INFLUENCE OF SCHOOL FEEDING PROGRAM ON PUPILS' PARTICIPATION IN PUBLIC PRIMARY SCHOOLS IN MASINGA DIVISION IN MACHAKOS COUNTY, KENYA

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DECLARATION

This research project is my original work and has not been presented for an award
in any other university.
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DEDICATION

This research is dedicated to my wife, Jane Syombua, to my mother, Beatrice Mumbua and my late father, Samson Mutua and my children: Abigail Mumbua, Alpha Mutua, Clementine Katume and Vivian Ovasi.

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ABBREVIATIONS AND ACRONYMS

ASAL Arid and Semi Arid Lands

CRC Convention on the Rights of the Child

DEO District Education Office

EFA Education for All

FPE Free Primary Education

HGSFP Home Grown School Feeding Program

MDGs Millennium Development Goals

MoE Ministry of Education

NCST National Council for Science and Technology

OVC Orphaned and Vulnerable Children

RoK Republic of Kenya

SFP School Feeding Program

SPSS Statistical Package for social sciences

UNESCO United Nations Education Science and Cultural Organization

UPE Universal Primary Education

WFP World Food Program

ABSTRACT

The study was to establish the influence of feeding programme on pupils' participation in public primary schools in Masinga division in Machakos county, Kenya. Five research objectives were used to guide the study. The research objectives sought to assess the influence of school feeding program on enrollment in school feeding program assisted public primary schools in Masinga division; establish the influence of school feeding program on pupils' attendance in school feeding program assisted public primary schools in Masinga division; establish whether school feeding program contributes to pupils' class participation in school feeding program assisted public primary schools in Masinga division; analyze the effect of school feeding program on pupils' performance in school feeding program assisted public primary schools in Masinga division and finally establish the extent to which school feeding program has reduced pupils' dropout in school feeding program assisted public primary schools in Masinga division. Target population was the 98 feeding programme assisted public primary schools in Masinga division, Machakos county. Out of the 98 public primary schools, 10 were selected where 10 headteachers, 30 teachers and 100 standard eight pupils were sampled. Simple random sampling, purposeful random sampling and stratified random sampling were used. The study used descriptive survey research design. The research instruments used included: questionnaires, focus group discussion and document analysis to solicit information from the respondents. Data from questionnaires were analyzed by help of 12.0 SPSS programme while that of focus group discussion and document analysis were analyzed according to the themes in the study variables. The study findings showed that school feeding progrmme had positive influence on pupils' enrolment, attendance, class participation and reduced dropout. For instance, from 2008 to 2012 there was a 3 percent increase in overall schools' enrolment noting that afternoon sessions attendance were better than the morning sessions attendance as some pupils came to take lunch and learned in the afternoon sessions who were absent in the morning sessions. In the light of the study the researcher recommended that the Government provide reliable and steady school feeding programme food to all primary schools in the disadvantaged (ASALS) famine prone areas through home grown school feeding programme, at the beginning of every term by sending money to schools to procure food. The community to take part in providing some of the school feeding programme items by growing vegetables in school gardens/ shambas to provide vegetables to the school feeding programme.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Poverty prevents children from attending school and those that do not attend are at high risk of exploitation through child labour, child trafficking as well as becoming victims of violence (United Nations [UN] News, 2000). According to World Food Program [WFP] (2000), hungry pupils do not concentrate in learning. Therefore, the disadvantaged pupils who attend school are likely to repeat the cycle of hunger and poverty in future due to lack of education if not assisted with school feeding programme (United Nations Education Science and Cultural Organization, [UNESCO], 1999).

Each year, World Food Program provides millions of school children with food in the world as an incentive to lure children to school and maintain their attendance. The programme targets areas where enrolment ratios are lowest and which can have greatest effect towards improving education standards of the children (WFP, 1999). In 2001, WFP launched a global campaign to expand access to education for millions of children in the world. By then, there were 66 million school children attending school hungry in the world (World Food Program, 2001)

According to Ahmed (2004), school meals increased pupils' participation in school. Ahmed found that school feeding increased pupils' enrolment, reduced dropout rate, increased attendance and improved performance in participating

schools as compared to their counterparts where no feeding programs were available.

In Africa, some regions are adversely affected by drought and famines which affects children severely than the adults. In 1999, 29 countries in these regions including: North of Africa zone bordering Senegal, Upper Volta and Chad in the South and Morocco, Algeria, Libya and Egypt in the North. The zone extends South East through Somalia and Northern Kenya. In South of equator the zone covers Lesotho parts of Cape, Northern Transvaal and Free State province of South Africa, Botswana, Namimbia and parts of Zimbabwe. These regions benefited from WFP food assistance to relief children from hunger (UNESCO, 1999). It has been noticed that when school feeding programmes are introduced to school, enrollment increases. For instance, when a school feeding programme which consisted school meals and home rations for girls was introduced in 2000 by WFP in Morocco, enrolment of girls in schools increased within two years of the programmes' implementation.

Niger was one of the countries with the five lowest school enrollment rates in the world. However, the introduction of school feeding program which was intended to enhance attendance of nomad and transhumant families, particularly of girls, enrollments were noted to have increased by 30 percent within two years of the programmes implementation (WFP, 1988). In Ghana, school feeding programme

introduced in 2003 made an amazing increase in pupil enrollment from about half a million to about 1.04 million by 2010 (WFP, 2001).

Kenya has made efforts to increase enrollment and retention of children in schools. For example school feeding program was introduced in Kenya in 1966 with an aim of improving participation of children in primary schools, in relation to enrolment, retention and academic performance. In 1979 the government introduced school milk which resulted to 23 percent increase in enrolment (Republic of Kenya, 1988). Having been stopped for a while, the programme was re-introduced in 1980. Since then, the World Food Programme has been supporting school feeding programme targeting 1.1 million pre-primary and primary school pupils in Arid and Semi Arid Lands (ASAL) and some slum areas of Nairobi and Mombasa cities since 1980 (Ministry of Education [MoE], 2010).

In Kenya from 1999 in order to respond to increased frequency of food crises resulting from drought and political violence and to the introduction of free compulsory primary education in 2003, the school feeding programme has expanded significantly, peaking at 1.85 million children in over 5,000 schools. The programme has so far seen great improvement in pupil enrollment in primary schools (WFP, 2010).

In an impact evaluation of WFP school feeding programmes in Kenya Enrolment rates were on average 28 percent higher in schools that offered school meals, than in those that did not (WFP, 2010). The difference was even more marked in the

early grades. The rate of completion of primary school was also higher in schools offering school meals, especially for girls, and a higher percentage of children from primary schools that offered meals moved on to secondary school after graduating. School meals had a positive effect on attendance rates and on scores in exams in the final year of primary school. Educational outcomes were more positive in urban areas than in rural semi-arid and arid areas (WFP, 2010).

In 2009, the government of Kenya introduced the Home Grown School Feeding Program (HGSFP). It was a government effort to move towards a more sustainable and nationally integrated alternative. The HGSFP aim at supporting pupils' school access and retention especially in marginal agricultural districts and it has enjoyed partner support from the local community (Ministry of Education, 2010).

World Food Program fourth expansion 2000-2003 intended to retain and maintain the rates of increase in the Arid and Semi Arid Lands [ASAL] (World Food Program, 2001b). To support the intention and increase pupils' participation in learning the government started funding school feeding program in ASAL and some slum areas in Nairobi and Mombasa cities through the home grown school feeding program in 2009. In the financial year 2011/2012 it allocated Free School Feeding Program 1.67 billion Kenya shillings (East African Standard, 2011). Specifically, government's objective is to ensure all children; especially girls,

those in ASAL and ones from vulnerable groups have access to free, quality and compulsory education.

Schools in parts of drought stricken Kenya have managed to stay open, providing crucial meals for young children. The drought that often hits various region of the country creates serious food shortages, putting more than one million Kenyans at risk of hunger. Masinga division in Machakos County is one of the districts that often experiences serious food shortage during droughts and has a population of 125,940 according to Kenya 2009 census data. The area is dry and its people keep livestock such as sheep, indigenous cattle and goats. The division has been benefiting from school feeding programmes since 1980 (Masinga District Education Office, 2012). Currently it benefits from the home grown school feeding programmes. The Ministry of Education has cited disparities of food and transport prices together with funding shortfalls as factors that hind education officers from effectively monitoring the home grown school feeding program (Ministry of Education, 2010).

1.2 Statement of the problem

School feeding programmes have been implemented in Kenya since the 1980's with varying degrees of success (Songa, 2011). For instance, Obonyo (2009) in Yala division in Busia County found that school feeding programme is an effective tool in reducing pupils' dropout rate. Subsidized meal programmes, used primarily to promote enrollment and retention of rural children, have played an

integral part in realizing the country's goal of universal primary education. In 1980 the government of Kenya in collaboration with World Food Program launched school feeding programme to support projects which provided nutritious meals (10 o'clock porridge and lunch) to pre-primary and primary school children in Arid and Semi Arid Lands (ASAL) and slum areas in Kenya. The practice solved short-term hunger, improved pupils' health and provided them with energy and ability to cope with their school work eventually increasing their participation in learning (Rukmani, 2011; Songa, 2011; Wambua, 2008).

In 2009, the government introduced the home grown school feeding programme in order to involve and empower the community in the provision of school food to support school access and retention of their children in schools (Langinger, 2011). Although, many studies have been carried out to analyze the impact of school feeding program on education (Rukmani, 2011; Songa, 2011; Wambua, 2008 and Obonyo, 2009), few have been done after the introduction of home grown school feeding programme to monitor the progress of school feeding programme and assess its influence on pupils' participation in learning in primary schools more so in Masinga division in Machakos county. Therefore, this study analyzes the influence of Home grown school feeding programme on pupils' participation in education in Masinga division in Machakos county.

1.3 Purpose of the study

The purpose of the study was to establish the influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County.

