

**INFLUENCE OF FEEDING PROGRAMMES ON THE PARTICIPATION OF  
LEARNERS AT EARLY CHILDHOOD DEVELOPMENT EDUCATION  
INSTITUTIONS: A CASE OF BUNGOMA SOUTH DISTRICT**

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**A Research project submitted in partial fulfilment of the requirement for the award  
of master of arts degree in project planning and management of the University of  
Nairobi**

**2012**

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## DECLARATION

This research project is my original work and has not been submitted for any award in any other university or institution of higher learning.

  
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## **DEDICATION**

The research report is dedicated to my beloved daughter Fatuma Hamdhi, my mother Asha Mohamed, my father Ali Osman and other family members for the warmth, love, Support and encouragement they have inspired in me throughout the project period

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ECDE</b>	Early Childhood Development Education
<b>EFA</b>	Education for All
<b>FFE</b>	Food for Education
<b>GOK</b>	Government of Kenya
<b>KANU</b>	Kenya African National Union
<b>MDG</b>	Millennium Development Goal
<b>MOEST</b>	Ministry of Education, Science and Technology
<b>NGO</b>	Non Governmental Organisation
<b>NSFP</b>	National School Feeding Program
<b>ROK</b>	Republic of Kenya
<b>SFP</b>	School Feeding Programme
<b>UNESCO</b>	United Nations Education, Science and Cultural Organisation
<b>WFP</b>	World Food Programme

## ABSTRACT

The purpose of the study was to find out the influence of feeding programmes on participation of learners in ECDE institutions in Bungoma South District. The main objective of this study will be to find out the influence of feeding programmes on participation of learners in early childhood development, (ECDE) institutions in Bungoma South District. The specific objectives of the study were; to establish the extent to which school feeding program affect enrolment, attendance, retention and learning of learners in ECDE institutions of Bungoma South District. The findings of this study may be of use to the various ECDE centres for it would assist them understand better the issues related to school feeding programmes. This would see school managers in the various centres provide learners with balanced feeding programmes and create awareness to parents on its importance to proper learning and holistic development of their children. The study would also go along way to helping the government in making relevant policy to safeguard the wellbeing of ECDE learners by providing well balanced feeding programmes to these centres as well as budgetary allocation to the same. This study used descriptive survey research design to obtain information that will be used to describe the existing phenomena. The target population of this study was 206 ECDE centres in Bungoma South District, which summed up to 618 respondents. Stratified random sampling was applied in this case whereby 63 respondents were picked to fill the questionnaire. This research study used the test-retest method which involves administering the same scale or measure to the same group of respondents at two separate times. This is after a time lapse of one or more weeks. The instrument used in this study was a questionnaire as the only data collection tool. Descriptive statistics analysis was employed whereby the SPSS (Statistical Package for Social Sciences) programme is used. Tables was used to present data as was found appropriate. On enrolment, study concludes that feeding programme in the centre enhance enrolment to a very great extent. The study further concludes that the ECD centres sampled by the study shows that the enrolment of between 21- 30 pupils and over 30 pupils per school and that enrolling of most schools is done early every year. On enrolment some pupils miss school because of the feeding programme not in place. The study concludes feeding programs enhance attendance levels in the centres to a very great extent that there were cases of children who miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students. On improved learning, School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding programme is important than other factors towards the improved performance. On retention, the study concludes that there were transfer cases in the centre and that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

## CHAPTER ONE:

### INTRODUCTION.

#### 1.1 Background to the Study

School feeding programs are common in both developing and industrialized countries, (Del Rosso, 1999). The objective of feeding programs is to provide meals or snacks to reduce short-term hunger in the classroom so that the learners can concentrate and learn better. In addition, it aims at attracting learners to school and to have them attend regularly. According to Ahmed (2003), children affected by hunger and malnutrition as well as ill-health did not have the same potential to do well at school in comparison with well nourished and healthy children, poor healthy children. Poor health and malnutrition lowered children's cognitive development and performance through physiological changes or reduced capacity to participate in learning activities or both.

Early Childhood Development Education (ECDE) caters for children between 0-3 years and 3-6 years of age. The ECDE programmes are largely provided by communities, individuals and local authorities and are crucial for social, physiological and cognitive development of children. It lays a firm foundation for primary, secondary and further education, exposing children to various experiences that enhance their development, prepare them for high-level professions and ultimately help them to lead a better life, (Cueto, 2005).

