleviation of Short Term Hunger and Retention of Learners in Public Primary Schools

H0: There is no influence of alleviation of short term hunger in school children and retention of pupils in public primary Schools.

H1: There is influence of influence of alleviation of short term hunger in school children and retention of pupils in public primary Schools.

4.8.3 Test of Significance Between Quality of Milk and Retention of Learners in Public Primary Schools

H0: There is no influence of the quality of milk given and retention of pupils in public primary schools.

H1: There is influence of the quality of milk given and retention of pupils in public primary schools.

4.8.4 Test of Significance Between Quality of Milk and Retention of Learners in Public Primary Schools

H0: There is no influence of the relationship between meals frequency and pupil's retention in public primary schools.

H1: There is influence of the relationship between meals frequency and pupil's retention in public primary schools.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the study's summary of findings, discussion, conclusions and suggests recommendations for improvement and further studies.

5.2 Summary of Findings

The researcher sought to investigate the factors which could influence the school feeding program on the retention of learners in public primary schools in Mombasa County. The factors investigated included sustainability of school feeding program, alleviation of short term hunger, the quality of milk and frequency of meals.

5.2.1 Sustainability of School Feeding Program as a School Feeding Program Influences the Retention of Pupils in Public Primary Schools.

Most of the respondents noted that sustainable feeding programs stabilises regular attendance of pupils due to high enrolment rate in schools hence retention with a mean of 3.39 and a standard deviation of 0.85. The study found that sustainable feeding program reduces drop out hence retention of the pupils in school with 3.44 mean and standard deviation of 1.00, and sustainable school feeding program improves academic performance and enhance transitional rates of pupils in school hence their retention. At a mean of 3.62 response rate, it was found out that sustainable school feeding program in schools encourages pupils to stay in schools. Overall the study found that sustainable feeding program highly influenced pupil's retention in public primary schools.

5.2.2 Alleviation of Short Term Hunger Influences the Retention of Pupils in Public Primary Schools.

The study found that each of the indicators of alleviation of short term hunger in malnourished schools as a school feeding program initiative highly influenced pupil's retention in public primary schools. That is 3.7 mean and a standard deviation of 0.93 strongly agreed that well fed students have got increased attention span leading to improved class participation and hence improve their academic performance and enhancing retention of pupils in public primary school, alleviation of short term hunger decreases the dropout rates among pupils hence retention of

pupils . Overall it was found that alleviation of short term hunger as a school feeding program initiative highly influenced pupil's retention in public primary schools.

5.2.3 The Quality of Milk Influences the Retention of Pupils in Public Primary Schools.

It was found that an overall, nutritious meal and quality of milk highly affects the retention of pupils in public primary schools. The study found that at a mean of 3.30 and standard deviation of 1.06 nutritious meals encourages enrolment of more pupils in school especially lower classes thus enhancing retention of pupils. Most of respondents noted that milk quality influences age entry of pupils to enhance enrolment of more pupils in primary school hence retention of pupils.

5.2.4 Frequency of Meals Influences the Retention of Pupils in Public Primary Schools.

The study found that of frequency meals influences the retention of pupils in public primary school with mean of 3.87 and standard deviation of 0.97strongly agreeing, frequency of meals decreases dropout rates in pupils with a mean of 3.28 and standard deviation of 0.87 of response agreeing that it enhances retention of pupils in public primary school. It was found that frequency of meals improves regular attendance of pupils and increase enrolment hence retention of pupils in public primary schools.

5.3 Discussions of findings

As per the findings of the study, of 46 teacher and head teachers targeted, 26.1% of the respondents were male while 73.9% of respondents were females. Age wise the respondents involved in the study were mostly aged between 21 to 25 years with 39.1% meaning most of the teachers are young and energetic hence able to convince pupils in school feeding program. In terms of education most teachers and head teachers hold a diploma with 43.48%.

5.3.1 Sustainability of School Feeding Program as a School Feeding Program Influences the Retention of Pupils in Public Primary Schools.

At a mean of 3.39 response rate the study found that sustainable feeding highly influenced pupils retention, the respondents noted that adequacy of stable food supply in school feeding program was the major attraction to pupils retention in schools. This confirmed by Finan(2010), who established that pupils under SFP are no longer distracted by hunger .Therefore pupils are able to

concentrate better as established by WFP(2005) that one nutritious meal each day boosts enrolment and promotes regular attendance.