1.4 Objectives of the study

The objectives of the study were:

- To assess the influence of school feeding program on enrollment in school feeding program assisted public primary schools in Masinga division.
- To establish the influence of school feeding program on pupils' attendance in school feeding program assisted public primary schools in Masinga division.
- iii. To establish whether school feeding program contributes to pupils' class participation in school feeding program assisted public primary schools in Masinga division.
- iv. To analyze the effect of school feeding program on pupils' performance in school feeding program assisted public primary schools in Masinga division.
- v. To establish the extent to which school feeding program has reduced pupils' dropout in school feeding program assisted public primary schools in Masinga division.

1.5 Research questions

To achieve the objectives, the study was guided by the following research questions:

- i. What is the influence of school feeding program and pupils' enrollment in assisted public primary schools in Masinga division?
- ii. How does school feeding program influence pupils' attendance in assisted public primary schools in Masinga division?
- iii. How does school feeding program influence pupils' class participation in assisted public primary schools in Masinga division?
- iv. What is the influence of school feeding program on pupils' performance in assisted public primary schools in Masinga division?
- v. How has school feeding program reduced pupils' dropout in assisted public primary schools in Masinga division?

1.6 Significance of the study

The findings may be beneficial to the government and education stakeholders by showing how school feeding program assisted in guaranteeing learners' regular school attendance and active participation in school activities. It may reveal the significant role played by school feeding program on attainment of universal primary education on the way to realizing EFA, Millennium Development Goals (MDG) and Vision 2030. The study may awaken teachers to maximize their teaching efforts as the pupils are ready and motivated to learn. The study may also form a base for further studies for scholars interested in the area.

1.7 Limitations of the study

The study was done in Masinga division in Machakos County. Most schools in Masinga division are in rural areas which experience semi-arid climate which leads to low crop yields in most seasons in most cases. It was difficult to control the attitudes of the respondents as they could have given socially biased answers to support the SFP. However this was checked through triangulation of the collected data.

1.8 Delimitations of the study

The study was done in 10 selected public primary schools which have the school feeding programme as the schools are sparsely located due to low population in the area. The socio-economic and cultural background of the division's population might limit generalization to areas with pastoralists' inhabitants. In the division, there are very few urban schools and neither special schools except children's home and there are no public boarding primary schools which limits generalization of the results to areas with such conditions. Private schools did not participate as their environment, parents/guardians motivation, socio-economic status of their members and management varied from that found in public primary schools. The study participants were headteachers, teachers and standard 8 pupils from the selected schools as they had first hand information about effects of school feeding program on pupils' participation in education.

1.9 Assumptions of the study

The study was based on the following assumptions:

- i. That provision of food through school feeding program was regular in the area.
- ii. That record (class register and KCPE records) were available and accessible in schools.
- iii. That respondent felt free, knowledgeable and truthful in providing the required information.

1.10 Definition of significant terms

The following are the significant terms as used in the study.

Children's home refers to special units where challenged children are boarded and taken care of as they learn together with other normal children.

Class participation refers to the act of pupils actively and lively taking part in teaching-learning activities.

Completion refers to the state of a pupil going through all grades in primary course education.

Dropout refers to stopping to attend school of a pupil who had been enrolled in a certain school before completing a course for example; eight years primary course.

Enrolment refers to the number of children registered in a school.

Gross enrolment refers to the total number of pupils enrolled at a given time in school.

Participation refers to the pupils' enrolment, daily attendance to school, class learning activities and performance.

Pupil attendance refers to both daily going to school of a pupil and available in class to learn.

Retention refers to state where registered school pupils progress from standard one primary to standard eight without dropping out of school.

School feeding programme refers to a partnership project sponsored by the government of Kenya in collaboration with World Food Programme targeting disadvantaged children in Schools in ASAL and some city slum areas in Kenya.

1.11 Organization of the study

The study is organized into five chapters. Chapter one comprise of background to the study, statement of the problem, purpose and objectives of the study, research questions, significance of the study, limitations and delimitations of the study, basic assumptions of the study and definitions of significant terms as used in the study. Chapter two consists of the literature review which is divided into; policy guidelines on access to education; influence of school feeding program on (pupils' dropout, pupils' enrolment, pupils' performance, pupils' class participation and pupils' attendance), summary of the literature review, theoretical framework and conceptual framework. Chapter three consists of the research methodology divided into: research design, target population, sampling and sampling procedures, research instrument, data collection and data analysis. Chapter four discusses analysis of the research findings from the data analysis.

Chapter five comprises of the summary of the findings, conclusions, recommendations and suggestions for further research studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review of the study. The chapter reviews literature on the concept of pupils' participation. Influence of school feeding programme on pupils' dropout, influence of school feeding programme on pupils' enrollment, effects of school feeding program on pupils' performance. Influence of school feeding program on pupils' class participation and the influence of school feeding programme on pupils' attendance. The section finally presents the theoretical and conceptual framework of the study.

2.2 Pupils' participation in education

Participation is the process of taking part in something (Macmillan Dictionary). Therefore, pupils' participation in education or learning is the willingly and lively taking part in learning activities to acquire education. It includes; the pupils' attendance, enrollment, high retention or reduced dropout, high performance and the lively class learning activities. To achieve a satisfactory pupils' participation, the learner must be healthy and free from any disturbances. However, many children in the world experience adverse conditions which deter them from participating effectively in learning. As a result of this the WFP has been providing nutritious food to school children in the poor countries around the world, for nearly 40 years. For example, in 2000 it fed over 5 million children in school in 54 countries (WFP, 2001).

In Africa, school feeding program study done in Tanzania,s poorest region (Arush, Dodoma, Singida) within the first 2 years revealed increased enrollment by 15 percent in three regions. In conclusion, the program improved enrollment, stabilized attendance and reduced dropout of children (WFP, 2002). All the above led to increased pupils' participation in education.

In another instance, WFP (2001) noted that, hungry pupils struggle to concentrate in class work and are easily distracted. They may be eager to learn but they are not in good state to learn. The report found that providing a good meal to the pupils would solve the problem as it increased pupils' attendance significantly. According to Bundy, Burbano, Grush, Geli, Jackes, and Drakes, (2009) a combination of school feeding studies revealed that absolute enrollment increased for girls and boys by 28 percent and 22 percent respectively in the first year of implementation in WFP supported countries. In the following years the absolute enrollment of girls in schools with on—site meals reverted to levels similar to ones before the school meals introduction. However, in the highest primary grades, with both on-site meals and take-home rations, girls' absolute enrollment increased more than twice of the schools with only on-site meals. The effect displayed by the above different school feeding programs on pupil's participation warrants a study to establish whether the same happens today.

In Kenya, the government has been trying to provide accessible quality education.

The effort led to increase in pupils' enrolment since independence up to date. For

example in 1963 and 2009, the enrolment was 981,553and 8,827,535 respectively (Republic of Kenya 1998, Ministry of Education News Letter 2007 and Kenya National Bureau of Statistics 2010). However, the government in collaboration with World Food Programme has been providing school feeding programme to pre-primary and primary schools in ASAL since 1980. For, instance the financial year 2011/2012 the government allocated Free School Feeding Programme 1.67 billion shillings (Standard News Paper, 2011). Both the increase in pupils' enrolment and increase in attendance are components of pupils' participation.

At the same time, the Kenya government committed itself by accepting the international conventions and formulated a policy on education of attaining EFA and MDGs by 2015. As the Education Sector Report of 2006 put it, to enhance access, equity, quality and relevance education at all levels of education and training by 2010. Therefore, the government's specific objective was to ensure all children; especially girls, those in ASAL and ones from vulnerable groups have increased participation in education.

2.3 Influence of school feeding program on pupils' enrolment

Enrollment is the number of pupils who are registered and maintained in the school registers from standard one to standard eight. School feeding program was started to increase participation of pupils in the marginalized areas of the world. According to World Food Program (2002) in Nepal, School Feeding Program improved enrolment rates; the gross enrolment was 39 percent higher for all

children and 43 percent higher for girls compared to non-supported schools. In 1996 in Malawi, a small pilot school feeding program performed excellently when it improved enrolment of the participating schools by 5 percent in a period of 3 months as compared to others not participating in schools. It shows that school meals are effective in attracting children to school especially girls, orphaned and vulnerable children. Also in Ghana the Ghanaian school feeding programme which was implemented in 2007 in 975 schools marked a success in bringing more children in schools as on average schools increased enrolment by 20 percent (Netherlands' Development Organization, 2007).

With school feeding program implemented for many years in Kenya, Finan 2010, found that between 2002 and 2007, the net primary school enrolment increased from 77 percent to 92 percent while enrollment in the ASAL increased from 17 percent to 29 percent. An evidence that, ASAL continue to lag behind their counterparts in the urban areas; in terms of education expansion and accessibility. However, what about the situation of enrolment in the ASAL and slum areas today? Ministry of Education (2010) reported that primary school enrollment increased from 5.9 million in 2003 to 8.6 million in 2009. Whereas, Steinmeyer and others (2009) did not give enough information in their study when they noted that the school feeding program had some general objectives to achieve, improving pupils' enrollment being one of them.

2.4 Influence of school feeding program on pupils' attendance

Pupils' attendance is the pupils' going to school and available in class to learn. When pupils attend school, they participate in learning to acquire knowledge and skills (education). Children in disadvantaged areas may not attend school because of lack of food, lack of motivation and other hindering issues. For example, Glewwe and Jacoby (1994) in Ghana noted that malnourished children entered school at later age and attended school for fewer years than the better nourished children (before dropping out). Also according to Del Rosso 1999, school feeding programme motivated parents to enroll their children in school and have them attend school regularly.

When school feeding program is implemented in a school, the attendance rate of disadvantaged and vulnerable children stabilizes as World Food Program (2000) found out that providing a meal to school children (a hot breakfast or lunch) significantly increases their attendance rates. For instance, a pilot school feeding program in Malawi resulted to 36 percent increase in pupils' attendance to school within duration of 3 months (World Food Program, 1996). Therefore, school meals influence the attendance of pupils' positively as the studies have proved. However, in Kenya Steinmeyer (2009) noted that the school feeding program had some general objectives to achieve stabilizing pupils' attendance was one of them.