In 1994 the South African Department of Health introduced a national-scale primary school feeding program. This program was subsequently taken over by the Department of Education in 2004. The principles of South Africa's school feeding program (SFP) are

outlined in Section 18 of the constitution, which declares the provision of basic education a right for all. The National School Nutrition Programme (NSNP) in South Africa aims to foster better quality education by enhancing children's learning capacity, encouraging regular attendance and punctuality, decreasing gender disparity, addressing micronutrient deficiencies, and alleviating short-term hunger by providing 30% of daily energy requirements of the child. Additionally, the three key pillars of South Africa's national school feeding policy are: to have a school feeding program in place; to use school gardens to stimulate local farm production; and to promote healthy lifestyles (Cueto, 2005).

As a result, in 2004 steps were taken to standardize coverage and menu options. The minimum policy is to feed all grades from R (preschool) to grade 7 for 196 school days per year. It was further decided that menus should provide at least 20% of the recommended dietary allowance for energy, protein, calcium, iron, zinc, and vitamin A. More recent guidelines (in the process of establishment) increase the requirement to 30%. Additionally, a meal must be served before 10 am to enhance learning capacity. Common ingredients in South African school meals include: beans, rice, canned fish, Soya, fortified maize meal, fortified bread, and fruits and vegetables (Alderman and Lehrer, 2008).

A survey of primary schoolchildren from a rural area in Kwa Zulu-Natal, where school feeding had been in operation at the school level for nearly two years, revealed a great number of children with persistent micronutrient deficiencies including inadequate vitamin A status (40%) anemia (28%), and iodine deficiency (97%). Additionally, evaluations have demonstrated that not all children entitled to school feeding received

food, with great variation in food availability between rural and urban areas. While urban schools often report that their stocks are sufficient to provide food regularly, rural schools may not always have sufficient ingredients. Also, there may be inadequate communication mechanisms between schools and caregivers regarding whether or not children receive food on a daily basis (Ahmed, 2003).

The school feeding program initiative in Kenya did not start with the collaboration of world Food program (WFP) and the Kenya government in 1980. It existed even before as early as 1969 and it was managed in the National School Feeding Council (NSFC). In his speech while outlining KANU election manifesto blueprint in 1969, the late president Mzee Jomo Kenyatta noted that school feeding programme which was then operating in some areas would be expanded to cover other parts of the country for KANU believed that only healthy children could utilize fully the opportunities provided by schools to develop fully their intellectual potential (KANU Manifesto 1969).

WFP's new five-year development program (2009-2013) has emphasized the need to hand the program over to the Kenyan Government after 28 years of assistance. Management responsibilities are gradually being transferred. The government receives external assistance for purchasing and providing food for the program, and is responsible for food distribution to each assisted school. One interesting, innovative approach to dealing with school feeding challenges in Kenya has been the development of computer-based monitoring system jointly run by the Ministry of Education and the WFP. This tool is designed to gather timely reports from school feeding project review committees and has resulted in the identification of poor management practices and the need for assistance in vulnerable areas (Alderman and Lehrer, 2008).

According to Whaley et al. (2003), the objective of the school feeding programme in Kenya is to promote UPE for the socio-economically disadvantaged and nutritionally vulnerable children, especially girls in pre -primary and primary schools in ASALs and informal urban settlements as well as enhancing sustainability of the school feeding programme. The main strategy of the programme was to provide mid-day meal to 1.1 million pre-primary and primary school children in the 29 ASAL districts and Nairobi slums and support activities which will ensure the sustainability of the school-feeding programme. Food aid will also be used in the implementation and development of income generating activities at school level to sustain the school feeding programme.

The Kenyan Education Support Program(2005-2015) provides an institutional framework by including school feeding as one of the main components of the School Health, Nutrition, and Feeding Program, and the 2008 National Nutrition and Food Security Policy includes a section on school meals and the need to enhance and expand the school feeding program. The current schools covered by the program include pre-primary and primary schools in arid and semi-arid areas, schools in unplanned urban settlements of Nairobi, and early childhood development centers in arid districts. Children in beneficiary schools receive a midday meal, with children in slum schools and early childhood development centers receiving an additional 40 grams of corn soya .Some additional support for the unplanned settlements comes from the private sector and from non-governmental religious organizations operating in the area. The full cost of running the school feeding program in Kenya, including community contributions, is estimated to be \$28 per child per year (Hall, Drake & Bundy DAP, 2001).