Adequacy of food supply in school feeding program was a major attraction of pupils retention in schools, which agreed with World Bank(2010) findings that the pupil do not have to worry about food when in school because it is available for free in schools. Continuous school feeding program stabilises regular attendance of pupils in school and helps to reduce dropout rate of pupils in schools which in turn improves academic performance of pupils, enrolment and thus retention of pupils in public primary schools.

5.3.2 Alleviation of Short Term Hunger Influences the Retention of Pupils in Public Primary Schools.

The study established that alleviation of short term hunger in malnourished schools as a school feeding program initiative highly influences pupil's retention in public primary school. From the total respondent's mean of 3.7 and standard deviation of agreed 0.93 that alleviation of short term hunger in children influenced pupil's retention in public primary schools. This was confirmation of the study by Bennet (2003) 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. The outcome was better learning and more children attending school as confirmed by Mc Gowen (2007) that alleviation of hunger improves concentration, which in turn improves child performance enabling retention in school. The study therefore concluded that properly designed and effectively implemented SFPs can alleviate short term hunger in school children and thus helps increase attention span, stabilises attendance which reduces dropout rates and encourages transitional rates of pupils thus enhancing retention of pupils in public primary schools.

5.3.3 The Quality of Milk Influences the Retention of Pupils in Public Primary Schools.

Malnutrition remains one of the major obstacles to human well-being and economic prosperity in developing countries according to Bundy (2001).The findings of the study found at a mean of 3.30 and standard deviation of 1.06 of respondents agreeing that nutritious meal and quality of milk affects retention in public primary schools. It is also confirmed by Bordi et al (2002) that

healthy eating habits among children play a key role in their mental and physical development and also promote growth and reduce many risks associated with both immediate and long-term health problems .the study concluded that nutritious meal and quality of milk affects retention of pupils and also nutritious meals encourages enrolment of pupils in school especially lower classes and milk quality influences age entry of pupils to enhance enrolment thus enhancing retention in public primary schools.

5.3.4 Frequency of Meals Influences the Retention of Pupils in Public Primary Schools.

It was found that at a mean of 3.87 and standard deviation of 0.97 strongly agreed that frequency of meals influences the retention pupils in schools. A study conducted in Kenya by Vermeersch and Kremer (2004) showed that the provision of school meals led to increased participation among preschoolers. This was confirmed by Buttenheim (2011) which showed provision of school meals with positive effects such as increased school participation and retention, improvement of child's cognitive abilities, increased attention span and reduction of vulnerability of infectious diseases that negatively affect school attendance .The study concluded that food frequency influences enrolment of pupils to a great extent hence retention of pupils .

5.4 Conclusions

The study concludes that sustainable feeding program as an initiative of school feeding program highly influences the pupils' retention in public primary school. The factors enhancing this includes stabilizing regular attendance of pupils, reduces pupils dropout rate, improving academic performance and encourages transitional rates of pupils in school hence enhancing pupils retention in public primary schools.

The study concludes that alleviation of short term hunger as a school feeding initiative highly influences retention of pupils in public primary schools. Indicators such as well fed students have got increased attention span leading to improved class participation, concentration of pupils in class affects pupils interest in learning hence improving academic performance and decreasing dropout rates hence retention of pupils in public primary schools.

The study concludes that the quality milk of milk as a school feeding initiative highly influences retention of pupils in public primary schools. Factors such as nutritious meal and quality of milk affects retention of pupils, nutritious meal encourages enrolment of more pupils in schools especially lower classes and it influences age entry of pupils to enhance enrolment in public primary schools.

The study concluded that frequency of meals influences the retention of pupils in public primary schools hence retention with indicators such as frequency of meals decreases the dropout rates among pupils and frequency of meals improves regular attendance of pupils thus enhancing pupils' retention in public primary schools.

The study reveals that there exists a high and positive significant relationship between sustainable school feeding program, alleviation of short term hunger, quality of milk and frequency of meals and retention of pupils in public primary schools since the p-value for each was less than 0.05 and relationship was greater than 0.5.

5.5 Recommendations

The study recommends that the ministry of education should review the School feeding Programme and extend it upper primary classes. They should prioritize supply of food to ensure continuous provision and adequate supply of food for pupils.

The study recommends that the county government and the ministry of education should collaborate to create structures for sustainable feeding program. The structure should provide adequate resources to ensure regular supply of food.