2.5 Influence of school feeding program on pupils' class participation

Class participation is the act of pupils actively and lively taking part in teaching/learning activities. A child who is not healthy (physically, psychologically and emotionally) may not fully take part in a learning session. Hunger makes a child unhealthy. World Food Program 2000 noted that a hungry learner will struggle to concentrate on his or her studies but is easily distracted. Meaning that, the vulnerable and disadvantaged children who are lucky to attend school in the marginalized areas may not perform well in absence of school feeding program. The school meal is there to solve the short-term hunger and enable the learner to have full concentration in learning.

In 1984, a study on school meals in Tamil Nadu in India showed that school feeding program increases school participation of pupils according to World Food Program (2002). Another report by Del Rosso 1999 revealed that school feeding programme alleviates short term hunger in malnourished or otherwise well nourished school children. This helps to increase the attention and concentration of students producing gains in cognitive function and learning. Then recently, another study in the same place revealed that school feeding program improves pupils' participation in school (Rukmani, 2011). Vermeersch and Kremer (2004) in Kenya found that pre-school children receiving breakfast increased school participation in the treatment group by 8.5 percent than their counterparts. According to the studies above, it is clear that school meals improve pupils'

participation in school but they have not specified the pupils' activeness in the learning activities in a classroom situation or in a learning session.

2.6 Effects of school feeding programme on pupils' performance

Performance is the pupils' progressive score after doing an examination. According to Economy Recovery Strategy for Wealth and Employment Creation (2003/2007), performance is an important exit route from poverty by improving people's ability to take advantages of the opportunities that can improve their well being as individuals and enable them to participate more effectively in the community and the market. School Feeding Program has been successful in increasing pupils' performance (Pollitt, Jacoby & Cueto 1995 and Ahmed 2004). Another study in Ghana, the National School Feeding Programme implemented in Ghanaian basic schools showed a positive effect on school enrolment and school academic performance (Abotsi, 2013).

In Kenya, a study conducted in 2008 in Mwala division, Machakos county concluded that school feeding program improves performance of pupils (Wambua, 2008) but Obonyo (2009) in Yala division in Busia county contradicted the belief and expectations by concluding that school meals do not affect pupils' performance. Therefore, the last phenomenon warranting more studies to prove whether it is true according to the prevailing conditions that school feeding does not influence performance of pupils'. This study will however assess the effect of SFP on pupils' performance.

2.7 Influence of school feeding program on pupils' dropout

Dropout is stopping to attend school by a pupil who had been enrolled in a school before completing a course, for example, the primary 8 years course in Kenya (Republic of Kenya [RoK], 2005). In 2006, Education Sector Report, from the objectives and strategies for revised education called for enhanced partnership and collaboration between various stakeholders; to enable children access to early education that can lay a strong foundation to future learning leading to development of children in their early years. It called for increased enrollment, improved pupils' participation and retention of pupils in primary schools.

School feeding program came in to support the above as it has been very effective in the fight against hunger by sparing children the pains of hunger in disadvantaged communities. Well-nourished children are able to cope with their class work and acquire education reported World Food Program (2002). For example, in Bangladesh a survey on school feeding program done after more than one year of its implementation, reduced dropout rate of pupils by 7.5 percent (Ahmed, 2004).

In Kenya, the average completion rates hovered at around 34 percent in arid and 57 percent in semi arid districts displaying disparity as the percentages were below what Kenya expected to meet in order to achieve the first three MDGs [eradicate poverty and hunger, attain UPE and have gender equity in education] by 2015 (Ministry of Education, 2004).

2.8 Summary of literature review

Various studies done globally, regionally and nationally had displayed the picture that, school feeding program increases pupils' participation in learning. The studies reported increase in pupils' enrollment, increase in pupils' attendance, improvement in pupils' performance and reduction in pupils' dropout rates. All those are positive trend on implementation of school feeding programme as a measure to solve unequal provision of education in disadvantaged areas of the world. There are also introduction of various types of SFP in Kenya such as HGSFP. Therefore, introduction of home grown school feeding program, the fact that ASAL and slum areas are lagging behind in terms of education according to Finan (2010) and the findings of the Bundy and others (2009) and Obonyo (2009) studies in Kenya warrants this study. It will analyze the influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County.

2.9 Theoretical framework

This study was guided by Vroom Expectancy Theory of motivation. The expectancy theory was proposed by Victor Vroom of Yale School of Management in 1964. Vroom stresses and focuses on outcomes, and not on needs. The theory states that the intensity of a tendency to perform in a particular manner is dependent on the intensity of an expectation that the performance will be followed by a definite outcome and on the appeal of the outcome to the individual. The Expectancy theory states that employee's 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 the performance will lead to reward (Instrumentality). In short, Valence is the significance associated by an individual about the expected outcome. It is an expected and not the actual satisfaction that an employee expects to receive after achieving the goals. Expectancy is the faith that better efforts will result in better performance.

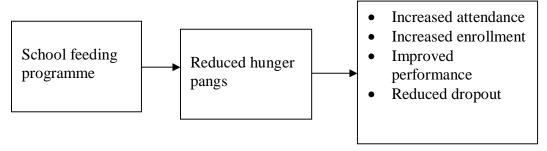
Tolman (1932) attributed the results of reinforcement to learning but not regarding reinforcement as a necessary condition for learning to take place. Pupils' with hunger pangs will come to school to be free from hunger and at the same time acquire education. However, in Vroom's theory, valence is the emotional orientations toward particular outcomes (rewards) or is the value the person attaches to the outcome. Therefore, it is the attractiveness or preference for a particular outcome to an individual. The school feeding program is an incentive (bait) to attract children to school and enable them to learn. Expectancy is a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome (the belief that better efforts will result to better performance). Then instrumentality that good performance will lead to valid outcome. To the pupils, expectancy is the (internal) belief that going to school (regularly) will enable them acquire quality education and that education will empower them to be free from the pains of hunger and poverty in future.

Therefore, school feeding program facilitates pupils to learn by solving short-term hunger and making them healthy to cope with class work.

2.10 Conceptual framework

The relationship between school feeding programme and learners' participation can be conceptualized as depicted in figure 2.1as a three stage relationship. The school food would reduce hunger pangs and therefore lead to increased pupils' class participation. The pupils' participation would include: increased enrolment, increased attendance, improved performance, increased class participation and reduced dropout. The conceptual framework for the study is presented in Figure 2.1 below.

Figure 2.1 Influence of school feeding programme on pupils' participation in primary schools



School feeding program is the independent variable while pupils' participation (increased attendance, increased enrolment, improved performance, increased class participation and reduced dropout) is/are the dependent variables. Participation will be influenced by school feeding program as it acts as a strong motivating factor to the disadvantaged pupils and make them attend school and acquire education. Therefore, the incentive SFP will lead to increased pupils

participation in learning and finally achieve the universal primary education. The framework illustrates that the pupils' participation results from the school SFP which reduced hunger pangs hence leading to increased enrolment, attendance, participation, improved performance and reduced drop out.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures that were used in conducting the study. The section focuses on research design, target population, sample and sampling procedures, research instruments, validity of the instruments, reliability of the instruments, data collection procedures and data analysis. The chapters are as follows here below.

3.2 Research design

According to Orodho (2003), research design is what holds all the elements of the research project together. The research design used in this study is descriptive survey, which is a method of collecting data by interviewing or administering a questionnaire to sampled individuals. Descriptive survey also can be used to investigate a population by collecting samples to analyze and discover occurrences. This research design was suitable to my study as the population was large and the population was distributed in a vast area.

3.3 Target population

The target population is all the members of the real set of people, events or objects to which the researcher wishes to generate the findings as defined by Borg and Gall (1982). The target population comprised of all the 98 public primary schools in Masinga division that have implemented school feeding programme.

The schools had a total number of 819 teachers together with headteachers and 2,797 class 8 pupils. The researcher targeted standard 8 pupils since they have been in the schools for a relatively longer time and hence are able to provide reliable information than other pupils. It also targeted teachers and headteachers because they are the administrators and had significant information about the effects of school feeding programme on pupils' participation.

3.4 Sample size and sampling techniques

The researcher used the internet sample size calculator to determine the sample size of the schools, the teachers and the standard eight pupils. In all cases a confidence level of 95 percent and worst case percentage of 50 was used. Confidence intervals used were as follows: 29.5 percent in schools, 15.1 percent in headteachers and teachers and 9.6 percent of standard eight pupils. This implies that out of 98 schools, 10 were selected as they were sparsely located due to low population. Then out of 819 head teachers and teachers 40 were selected while out of 2797 class 8 pupils, 100 were selected. Simple random sampling was used to select the respondents in each school. To select the number of schools, a list was sought from the District Education Officer (DEO) from which the researcher simple randomly selected the 10 schools.

To select the teachers, the number of sampled teachers was divided by the number of schools (40/10) which yielded 4 teachers including the headteacher. Three teachers and the headteacher were therefore selected from each school. To select

the individual teachers, the researcher used the purposeful random sampling and picked the school feeding program teacher together with either the deputy headteacher or the senior teacher, as they have significant information in both curriculum and feeding program and another teacher. To address gender issues stratified random sampling was used where the researcher made sure that among the three teachers and the headteacher both genders were equally represented. That is two males and two females regardless of whether a teacher or a headteacher. If the deputy headteacher and the headteacher were the same gender, two teachers of different gender were selected. The first two teachers appearing from the school list of teachers. The number of pupils sampled was divided by the number of schools (100/10). This yielded to 10 pupils which mean that 10 class 8 pupils were selected from each school. To select the individual pupils, the researcher used the class registers. Using the register, the researcher picked 5 boys and 5 girls alternatively.

3.5 Data collection instruments

Data in the study were collected using questionnaires, document analysis and focus group discussion guide. The study aimed at collecting information from respondents about the influence of school feeding program on pupils' participation. It used both primary and secondary data. Primary data were collected through questionnaires and focus group discussion. Secondary data was obtained from school returned records at head teacher's office through document analysis. Both quantitative and qualitative methods were used in the study.