## 1.2 Statement of the Problem

The importance of school feeding programmes cannot be neglected at all costs. Millennium Development Goal 2 calls for increased primary school enrolment and reductions in the gender gap in school enrolment. Many policy solutions have been proposed to achieve this goal, from teacher quality initiatives to transfer programs. School feeding programs, a form of conditional transfer, have been an important and prominent part of this policy portfolio in recent decades, and have been implemented widely in developing countries and for low-income populations in developed countries. It is anticipated that the transfers associated with school feeding can improve educational participation (enrolment, attendance, and age at school entry), achievement and cognition (test scores, grade progression), and nutritional status (height and weight-for-age and micronutrient status) (Allen, 2001 & Levinger, 1986) and encourage students to stay in school longer as well as the performance/ improved learning.

Research by Bennett (2003) showed that children who are nutritionally fit are more likely to have the energy, stamina and self esteem that enhance their ability to learn. However, there are many factors that have contributed to poor nutrition such as poverty, big families, broken families, and lack of feeding program among others. Poor nutrition and health among schoolchildren contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and are more likely to repeat grades and to drop out of school than children who are not impaired; they also enrol in school at a later age, if at all, and finish fewer years of schooling. The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even temporary hunger, common in children who



are not fed before going to school, can have an adverse effect on learning. Children who are hungry have more difficulty concentrating and performing complex tasks, even if otherwise well nourished. Research and program experience shows that improving nutrition and health can lead to better performance, fewer repeated grades and reduced drop out (Chopra, 2004).

Locally, there are few studies related to school feeding programmes effect on participation of learners in schools. For example, Nkinyangi (1980) did a study on socio-economic determinants of Repetition and Early school withdrawal at the primary school level and their implication for educational Planning in Kenya. Another study on randomized controlled trial of Kenyan preschoolers which demonstrated that children receiving breakfast scored 8.5% higher in school participation than a control group. The table below shows the enrolment levels in ECE Centers in Bungoma South District:

**Table 1.1: Pupil Enrolment Numbers in ECE Centres in Bungoma south District, 2005-11**

YEAR	TERM 1	TERM 2	TERM 3	TOTAL ENROLLMENT
2005	9199	8878	9279	27356
2006	9678	9347	9678	28703
2007	10525	10220	10545	31290
2008	12411	12033	12400	36844
2009	9583	9673	9840	29096
2010	13389	12876	13411	39676
2011	14970	14368	14965	44303

According to the table 1.1 above, it is clear that enrolment since 2005 increased slightly but suddenly reduced in the year 2009 increasing again in the year 2011. This means that the level of participation in the ECE centers in the region has not been harmonized. In ECDE centers, parents contribute maize and sugar which is used for the preparation of

snack. The fact that feeding program is organized within the school by parents which may lead to higher or lower participation of learners. This study therefore seeks to find out the influence of feeding programmes on participation of learners in ECDE institution in Kenya specifically in Bungoma South District.

### **1.3 Purpose of the Study**

The purpose of the study was to find out the influence of feeding programmes on participation of learners in ECDE institution in Bungoma South District.

### **1.4 Objectives of the Study**

The study sought to address the following objectives:

- i. To investigate the extent to which school feeding programme influence enrolment of learners in ECDE institutions in Bungoma South District.
- ii. To establish the influence of school feeding programme on attendance of learners in ECDE institutions in Bungoma South District
- iii. To find out whether school feeding programme influence retention of learners in ECDE institutions in Bungoma South District
- iv. To examine the extent to which school feeding programme influence performance in ECDE institutions in Bungoma South District.

### **1.5 Research Questions**

The study therefore sought to address the following research questions:

- i. How does a school feeding program influence Enrolment of learners in ECDE institutions in Bungoma South District?
- ii. How does school feeding program influence attendance of learners in ECDE institutions in Bungoma South District?
- iii. To what extent does school feeding program influence retention of learners in ECDE institutions in Bungoma South District?
- iv. To what extent does a school feeding program influence performance in ECDE institutions in Bungoma South District?

### **1.6 Significance of the Study**

The findings of this study may be of use to the various ECDE centres for it would assist them understand better the issues related to school feeding programmes. This would see school managers in the various centres provide learners with balanced feeding programs and create awareness to parents on its importance to proper learning and holistic development of their children.