The study recommend that nutritionist should be involved in order to give knowledge on the amount required for pupils per day so that children have a balanced diet food in schools and also school administration together with the school feeding programme developers are sensitized on the need to provide balanced school feeding programme

Lastly the study recommends that the schools should increase the frequency of food being given to pupils in order for it to benefit more pupils.

5.6 Suggestion for Further Studies

1. The study established the status of retention of pupils in public primary school, so other studies should be done to establish the challenges facing the SFP that hinder attainment of the objectives.

2. The study focused on public primary schools Mombasa County which are just a few schools, so their studies can focus on private primary schools as well as other schools in Mombasa County or the entire Kenyan Republic.

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WFPinfo@wfp.org

APPENDICES

Appendix 1: Letter of introduction

Date: 29th May 2020.

TO WHOM IT MAY CONCERN

Dear sir/ madam,

REQUEST FOR COLLECTION OF DATA

I Asha Bekidusa, Adm.no.L50/86473/2016,am a post graduate student at the School of Continuing and Distance Education, University of Nairobi. I am conducting a research study titled "The influence of school feeding program on the retention of learners in public primary schools in Kenya; A case of Mombasa County".

You have been selected to form part of this study. Kindly assist by filling in the attached questionnaire. The information given will be treated in strict confidence and will be purely used for academic purposes.

A copy of the final report will be availed upon your request.

Your assistance and cooperation will be highly appreciated.

Yours sincerely,

Asha Bekidusa.

Appendix 2: Questionnaire

SECTION A – GENERAL INFORMATION

1. What is your gender ?(Please tick one)

☐ Male ☐ Female

2. What is your Age Group?(Years)

☐ 21 – 25 ☐ 26 – 30 ☐ 31 – 35

☐ 36 – 40 ☐ 41 – 45 ☐ 46 – 50

☐ Over 50

3. What is your Level of Education?

☐Primary School ☐High School ☐Certificate

☐Diploma ☐Degree ☐Masters

☐PHD ☐Others (Please specify)

4. How long have you known about School Milk Program?

☐Less than 5years ☐5 – 10 years ☐Over 10 years

SECTION B – SUSTAINABILITY OF SCHOOL MILK PROGRAM

1. Indicate whether you agree with the following statements on sustainability of school milk program on influence of pupils' retention in your school. Key: 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree
    a) Sustainable school milk program stabilises regular attendance of pupils in school hence retention.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

b) Sustainable school milk program reduces pupil's dropout rate hence retention of the pupils in schools.

☐ 1 ☐2 ☐ 3 ☐ 4 ☐ 5

c) Sustainable school milk program improves academic performance of pupils hence retention.

☐ 1 ☐2 ☐ 3 ☐ 4 ☐ 5

d) Sustainable school milk program encourages transitional rates of pupils in school hence retention.

☐ 1 ☐2 ☐ 3 ☐ 4 ☐ 5

SECTION C – ALLEVIATION OF SHORT TERM HUNGER IN PUPILS

2. Indicate whether you agree with the following statements on alleviation of short term hunger affect pupils' retention in your school. Key: 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree

a) Well fed students have got increased attention span leading to improved class participation.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

b) The concentration of pupils in class affects their interest in learning hence improving their academic performance.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

c) Alleviation of short term hunger in schools decreases the dropout rates among pupils in school hence retention of pupils.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

SECTION D– EFFECT OF QUALITY OF MILK

3. Indicate whether you agree with the following statements on effect of quality on pupils' retention in your school. Key: 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree

    d) Nutritious meal and quality of milk affects the retention of pupils.

    ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

    e) Nutritious meal encourages enrolment of more pupils in school especially lower classes.

    ☐1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

    f) Milk quality influence age entry of pupils to enhance enrolment in primary education.

    ☐1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

SECTION E– FREQUENCY OF MEALS

4. Indicate whether you agree with the following statements on effect of quality on pupils' retention in your school. Key: 1-Strongly Agree, 2-Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree

    g) Frequency of meals influences the retention of pupils in public primary schools.

    ☐1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

    h) Frequency of meals decreases the dropout rates among pupils in school hence retention of pupils.

    ☐1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

i) Frequency of meals improves regular attendance of pupils hence retention of pupils.

☐1 ☐2 ☐3 ☐4 ☐5

*****Thank you once again for your kind cooperation*****