Quantitative method was used on returns from head teacher's office whereas; qualitative method was used on focus group discussion and questionnaires.

3.5.1 Questionnaires

The researcher relied on self-administered questionnaires. The questionnaires were developed by the researcher. A questionnaire is a research instrument that gathers data over a large sample (Kombo and Tromp, 2006). The advantages of using questionnaires are: the person administering the instrument has an opportunity to establish rapport, explain the purpose of the study and explain the meaning of items that may not be clear. Gay (1976) maintains that questionnaires give respondents freedom to express their views or opinions and also to make suggestions. They are also anonymous which helps to produce more candid answers than it is possible in an interview. It was responded to by the headteachers, teachers and pupils

3.5.2 Questionnaire for the headteachers

The questionnaire for the headteachers contained two major sections. Section one contained the demographic information of the headteachers while section two had items on how SFP has influenced pupil participation in schools. The questionnaires had both structured and unstructured items. The questionnaires had items that solicited information on the influence of school feeding programmes on pupil's participation.

3.5.3Questionnaire for the teachers

The questionnaire for the headteachers had two major sections. Section one contained the demographic information of the teachers while section two had items on how SFP has influenced pupil's participation in schools. The questionnaires had both structured and unstructured items. The questionnaires items sought information on the influence of school feeding programmes on pupil's participation.

3.5.4 Questionnaire for the pupils

The questionnaire for the pupils contained two major sections. Section one contained the demographic information of the pupils while section two had items on how SFP has influenced pupil participation in schools. The questionnaires had both structured and unstructured items. The questionnaire items sought information on the influence of school feeding programmes on pupil's participation.

3.5.6Document analysis guide

Document analysis was used to gather information on the influence of school feeding programmes on pupil's participation for the last five years. The researcher studied documents on school enrollment, school KCPE performance and school attendance. The information was recorded in the tables.

3.5.7Focus group discussion guide

A focus group discussion is usually composed of 6-8 individuals who share certain characteristics, which are relevant to the study (Kombo & Tromp 2009). Focus group discussion was used to obtain information on the participant's perception on the study. The focus group discussion relied on the discussion among participants about its questions.

Focus group is made of homogeneous members from the target population. In this instance the composition was 6 standard eight pupils from each selected public primary schools. The researcher was the moderator. Items of the focus group discussion focused on all the five research objectives.

3.6 Validity of the instruments

According to Kombo and Tromp (2009), validity of a test is a measure of how well a test measures what it is supposed to measure. The pilot study helped to improve face validity and content of the instruments. The researcher used face validity to review and develop an informal opinion as to whether or not the test is measuring what it is supposed to measure. Content validity on the other hand was used by the researcher to check whether the items in the questionnaire answer the research objectives. The supervisors who are experts in the area of study validated the instruments through expert judgment (Kirk & Miller, 1986).

3.7 Reliability of the instruments

Mugenda and Mugenda (1999) defines reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated tests when administered a number of times. To enhance the reliability of the instrument, a pilot study was conducted. The aim of pre-testing was to gauge the clarity and relevance of the instrument items so that those items found to be inadequate for measuring variables were either discarded or modified to improve the quality of the research instruments. This was to ensure that the instrument captured all the required data. Pearson's product moment correlation coefficient formula was used so as to establish the Pearson's product moment correlation coefficient of the quantitative data in both questionnaires and document analysis.

$$r = \frac{N\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma(x)^2 - (\Sigma x^2)][N\Sigma(y)^2 - (\Sigma y)^2}}$$

According to Mugenda and Mugenda (1999) a coefficient of 0.80 or more, shows that there is high reliability of data. The questionnaire revealed a coefficient of 0.72, hence it was deemed reliable.

3.8 Data collection procedure

The researcher sought a research permit from the National Council for Science and Technology (NCST). The researcher then proceeded to report to the District Commissioner and District Education Officer, Masinga District and thereafter wrote letters to the headteachers to be allowed to do the study in their respective

schools. The researcher visited the selected schools, created rapport with the respondents and explained the purpose of the study before administering the questionnaire to the respondents. The respondents were assured that strict confidentiality would be maintained in dealing with their identities. The completed questionnaires were collected once they had been filled out.

3.9 Data analysis

After the data had been collected cross-examination was done to ascertain their accuracy, completeness and identify those items wrongly responded to, spelling mistakes and blank spaces. Quantitative data were then entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS) version 12.0. This generated the frequencies and percentages which were used to discuss the findings. Tables and bar graphs were used to present the quantitative data while descriptive statistics such as percentages, frequencies, pie chart and bar graphs were used to present the qualitative data. Qualitative data was analyzed thematically according to the themes in the research objectives.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

Presented in this chapter are data analysis, presentation and interpretation of the findings. The data presented in this chapter were processed using Statistical Package for Social Sciences (SPSS) version12.0. All themes discussing the same research questions were presented and analyzed together. The analysis of data was presented in both narrative and tabular forms. The questions were grouped as follows:

- i) What is the influence of school feeding program and pupils' enrollment in assisted public primary schools in Masinga division? Responses from theme of enrolment by; Headteachers, teachers and pupils.
- ii) How does school feeding program influence pupils' attendance in assisted public primary schools in Masinga division? Responses from theme of attendance by; Headteachers, teachers and pupils.
- iii) How does school feeding program influence pupils' class participation in assisted public primary schools in Masinga division? Responses from theme of participation by; Headteachers, teachers, and pupils.
- iv) What is the influence of school feeding program on pupils' performance in assisted public primary schools in Masinga division? Responses from theme of performance by; Headteachers, teachers and pupils.

 v) How has school feeding program reduced pupils' dropout in assisted public primary schools in Masinga division? Responses from theme of dropout by; Headteachers, teachers and pupils.

4.2 Questionnaire return rate

Questionnaire return rate is the proportion of questionnaires filled in and returned after their administration. In this study, out of 10 headteachers, 30 teachers and 100 pupils issued with questionnaires, 8 (100 percent) headteachers and 28 (93 percent) teachers and 91 (91 percent) standard eight pupils filled in and returned the questionnaires. All of them were more than the 80 percent accepted in reliable researches. Table 4.1 presents the questionnaire returne rate.

4.3 Demographic data of the respondents

This section presents the demographic data of the respondents namely the headteachers, teachers and pupils. The information was important to understand the gender and the professional level of the teachers and the headteachers. It was also important to have both gender (male/female) well represented in the study. For the pupils it was very significant as girls are the most vulnerable children in ASALs.

4.3.1 Demographic data of the headteachers

The demographic data of the headteachers was based on their gender and the level of education. To establish the gender of the headteachers, they were asked to indicate the same. Their responses showed that 100 percent were male. This

implies that there is gender disparity in the leadership of schools. This further showed that the one third gender representation policy has not been adhered to.

The headteachers were further asked to indicate their highest level of profession.

The findings are presented in Figure 4.1.

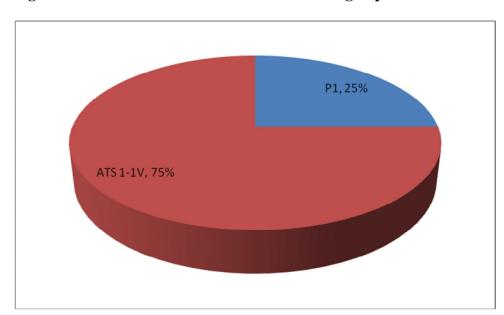


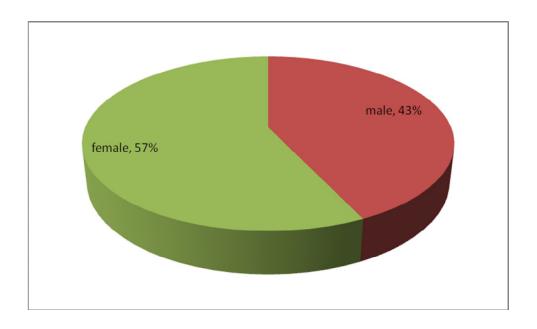
Figure 4.1 Distribution of headteachers according to professional level

Data presented in figure 4.1 shows that majority 75.0 percent of headteachers had ATSI-IV professional education while 25.0 percent of the headteachers had PI education level. This implies that headteachers had acquired further professional development.

4.3.2 Demographic information of the teachers

The demographic information of the teachers was based on their gender and their education level. Figure 4.2 presents the distribution of the teachers by gender.

Figure 4.2 Distribution of teachers according to gender



The Table shows that majority 57 percent of the teachers were female while 43 percent of teachers were male. Data implies that there was relatively higher number of female teachers than male. When asked to indicate their education level, they responded as table 4.1

Table 4.1 Distribution of teachers according to profession level

Total	28	100.0
Graduate	3	10.8
ATSI-IV	2	7.0
PI	20	71.4
Untrained	3	10.8

Table 4.1 shows that majority 89.2 percent of teachers had (PI, ATS and graduate) professional education. This data implies that all the teachers had the minimum requirement to teach in primary schools. A few of them 10.8 percent however were untrained.

4.3.3: Demographic information of the pupils

The demographic information of the pupils was based on their gender. Figure 4.3 presents their gender.

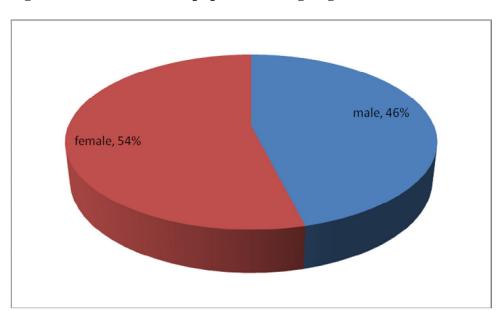


Figure 4. 3 Distribution of pupils according to gender

Figure 4.3 shows that majority 54 percent of pupils were girls while 46 percent of pupils were boys. The findings show that there were an almost equal number of the pupils in gender in the study.