The study would also go along way to helping the government in making relevant policy to safeguard the wellbeing of ECDE learners by providing well balanced feeding programs to these centres as well as budgetary allocation to the same.

The study would also benefit the parents which may make them get more empowered economically when the government and non-governmental organisations (NGOS) supports them to start small scale business or farming through youth funds or women

enterprise fund hence reduction of poverty. This would enable them to provide their children's balanced diet. Parents will also develop awareness of the importance of proper nutrition.

The school children may also benefit from these findings since the learning environment in the centres would be improved through integration of school feeding program which enhances proper nutrition put in place to control nutrition problems in ECDE centres.

Finally, the study would also benefit other researchers and academicians who would be interested in carrying out research in the same area for it will lay a foundation.

### **1.7 Delimitations to the study**

The study was carried out in ECDE institutions within, Bungoma South District only. Data will be collected from ECDE school managers, teachers in charge of feeding program, and ECDE parent representatives only so as to solicit information on the influence of school feeding programme on participation of learners in the centres.

### **1.8 Limitations of the Study**

The researcher faced problems of securing the respondents precious time considering their busy working schedules. The respondent gave truthfulness and honest information to the researcher. The researcher did not have enough time to carry out the research and have financial constraints during the research period. Respondents were very cooperative in filling and answering the questions from the researcher. The researcher assured the respondents that the information they gave was only for academic purposes only. For

anonymity reasons, respondents were not required to indicate their names in the research tools. This will help in soliciting enough information from the respondents.

### **1.9 Basic Assumptions**

This study was based on the assumptions that relevant records and data was available and accessible at schools, divisional and district education office. The study also assumed that there exists a school feeding programme in each of the ECDE centres within Bungoma South District and that provision of food is done throughout the year.

### **1.10 Definitions of Significant Terms as used in the study**

**Feeding program:** refers to as a meal given to learners while in school.

**Learners' participation:** Referred to active involvement of learners in school activities.

**Retention:** To remain at school throughout the learning period

**Snacks:** Refers to as a light meal provided to learners especially at break-time

**Attendance:** Being present at school frequently.

**Enrolment:** Total number of pupils who have registered in a ECDE centre in a given school year.

**Performance:** It is a mark of achievement or indicator in term of scores and grades that the learner gets in a subject.

## CHAPTER TWO:

### LITERATURE REVIEW.

#### 2.1 Introduction

In this section, literature related to school feeding programme was reviewed. The review will be broadly divided into; the school feeding program in Kenya, seven steps in developing SFP that improve education, the role of SFP on improved performance of learners and sustainability of the programme.

#### 2.2 The School Feeding Program in Kenya

The MOEST existing school feeding programme structure is responsible for the implementation and coordination of the programme at all levels. The overall management of this programme at district level is the responsibility of the DEOs. For the successful implementation of this programme, the DEO's will work closely with the school feeding programme section at MOEST headquarters and communities at local level. This increased the number of new students by 1.3 million and brought Kenya closer to the Millennium Development Goal of complete primary education for all children and achievement of gender parity. School feeding enhances free primary education by providing a meal at school. Children from food insecure households do not have to miss school to search for food. There is also evidence that school feeding programs attract more underprivileged girls to school, though gender ratios remain below parity in all schools. And although progress is being made, there continues to be significant regional disparities in access to education and school enrolment (Allen, 2001).

For instance, in Nairobi's slums, more than 70% of school age children are not enrolled in school, as compared to the national average of 8%. In addition to promoting universal primary education, Kenya's SFP seeks to target 23 socio-economically disadvantaged and nutritionally vulnerable children in pre-primary and primary schools in select districts. Specific objectives and expected benefits also include improving the attention span and learning capabilities of children, improving school facilities, supporting school-based micro-enterprises, and providing a significant contribution to the nutrient intakes of schoolchildren. However, these goals will not be met without adequate facilities, food access, resources, and training (MOEST, 2003).