4.4 Influence of school feeding programme on pupils' enrollment

The researcher examined the respondents' responses on whether school feeding program encourage pupils to join school. When the headteachers were asked to indicate whether school feeding programme had encouraged pupil join school, 100 percent of the headteachers said that the program encourages pupils to join school. This concurred with all the teachers who responded that the school feeding programme had encouraged pupil to join school. Among the pupils, 90.1 percent indicated that the programme had encouraged pupils to join school. In support of the above the Ghanaian school feeding programme which was implemented in 2007 in 975 schools revealed a success in bringing more children in schools as on average schools increased enrolment by 20 percent (Netherlands' Development Organization, 2007).

The pupils in the study were asked to give reasons why the school feeding program encouraged pupils to join school. Their response indicated that there was scarcity of food in some families hence children attended school since there was provision of food. They also indicated school feeding programme enhance smooth learning and that they had energy to study and perform better in examination.

The headteachers were further asked to indicate whether school feeding programme had influenced pupils' enrollment, their responses indicated that it had actually increased enrolment which was higher in classes 1 – 3 as shown by 75 percent. Studies by Bundy, Burbano, Grush, Geli, Jackes, and Drakes, (2009) a

combination of school feeding revealed that absolute enrollment increased for girls and boys by 28 percent and 22 percent respectively in the first year of implementation in WFP supported countries. In the following years the absolute enrollment of girls in schools with on –site meals reverted to levels similar to ones before the school meals introduction. The headteachers data is presented in Table 4.2.

Table 4.2 Enrolment: Pupils level influenced by school feeding programme

Level	F	%
Standards 1 – 3	6	75
Standards 4 – 5	1	12.5
Standards 6-8	1	12.5
Total	8	100.0

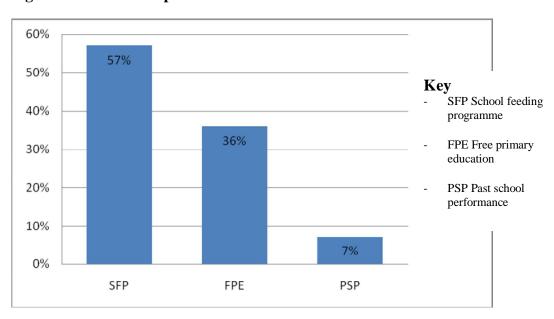
The headteachers were asked to indicate what mostly influenced the school increased enrollment, they responded as Table 4.3.

Table 4.3 Headteachers' opinions on what influences the school enrollment

Influence	F	%	
School feeding program meals	7	87.5	
Free Primary Education	1	12.5	
Past school performance	0	0.0	
Total	8	100.0	

Data shows that majority 87.5 percent of head teachers indicated that school feeding program meals mostly influenced increase in enrollment. The responses of the teachers on the same item concurred with the headteachers where majority 57 percent indicated that school feeding program meals influenced pupils' enrollment. Data on the teacher response is presented in Figure 4.4.

Figure 4.4 Teachers' opinion on what influences the school enrollment



Pupils were also asked to indicate what attracted children to come to school. Their responses were tabulated in Table 4.4

Table 4. 4 Pupils' opinion on what mostly attracted children to attend school

Influence	F	%	
Free Primary Education	65	71.4	
School food	22	24.2	
Teacher good teaching	4	4.4	
Total	91	100.0	

Table 4.4 shows that a small number of 24.2 percent indicated that it was due to school food provided at the school. This findings shows that school feeding programme had a positive impact on pupils' enrolment in the schools although rated second. Headteachers and teachers further indicated that when the school feeding programme was withdrawn, there was an effect on the school enrolment. The findings agree with Rukmani (2011) who revealed that school feeding program improves pupils' enrollment.

Asked whether meals helped them to attend school regularly, majority 71.4 percent of pupils were for the opinion that meals helped them to attend school regularly. All focus group discussion revealed that school feeding programme affected pupils' enrollment as it attracted pupils to join school especially at lower

primary and for orphaned children. These findings were confirmed by data from the document analysis on enrollment as presented in table 4.5.

Table 4.5 School enrolment

Year	Gender	Sub total	Total	
2009	Boy	1552	3052	
	Girl	1500		
2010	Boy	1581	3112	
	Girl	1532		
2011	Boy	1538	3063	
	Girl	1525		
2012	Boy	1614	3124	
	Girl	1510		
2013	Boy	1588	3148	
	Girl	1560		

Data from the document analysis from school enrollment records from 2009 to 2013 showed that there was an increase of 2 percent of the students' enrolment in the year 2009-2010 in the schools. In the year 2011 and 2012, there was a 2 percent increase of students' enrolment. An increase of 3 percent total student's enrolment was observed from year 2009 to 2013. The findings show that school feeding programme had an effect on school's enrollment as the headteachers had confirmed in their responses in table 4.3.

The findings are in agreement with World Food Program (2002) in Nepal, School Feeding Program improved enrolment rates; the gross enrolment was 39 percent higher for all children and 43 percent higher for girls compared to non-supported schools. In 1996 in Malawi, a small pilot school feeding program performed excellently when it improved enrolment of the participating schools by 5 percent in a period of 3 months as compared to others not participating in schools. It shows that school meals are effective.

The findings are also in live with Finan (2010) who found that with school feeding program implemented for many years in Kenya, found that between 2002 and 2007, the net primary school enrolment increased from 77 percent to 92 percent while enrollment in the ASAL increased from 17 percent to 29 percent.

4.5 Influence of school feeding programme on pupils' attendance

Pupils' attendance is the pupils' going to school and available in class to learn. When pupils attend school, they participate in learning to acquire knowledge and skills (education). Children in disadvantaged areas may not attend school because of lack of food, lack of motivation and other hindering issue. The study further sought to establish how school feeding programme had influenced pupils' school attendance. The respondents in the study were posed with questions requiring them to indicate how school feeding programme had influenced pupils' school attendance. The headteachers were asked to indicate whether pupils were ready to attend both the morning and afternoon sessions. Their responses indicated that

pupils were ready to attend both sessions since they would be provided with lunch.

The headteachers further indicated that lunch provided to the pupils gave them energy to concentrate in their afternoon sessions. Teachers also indicated that pupils were active during learning in the afternoon sessions since they had taken lunch. Teachers reported that pupils were ready to attend both morning and afternoon sessions as most of the homes had one meal per day. Among the pupils respondents they indicated that without food they could not concentrate in class well. School meals gave them energy and strength hence encouraged pupils to attend school to achieve their future dreams.

Findings from the group discussion revealed that feeding programme influenced pupils' attendance to school as pupils were not sent home for lunch which could affect the afternoon sessions. Due to provision of food in school there was no delay in starting the afternoon lessons.

The headteachers were asked to indicate the influence of school feeding programme on pupils' attendance. Their responses are tabulated in Table 4.6.

Table 4.6 Influence of school feeding programme on pupils' attendance

Influence	F	%
Pupils are happy and ready to attend school daily	1	12.5
Pupils are not sent home to eat lunch which would	4	60.0
affect afternoon session.		
Pupils are healthy after being feed from school and	3	37.5
hence attend school daily		
Total	8	100.0

Responses as presented in Table 4.6 show that majority 60.0 percent of the head teachers were of the opinion that since food was provided at the school, pupils did not go home for lunch which would otherwise affect the commencement of the afternoon lessons. The researcher also sought to establish pupils' attendance of standard 8 pupils in the 10 schools within the previous one month to establish the recent attendance of the pupils. The data is presented in Table 4.7

Table 4.7 Pupils school attendance in the previous one month (2013)

Gender	В	oys	G	irls	Class	s Total
Session	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
Present	2094	2096	1743	1744	3837	3840
Total	4	1190	3	3487	7	7678

Findings indicated that standard 8 pupils' school attendance in the afternoon was better than in the morning for both boys and girls. Three students missed in the morning sessions that were present in the afternoon sessions.

The finding concur with World Food Program (2000) found out that providing a meal to school children (a hot breakfast or lunch) significantly increased their attendance rates. For instance, a pilot school feeding program in Malawi resulted to 36 percent increase in pupils' attendance to school within duration of 3 months.

4.5 Influence of school feeding programme on pupils' class participation

World Food Program 2000 noted that a hungry learner will struggle to concentrate on his or her studies but is easily distracted. Meaning that, the vulnerable and disadvantaged children who are lucky to attend school in the marginalized areas may not perform well in absence of school feeding program. The school meal is there to solve the short-term hunger and enable the learner to have full

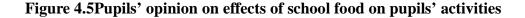
concentration in learning. It is on this basis that the researcher further examined the influence of school feeding programme on pupils' class participation. All the head teachers indicated that pupils were lively and very active in the classroom.

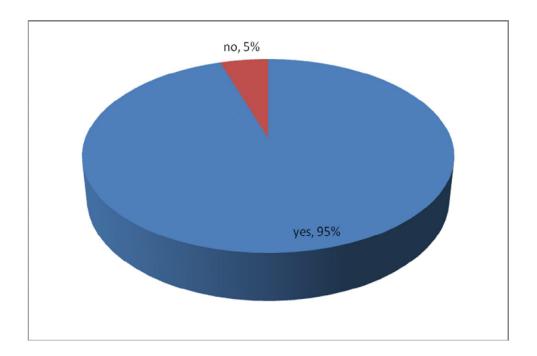
When the teachers were asked to indicate whether school feeding programme had an effect on pupils class participation, they responded as in table 4.8.

Table 4.8 Teachers' responses on how pupils participated in class

Response	F	0/0
Dull	0	0.0
Lively	17	60.7
Very active	11	39.3
Total	28	100.0

Table 4.8 shows that majority 60.7 percent of teachers said that pupils were lively in learning sessions as a result of school meals while 39.3 percent indicated that that pupils were very active during learning. Majority 95 percent of the pupils reported that meals provided by the school enabled them participate better in class. These findings are presented in Figure 4.5.