The WFP and the Kenyan Ministry of Education (Government of Kenya) have targeted 1.2 million children in roughly 4,000 schools (approximately 1/6th of children enrolled in primary school) and have expanded school feeding activities in food-insecure areas. According to the Session Paper on Policy Framework for Education (2005), a national school feeding program has not been fully implemented in Kenya, although it was approved by Parliament. The policy highlights the need for school meals, calls for the expansion of the program, and encourages communities to provide mid-day meals to needy children (MOEST, 2003). According to the Economical Survey (2009), the Government of the Republic of Kenya (GOK) recognizes the importance in Early Childhood Development (ECD) as one of the most important levers for accelerating the attainment of Education for All and the Millennium Development Goals. This is to enhance access, equity and quality of ECDE services for children aged 4-5 years, especially those from arid and semi arid areas and poor households. According to the survey, enrolment in ECDE has increased significantly over the past decade;

whereas there were 1.59 million children enrolled in ECDE in 2003, the number rose to 1.72 million in 2008. Although the number of children enrolled in ECDE has been increasing, on average they represent only 50.1 percent of the eligible population. This progressive data is shown on the table :

**Table 2.2: Pupil Enrolment in ECDE centres, 2003-08**

Children/ Yr	2003	2004	2005	2006	2007	2008
<b>GIRLS</b>	785,655	804,304	812,347	805,891	814,930	834,925
<b>BOYS</b>	816,577	823,417	830,828	866,445	876,163	885,320

(Source: Economic Survey, 2009)

### **2.3 Seven Steps in Developing School Feeding Programs that Improve Education**

The research and program literature on SFPs shows the potential that school feeding has to contribute to improving education. According to Levinson (1998), these guidelines provide seven recommendations for improving the design and implementation of programs in order to meet some of this potential. The first recommendation, which calls for the establishment of a policy and objectives for school feeding program, will provide the framework for implementing the subsequent commendations. These focus on the most critical aspects of school feeding program include targeting, cost and financing issues, ration composition and meal delivery, program implementation, and monitoring and evaluation, in addition to the integration of feeding with other interventions that address the nutrition and health needs of school children. Specifically, it is recommended



that program managers and policy makers build a consensus on a policy and objectives that focuses on how school feeding can effectively contribute to improving education and to meeting the nutrition and health needs of school-age children (Levinson, 1998). In addition they should develop a targeting criteria and mechanisms that concentrate program resources on high risk children and communities.

The stakeholders in the ministry should also elaborate appropriate guidelines for ration composition and the timing of school meals, Identify and address any potential bottlenecks in implementation: such as the availability of supplies and other resources, the appropriateness of cooking practices and the management of private sector inputs, Develop monitoring systems that focus on program processes, that is, how a program is functioning, and institute an evaluation system to assess the impact of the program on specific outcomes, (Levinson, 1998). These interventions are described in more detail in *Class Action, Improving School Performance in the Developing World through Better Health and Nutrition* (Del Rosso & Marek, 1996) and in the publications of the Partnership for Child Development.

#### **2.4. Sustainability of the School Feeding Program**

The issue of sustainability of SFP is a concern of UN-World Food Programme, the schools, communities and the government. Due to the dwindling resources, the World Food Programme has in many fora expressed its intention to withdraw the programme (WFP, 2001). In Cote d'Ivoire, for a school to qualify for WFP support, parents must organise an association and then build a kitchen and a storeroom. The Parents Teachers Association (PTA) then hires cooks or parents cook in turn and manage the food stock.

The parents also provide fresh vegetables and other ingredients to enrich the food (WFP, 2001).

In Kenya, the current phase of the programme emphasis sustainability of the programme. Schools are encouraged to initiate income generating projects. The UN-WFP creates partnership between the schools, the parents, teachers and local officials. According to the WFP School Feeding Programme (2001), parents associations have proven to be key to community participation. As a general rule, the essential services required for school feeding such as cooks, kitchens, stores among others should be covered by the communities either through providing services itself or contributing cash to pay for the services.

During a School Feeding Programme management workshop held at Izaak Walton Hotel in Embu between 30<sup>th</sup> July to 2<sup>nd</sup> August 2002, the Director of Education in her opening speech noted that the current phase of this project laid great emphasis on the sustainability of the School Feeding Programme. In this regard, the World Food Programme and the Ministry of Education, Science and Technology have initiated sustainability strategies for School Feeding Programme based on mobilisation of communities and local resources. Communities will be expected to take over gradually the feeding programme currently supported by the World Food Programme. This demands greater participation by school committees, district and divisional level committees in planning and implementing the project. The Director further noted that there is urgent need to reactivate participatory implementation nature of sustaining the School Feeding Programme. Despite the many efforts that have been put in place, the sustainability process of School Feeding Programme is still faced with many challenges

and constraints. Schools and communities are still not in a position to initiate micro-projects that would sustain School Feeding Programme (Ranivnder, 2007).