Headteachers and teachers further said that with school meals, pupils actively participate in learning in both morning session and afternoon session. From the focus group, it was said that school feeding programme has an influence on pupils' class participation as all the groups indicated that pupils got energy and strength to do school activities as well as remember what they have learnt during examinations. These findings imply that school feeding programme had an influence on pupils' class participation. The above findings are in line with a study by World Food Program (2002) in Tamil Nadu in India that showed that school feeding programme increased learners participation in class. The findings are also in line with Vermeersch and Kremer (2004) who found that pre-school

children receiving breakfast increased school participation in the treatment group by 8.5 percent than their counterparts.

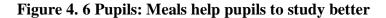
4.6 Effects of school feeding programme on pupils' performance

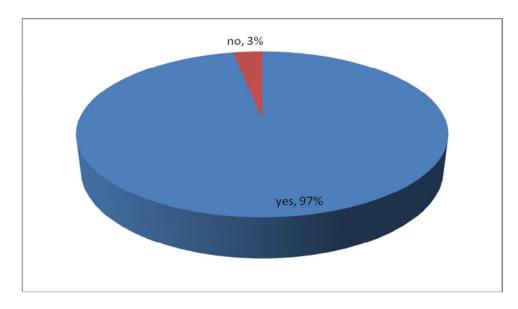
Class participation is the act of pupils actively and lively taking part in teaching/learning activities. A child who is not healthy (physically, psychologically and emotionally) may not fully take part in a learning session. Hunger makes a child unhealthy. Performance is the pupils' progressive score after doing an examination. According to Economy Recovery Strategy for Wealth and Employment Creation (2003/2007) performance is an important exit route from poverty by improving people's ability to take advantages of the opportunities that can improve their well being as individuals and enable them to participate more effectively in the community and the market. The study therefore sought to investigate the effects of school feeding programme on pupils' performance, the researcher sought to investigate the same form the respondents.

The headteacher and teachers were of the opinion that meals assisted the pupils to improve their class performance. When asked to give reasons, they said that when the pupils had eaten, they are readily available and active for learning; school absenteeism is minimal hence improved performance. Balanced diet food provided by school meals enable children to be healthy thus having good cognitive development which enables them to acquire concepts well in class thus

improving their performance. With school feeding programme the children are stable and can concentrate seriously.

A child who is not healthy (physically, psychologically and emotionally) may not fully take part in a learning session. Hunger makes a child unhealthy. World Food Program 2000 noted that a hungry learner will struggle to concentrate on his or her studies but is easily distracted. Both the headteachers and teachers had also said that people under normal circumstances have enough energy to do many things when they have eaten to fullness and due to regular feeding the pupils are protected from diseases which are caused by lack of food hence good performance. From all the focus groups, it was found out that school feeding programme had an influence on pupils' performance as the participants indicated that pupils are able to perform better in class and reflect the same during examinations. The pupils in the study accepted that the meals helped them to study better, majority 97 percent of pupils said that meals help them to study better as indicated by Table 4.6. Which is supported by Pollitt, Jacoby & Cueto 1995 and Ahmed 2004 in their studies which revealed that school feeding programme is successful in increasing pupils' performance.





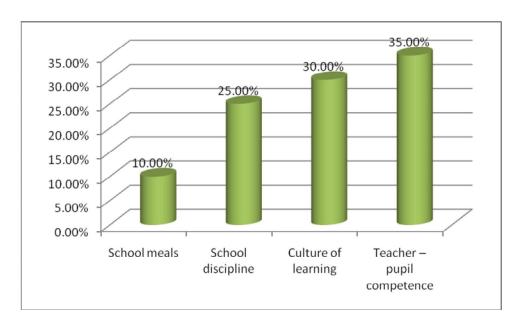
The findings further indicate that school meals assisted pupils to perform better in schools. When the students were asked to indicate their total marks in the last terms exam, majority 70.3 percent of pupils indicated that they had between 250 and 399 marks. Table 4.9 indicates the headteacher responses on the main factor which has contributed to the school's performance.

Table 4.9 Headteachers' responses on the main factor contributing school's performance

Factor	F	%
School meals	5	62.5
School discipline	3	37.5
Culture of learning	0	0.0
Total	8	100.0

Table 4.9 shows that majority 62.5 percent of headteachers indicated that school meals contributed to school's performance. The headteachers concurred with a study which was done in Ghana, the National School Feeding Programme imlemented in Ghanaian basic schools. The research showed that the SFP had a positive effect on school enrolment and school academic performance (Abotsi, 2013). The teachers were also asked to indicate the main factor that had influenced pupils' performance. Figure 4.7 indicates the teachers' responses on the same.

Figure 4. 7 Teachers' opinion on factors contributing to the school's performance



Data shows that 10.0 percent of teachers reported that school meals contributed to school's performance. The findings show that though there are various factors that influenced performance, school meals had an influence. The researcher also

sought to establish pupils' performance since the inception of the school feeding programme. The findings from document analysis are presented in Table 4.10

Table 4.10 School Performance K.C.P.E. Mean Grade

Year	Gender	Sub mean	Mean grade
2009	Boy	271.25	262.00
	Girl	252.75	
2010	Boy	258.35	262.00
	Girl	265.65	
2011	Boy	258.50	258.13
	Girl	257.75	
2012	Boy	254.00	253.62
	Girl	253.25	
2013	Boy	264.75	266.50
	Girl	268.25	

Data from the document analysis showed that KCPE performance between year 2008 and 2009 was constant although in the year 2010 there was a drop mean of 3.87. A mean drop was observed in the year 2011 by 4.51, however, in the year 2012 the performance increased with a mean of 4.5. The data implies that pupils had performed well within the five years of the study as the teachers and headteachers had revealed.

These findings are in line with Wambua (2008) who in his study conducted in 2008 in Mwala division, Machakos County concluded that school feeding program improved performance of pupils. The findings however contradicts Obonyo (2009) whose study in Yala division in Busia County found that school meals do not affect pupils' performance. Therefore, the last phenomenon warranting more studies to prove whether it is true according to the prevailing conditions that school feeding does not influence performance of pupils.

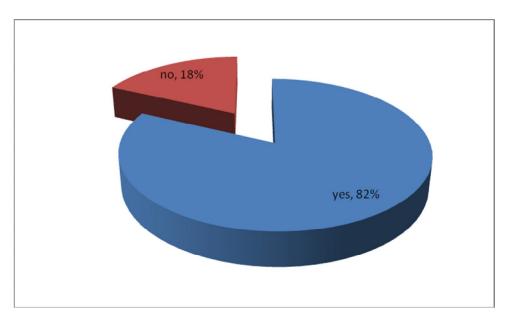
4.7 Influence of school feeding programme on pupils' dropout.

Dropout is stopping to attend school by a pupil who had been enrolled in a school before completing a course, for example, the primary 8 years course in Kenya (Republic of Kenya [RoK], 2005). The study sought to establish the influence of school meals on pupils drop out. To establish the influence of school feeding programme on pupils' dropout, the headteachers and teachers were asked whether school meals attracted and retained pupils in school. Data indicated that school meals attracted and made children remain in school. A survey done in Bangladesh school feeding programme which consisted of school feeding biscuits reduced school dropout rate by 7.5 percent (Ahmed, 2004) further supports the findings.

School feeding programme also enabled children to remain in school both in the morning session and in the afternoon session since they eat lunch at school and so didn't struggle to get meals outside the school to be able to be retained in school from morning to afternoon. As noted previously due to hunger pangs, pupils

would get out of school go home to look for food however when food was not available, pupils remained at home and ultimately dropped out. With the provision of food, pupils were retained in schools and hence dropout minimized. Majority 82 percent of the pupils affirmed that food helped minimize pupils dropout in the school as indicated by figure 4.8.

Figure 4.8 Reduction of pupils' dropout by school food



The pupils were further asked to indicate what mainly attracted them to continue coming to school, they responded as table 4.11.

Table 4.11 Factors contributing to children retention in schools

Response	F	%	
Free Primary Education	24	26.4	
School food	64	70.3	
Teacher good teaching	3	3.3	
Total	91	100.0	

As indicated in table 4.11, majority 70.3 percent of pupils indicated that school food attracted them to continue coming to school. These findings further showed that school meals had an impact on pupils' participation in schools as they remained learning without discontinuation. When headteachers were asked to indicate what mostly causes pupils' dropout in their school, they responded as Table 4.12.

Table 4.12 Headteachers' opinions on causes of pupils' dropout

Factor	F	0/0
Hunger	3	37.5
Early pregnancy	1	12.5
Search for food	4	50.0
Total	8	100.0

Table 4.12 shows that 50.0 percent majority of headteachers indicated that children had dropped out of schools to search for food. At the same note, majority of teachers 60.0 percent said that dropout of pupils from their school is caused by poverty. This is shown by figure 4.9.

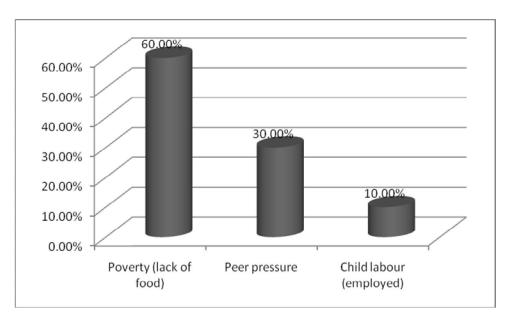


Figure 4. 9 Teachers' opinions on causes of pupils' dropout

From the focus group, it was revealed that school feeding program reduced pupils' dropout in the school as majority of the groups indicated that pupils were able to acquire their future dreams, teachers are also able to complete the syllabus as there is no absenteeism and when people get food at school they are able to concentrate in school programme hence reducing dropout.

4.8 Summary of the chapter

This chapter has presented the analysis of the data as collected by means of research instruments discussed in chapter three. The analyses were presented using tables, pie chart and bar graphs. The analyses include data on the questionnaire return rate, demographic information and data on the research themes of the respondents.

According to the analyzed data it was revealed that school feeding programme has an influence on pupils' participation. The school feeding programme has positively affected pupils' enrolment, pupils' attendance, pupils' class learning and reduced pupils' dropout. On contrary, it has been shown that it affects pupils' performance at a low rate. However, if pupils do not dropout of school, attend class regularly without fail and are active in learning they will finally achieve better education performance.

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study from the analyzed collected data. It gives the conclusions reached after interpretation of the collected and organized data. It also displays the recommendations arrived at from the findings. Finally, it presents the suggestions for further researches which may be carried on.

5.2 Summary of the study

The purpose of the study was to establish the influence of school feeding program on pupils' participation in public primary schools in Masinga division in Machakos County. Five research objectives were formulated to guide the study. Research objective one sought to assess the influence of school feeding programme on enrollment in school feeding programme assisted public primary schools in Masinga division. Research objective two aimed at establishing the influence of school feeding programme on pupils' attendance in school feeding programme assisted public primary schools in Masinga division. Research objective three sought to establish whether school feeding programme contributes to pupils' class participation in school feeding programme assisted public primary schools in Masinga division. Research objective four aimed at analyzing the effect of school feeding programme on pupils' performance in school feeding programme assisted public primary schools in Masinga division while research

objective five sought to establish the extent to which school feeding programme has reduced pupils' dropout in school feeding programme assisted public primary schools in Masinga division.

The literature review of the study focused on the concept of pupils' participation. Influence of school feeding programme on pupils' dropout, influence of school feeding programme on pupils' enrollment, effects of school feeding program on pupils' performance. Influence of school feeding program on pupils' class participation and the influence of school feeding programme on pupils' attendance. This study was guided by Vroom's Expectancy Theory of motivation of 1964. The Expectancy theory states that employee's 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 the performance will lead to reward (Instrumentality). In short, Valence is the significance associated by an individual about the expected outcome. It is an expected and not the actual satisfaction that an employee expects to receive after achieving the goals. Expectancy is the faith that better efforts will result in better performance.

The study was guided by descriptive survey design. The target population comprised of all the 98 public primary schools in Masinga division that had implemented School Feeding Programme. The schools had a total number of 819 teachers and 2,797 class 8 pupils. The target population consisted of 10

headteachers, 30 teachers and 100 class 8 pupils all selected by use of simple random sampling. Data in the study were collected using questionnaires, document analysis and focus group discussion. The data were analyzed by use of qualitative and quantitative techniques.

Findings of the study revealed that school feeding programme had an influence on pupils' enrollment. For example, all 100 percent of the headteachers reported that the programme encouraged pupils to join school. This concurred with some of the teachers who responded that the school feeding programme had encouraged pupils to join school. Among the pupils, 71.4 percent indicated that the programme had encouraged pupils to join school. It was also revealed by pupils that there was scarcity of food in some families hence children attended school since there was provision of food. The headteachers also reported that school feeding programme had influenced pupils' enrollment.

Majority 75 percent of head teachers indicated that school feeding program meals mostly influenced increase in enrollment while majority 57.1 percent of teachers indicated that school feeding programme had attracted pupils to school. Findings from the group discussion revealed that feeding program affected pupils' enrollment as it attracted pupils to join school especially at lower primary and for orphaned children as indicated by all groups.

The study findings indicated that school feeding programme influenced pupils' attendance. Pupils' attendance is the pupils' going to school and available in class

to learn. When pupils attend school, they participate in learning to acquire knowledge and skills (education). Children in disadvantaged areas may not attend school because of lack of food, lack of motivation and other hindering issue. For example, the headteachers further indicated that lunch provided to the pupils gave them energy to concentrate in their afternoon sessions. Teachers also indicated that pupils were active during learning in the afternoon sessions since they had taken lunch. Teachers reported that pupils were ready to attend both morning and afternoon sessions as most of the homes had one meal per day. Among the pupils respondents they indicated that without food they could not concentrate in class. School meals gave them energy and strength hence encouraged pupils to attend school to achieve their future dreams. Findings from the group discussion revealed that feeding program influenced pupils' attendance to school as pupils were not sent home for lunch which could affect the afternoon sessions. Due to provision of food in school there was no delay in starting the afternoon lessons as it would be if pupils had to go home for lunch and come back to school.

It was also revealed that school feeding programme influence pupils' class participation. For example when the headteachers were asked how the pupils take part in learning sessions when there are school meals, all of them indicated that pupils were lively and very active in the classroom. Majority 60.7 percent of teachers reported that pupils were lively in learning sessions as a result of school meals while 39.3 percent indicated that those pupils were very active during

learning. Majority 95 percent of the pupils reported that meals provided by the school; enabled them participate better in class.

Findings on the effects of school feeding programme on pupils' performance showed that the headteacher and teachers were of the opinion that meals assisted the pupils to improve their class performance. When asked to give reasons, they said that when the pupils had eaten, they are readily available and active for learning; school absenteeism is minimal hence improved performance, good balanced diet provided by school meals enable children to be healthy thus having good cognitive development which enable them acquire concepts well in class thus improving their performance, with school feeding programme the children are stable and can concentrate seriously. They also said that people under normal circumstances have enough energy to do many things when they have eaten to fullness and due to regular feeding the pupils are protected from diseases which are caused by lack of food hence good performance. School meals were reported to have an influence of pupils' academic performance. Majority 70.3 percent of pupils indicated that they had between 250 and 399 marks.

Findings on the influence of school feeding programme on pupils' dropout indicated that school meals attracted and made children remain in school. School feeding programme also enabled children to remain in school both in the morning session and in the afternoon session since they eat lunch at school and so did not struggle to get meals outside the school to be able to be retained in school from

morning to afternoon With the provision of food, pupils were retained in schools and hence dropout was minimized.

Majority of pupils 82.4 percent said that food helped minimizing pupils' dropout in the school. Still a big number of pupils 70.3 percent of pupils indicated that school food attracted children to continue coming to school. From the focus group discussion, it was revealed that school feeding program reduced pupils' dropout in the school as majority of the groups indicated that pupils were able to acquire their future dreams. Teachers are also able to complete the syllabus as there is minimal absenteeism and when pupils get food at school they were able to concentrate in school programme hence reducing drop.

5.3 Conclusions

Based on the findings it was concluded that school feeding programme had an influence on pupils' enrollment. The school feeding programme had encouraged pupil to join school. From the study it was concluded that school feeding programme influenced pupils' attendance. For example, the headteachers indicated that lunch provided to the pupils gave pupils energy to concentrate in their afternoon sessions. School meals gave them energy and strength hence encouraged pupils to attend school to achieve their future dreams. Due to provision of food in school there was no delay in starting the afternoon lessons as it would be if pupils had to go home for lunch and come back to school.

Based on the study it was found out that school feeding programme influenced pupils' class participation. This conclusion was based on the fact that pupils took part in learning sessions when there were school meals. Pupils were lively in learning sessions as a result of school meals while meals provided by the school enabled them participate better in class. It was also concluded that school feeding programme influenced pupils' performance. This is because, when the pupils had eaten, they are readily available and active for learning; school absenteeism is minimal hence improved performance, good balanced diet provided by school meals enable children to be healthy thus having good cognitive development which enable them acquire concepts well in class thus improving their performance, with school feeding programme the children are stable and can concentrate seriously.

From the study, school feeding programme had an influence on pupils' dropout as it was indicated that school meals attracted and made children remain in school. School feeding programme also enabled children to remain in school both in the morning and in the afternoon since they eat lunch at school and so didn't struggle to get meals outside the school to be able to retain in school from morning to afternoon. As noted previously due to hunger pangs, pupils would get out of school go home to look for food however when food was not available, pupils remained at home and ultimately dropped out.

5.4 Recommendations

Based on the findings of the study, the following were the recommendations:

- i. The government to provide steady school feeding programme to all schools in the disadvantaged areas (famine prone areas) to ensure regular school attendance by the vulnerable children. As school food encourages pupils to attend class actively and regularly. This can be achieved through home grown school feeding programme where food can be provided at the beginning of each school term. It can also be done by sending money to school for the school management committee to purchase the locally produced foods.
- ii. The school community should support the school feeding programme for the disadvantaged pupils to be retained in school. This can be done by community provision of food items and also by ensuring that schools used school shamba to grow vegetables throughout the year. This will ensure that the vegetables grown in the school shamba increase food rations provided by the government.

5.5 Suggestions for further study

After carrying out the study it was felt that it is significant that some researches be done, if it's possible, to assist the completed study in realizing better results in education outcomes. As there are some fields which affects the school feeding

either directly or indirectly to smoothen its successful implementation. Then, the following are the suggestions for further studies.

- A study on the challenges faced in the implementation of school feeding programme should be conducted.
- ii. A study on administrative factors affecting school feeding programme should be conducted.
- iii. Since the study was conducted in one administrative district, there is need to conduct a similar study in other district to establish whether similar results will be achieved.

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APPENDICES

APPENDIX A: LETTER OF INTRODUCTION

University of Nairobi, School of Education, P.O BOX 92, Kikuyu.

The headteacher,

_____ primary school.

Dear Sir/Madam,

REF: PERMISSION TO CONDUCT A RESEARCH IN YOUR SCHOOL

I am a student at University of Nairobi currently pursuing a Masters' degree in

Education. I am carrying out a research on "The influence of school feeding

program on pupils' participation in public primary schools in Masinga Division in

Machakos County". I am requesting you to allow me to carry out the study in

your school. I shall administer questionnaires to the some teachers, some standard

8 pupils and you. I shall also have a 6 standard 8 pupils focus group discussion.

Finally, I would like to study the following documents: school enrolment records

from 2009 to 2013, school KCPE results from 2009 to 2013 and the standard 8

attendance register for this year 2013.

Thank you for your cooperation.

Mutua David Salee

University of Nairobi

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APPENDIX B: QUESTIONNAIRE FOR HEADTEACHERS

This questionnaire is designed to help the researcher find out the influence of school feeding program on pupils' participation in public primary schools in Masinga division. The information you give will be used for the purpose of the study only. Therefore, do not write your name.

Demographic information

lease tick ($$) to indicate your answer
What is your designation:
What is your gender: (a) Male [] (b) Female []
What is the level of your profession?
a) Untrained [] (b) PI [] (c) ATSI-IV [] (d) Graduate []
nfluence of school feeding programme on pupils' enrollment
Does school feeding program encourage pupils to join school?
(a) Yes [] (b) No []
If yes, which level has the highest increase?
a) Standards 1 – 3 [] (b) Standards 4 – 5 [] (c) Standards 5-8 []
What mostly influences the school increased enrollment?
a) School feeding program meals [] (b) Free Primary Educations []
c) Past School Performance [] (d) Others (Specify)

Influence of school feeding programme on pupils' attendance

7. With school meals, are the children ready to attend classes in morning session
and afternoon session?
(a) Yes [] (b) No []
8. If yes, give reasons
Influence of school feeding programme on pupils' class participation
9. How do pupils take part in learning sessions when there are school meals?
(a) Dull [] (b) Lively [] (c) Very active []
10. With school meals, do pupils actively participate in class learning in both
morning session and afternoon session?
(a) Yes [] (b) No []
Effects of school feeding programme on pupils' perfprmance
11. Do the school meals assist the pupils to improve their class performance?
(a) Yes [] (b) No []
12. If yes, give reasons.
13. What is the main factor which has contributed to the school's performance?
(a) School meals [1(b) School discipline [1(c) Culture of learning [1]

(d) Teacher – pupil competence [] (e) Others (specify)			
Influence of school feeding programme on pupils' dropout			
14. Does school meals attract and retain pupils in school?			
(a) Yes [] (b) No []			
15.If yes, give reasons.			
-			
16. What mostly causes pupils' dropout in your school?			
(a) Poverty (lack of food) [] (b) Peer pressure [] (c) Early pregnancy	[]	
(d) Child labour (employed) [] (e) Unable to cope with class work	[]	
(f) Others (specify)	••		
Thank you so much for taking your time to fill the questionnaire.			

APPENDIX C: QUESTIONNAIRE FOR TEACHERS

This questionnaire is designed to help the researcher find out the influence of school feeding program on pupils' participation in public primary schools in Masinga Division. The information you give will be used for the purpose of the study only. Therefore, do not write your name.

Demographic information

Please tick (\vee) to indicate your answer	
. What is your designation:	
. What is your gender: (a) Male [] (b) Female []	
. What is the level of your education?	
(a) Untrained [] (b) PI [] (c) ATSI-IV [] (d) Graduate []	
nfluence of school feeding programme on pupils' enrollment	
. Does school feeding program encourage pupils to join school?	
a) Yes [] (b) No []	
. What mostly influences the school increased enrollment?	
a) School feeding program meals [] (b) Free Primary Educations []	
(c) Past School Performance [] (d) Others (Specify)	
nfluence of school programme on pupils' attendance	
. Do pupils attend school regularly?	
a) Yes [] (b) No []	
. With school meals, are the pupils ready to attend classes in morning session	n
nd afternoon session?	

(a) Yes [] (b) No []
8. If yes, give reasons
Influence of school feeding programme on pupils' class participation
9. How do pupils take part in learning sessions when there are school meals?
(a) Dull [] (b) Lively [] (c) Very active []
10.Do school feeding programme influence pupils' class participation?
(a) Yes [] (b) No []
11. If yes, give reasons.
Effects of school feeding programme on pupils' performance
12. Does the school feeding programme help pupils to perform better?
(a) Yes [] (b) No []
13. If yes, give reasons.
14. What is the main factor which has contributed to the school's performance?(a)
School meals[] (b) School discipline [] (c) Culture of learning []

(d) Teacher – pupil competence [] (e) Others (specify)		
Influence of school feeding programme on pupils' dropout		
15. Does school meals attract and retain pupils in school?		
(a) Yes [] (b) No []		
16.If yes, give reasons.		
17. What mostly causes pupils' dropout in your school?		
(a) Poverty (lack of food) [] (b) Peer pressure [] (c) Early pregnancy	[]
(d) Child labour (employed) [] (e) Unable to cope with class work	[]
(f) Others (specify)	••	
Thank you so much for taking your time to fill the questionnaire.		

APPENDIX D: QUESTIONNAIRE FOR THE PUPILS

This questionnaire is designed to help the researcher find out the influence of school feeding program on pupils' participation in public primary schools in Masinga Division. The information you give will be used for the purpose of the study only. Therefore, do not write your name.

Demographic information Please tick ($\sqrt{}$) to indicate your answer 1. What is your sex? (a) Boy [] (b) Girl [] Influence of school feeding programme on pupils' enrollment 2. Do school food attract pupils to join school? (a) Yes [] (b) No [] 3. If yes, give reasons. 4. In this area, what mostly attracts children to come to school? (a) Free Primary Education [] (b) school food [] (c) Teacher good teaching [] Influence of school feeding programme on pupils' attendance 5. Do school meals help you to attend school regularly? (a) Yes [] (b) No [] 6. If yes, give reasons.

Influence of school feeding programme on pupils' class participation
7. Does school food enable you to be active in school activities?
(a) Yes [] (b) No []
B. If yes, give reasons.
Effects of school feeding programme on pupils' performance
9. Does school meals help you to study better?
(a) Yes [] (b) No []
10. What were your total marks in the last terms exam?
Influence of school feeding programme on pupils' dropout
11. Do school food help stop pupils dropout in your school?
(a) Yes [] (a) No []

12. Among the following, which one mainly attracts children to continue coming
to school?
(a)Free Primary Education [] (b) School food [] (c)Teacher good teaching []

Thank you so much for taking your time fill the questionnaire.

APPENDIX E: FOCUS GROUP DISCUSSION

This focus group is designed to help the researcher find out the influence of school feeding program on pupils' participation in public primary schools in Masinga Division. The information you give will be used for the purpose of the study only.

Instructions: Please pass the form to the other pupils after you mark and sign.

Demographic information

Please mark (x) to indicate your answer

Participant's consent

I agree to take part in the focus group.

 Sign:
 1.
 5.

 2.
 6.

 3.
 7.

 4.
 8.

Thank you very much for accepting to take part in the focus group discussion.

Facilitator's welcome, introduction and instructions to participants Welcome:

Welcome and thank you for agreeing to participate in his focus group. You have been asked participate because you have valuable information about school feeding programme since you have stayed in the school for a long period of time. Introduction

I am Mutua David a University of Nairobi student studying Master of Education. This focus group is designed to establish your thoughts and opinions about the influence of school feeding programme on pupil's participation in pubic primary schools in Masinga division. The information you give shall be kept confidential for the purpose of the study only and thereafter destroyed immediately. As we discuss I shall tape-record (optional if you accept) and take notes of your opinions and thoughts of the focus group. Therefore, feel free to participate.

Ground rules

- 1. Everyone should participate.
- 2. There are no wrong answers.
- 3. You do not have to agree with the views of other pupils in the group.
- 4. Does anyone have a question? (Provide answers).
- 5. Okay, let's begin.

Warm up

First I would like you to introduce yourself by telling us your first name, age and your favourite food.

(**Note**: Discussion begins giving the participants enough time to contribute toward a certain question)

Questions

1. Let's start the discussion by talking about the effects of school feeding program on pupils' enrollment. Does school food affect the number of pupils in the school? If so, how?

Probe:

- Increase/decrease number of pupils in the school.
- 2. What influence does school feeding program have on pupils' attendance in school? When there is school food do pupils come to school regularly? What about when one is send home for something?

Probe:

- Daily coming to school morning/afternoon sessions.
- 3. What contributions does school feeding program have on pupils' class participation? How do school foods affect pupils' class learning activities?

Probe:

- Learning activities-answering /asking questions
- 4. What effect does school feeding program have on pupils' performance in your school? What effect do school foods have on pupils' examination marks?

Probe:

- Increase examination marks.
- 5. How has school feeding program affected pupils' dropout in your school?

 Are there pupils dropouts when there is school food? If so, is the number the same as when there is no food?

Probes

• Continue coming to school.

Conclusion

Thank you so much for coming and sharing your thoughts and opinions with me.

APPENDIX F: DOCUMENT ANALYSIS GUIDE

This document analysis guide aims at seeking information on the school enrollment, school performance and school attendance.

School	

School enrolment

Year	2009		2010		2011		2012		20	13
Gender	Boys	Girls								
Sub										
total										
Total										

School Performance K.C.P.E. Mean Grade

20	08	20	09	20	10	20	11	20	12
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
		Boys Girls							

School Attendance (Std. 8 attendance for the previous one month)

Class	Boys		G	irls	Class	s Total
Session	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
Present						
Total						

APPENDIX G: LETTER OF AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349 254-020-310571, 2213123, 2219420 Fax: 254-020-318245, 318249 When replying please quote secretary@ncst.go.ke

NCST/RCD/14/012/761

David Salee Mutua University of Nairobi P.O.Box 30197-00100 Nairobi.

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

22nd June 2012

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Influence of school feeding program on pupils' participation in public primary schools in Masinga Division in Machakos County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Machakos County for a period ending 30th September, 2012.

You are advised to report to the District Commissioner and the District Education Officer, Machakos County before embarking on the research project.

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

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

Copy to:

The District Commissioner The District Education Officer Machakos County.

APPENDIX H: RESEARCH PERMIT

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOG JATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOG

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AT has been permitted to conduct research in IL FOR SCIENCE AND TECHNO IATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIONAL

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- 1. You must report to the District Commissioner and or science and technologyna TIONAL (the District Education Officer of the area before FOR SCIENCE AND TECHNOLOGYNAT HONAL cembarking on your research. Failure to do that IL FOR SCIENCE AND TECHNOLOGYNATI may lead to the cancellation of your permit uncil for science and technologynational council for science and technologynation are science and technologynation and the science and technologynation are science and technologynation and the science and technologynation are science and technologynation are scienced as a science and technologynation are sc
- 10.2. Government Officers will not be interviewed incit for science and technologynat With-out prior appointment SLOGYNATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGYNATIO
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