## **2.5 Empirical Review**

### **2.5.1 Influence of SFPs on Enrolment.**

School feeding programs themselves contribute to enhanced enrolment. Several factors influence the enrollment of students in the primary grades. According to Ranivnder, (2007), the importance of the first (primary) years of school and that these years have the largest impact on success later in school and in life. Children in poor health start school later in life or not at all. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Moock and Leslie, 1986). In Ghana malnourished children entered school at a later age and completed fewer years of school than better nourished children (Glewwe and Jacoby, 1994). A recent evaluation of an on-going school feeding program in Burkina Faso found that school canteens were associated with increased school enrollment especially among girls.

A small pilot school feeding program in Malawi was evaluated for its effect on enrollment. Over a three month period there was a 5% increase in enrollment compared to control schools over the same period (WFP, 1996). The same study found out that providing food as a take home ration can be an effective incentive for school attendance, but alternative programs, such as cash transfers, may be more cost-effective and simpler to administer. School feeding programs face challenges in reaching the poorest wherever enrolment is less than universal because enrolment rates are always lowest among the poorest (Ahmed and Del Ninno, 2002). In urban Botswana, for example, enrolment is

effectively universal and the potential errors of exclusion resulting from children not being in school are hardly a concern (Pollitt, Jacoby & Cueto, 1995). In Bangladesh, IFPRI and the World Bank evaluated the impact of a Government FFE programme (Ahmed and Del Ninno, 2002) that covered over 2 million children in 2000. The enrolment in FFE programme schools was found to have increased by 35 percent over the two year period between the programme start and after its first year. This increase was driven by a remarkable 44 percent increase in girl's enrolment and by a 28 percent increase for boys. In non-programme schools enrolment increased by 2.5 percent (5.4 for girls and 0.1 for boys) during the same period.

### **2.5.2 Influence of SFPs on Attendance.**

In Bangladesh a program of school-based food distribution increased attendance rates by 20% versus a 2% decline in non-participating schools (Ahmed and Billah, 2004). Successful schools begin by engaging pupils and making sure they come to school regularly. Attendance in FFE assisted schools was found to be 12 points higher than in non-assisted schools (70 percent compared to 58 percent respectively). Drop-out rates were also found to be 9 points lower in FFE assisted schools than in non-assisted schools (6 percent compared to 15 percent respectively). That may seem obvious. What's less obvious is that the consequences of low attendance are serious for all children and for the community, not just the students who miss school. The attendance rate tells you the average percentage of students attending school each day in the given year.

The attendance rate is important because students are more likely to succeed in academics when they attend school consistently. It's difficult for the teacher and the class to build their skills and progress if a large number of students are frequently absent. In

addition to falling behind in academics, students who are not in school on a regular basis are more likely to get into trouble with the law and cause problems in their communities. A 2008 study conducted by the Rodel Community Scholars at Arizona State University that tracked students from kindergarten through high school found that dropout patterns were linked with poor attendance, beginning in kindergarten. According to the National Centre for Student Engagement, schools are most effective in achieving high attendance rates when parents, school leaders and community members work together to focus on reducing absences and truancy, and keeping kids in schools (Ranivnder, 2007).

As a child learns to read and acquires basic math skills, it is important that he practice those new skills daily. Regular attendance promotes new learning. Regular school attendance is crucial to the development and education of children. There is a large impact on the student, the school and the community when a student does not attend school regularly. Because of this impact, in most states there are laws requiring a child to attend school until he is eighteen. Students who are not in class are more likely to commit crimes, costing the community time and money. Students learn to become good citizens through lessons at school and mentoring by adults. Combining an in-school snack with micronutrient fortification (iron, iodine, and vitamin A precursor) in primary schools in South Africa resulted in a fall in (diarrhea-related) absenteeism from 79 days to 52 days, an increase in attendance of approximately 15 percent (Stuijvenberg, 1999).

### **2.5.3 Influence of SFPs on improved Learning.**

The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in schoolchildren: the long distances children have to travel to school, cultural meal practices that include

no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply alleviating this hunger in school children helps them to perform better in school. A US study conducted in 1998, showed the benefits of providing breakfast to disadvantaged primary school students. Before the start of a school breakfast program, eligible (low-income) children scored significantly lower on achievement tests than those not eligible. Once in the program, however, the test scores of the children participating in the program improved more than the scores of non-participants (Nokes, van den Bosch and Bundy, 1998).

In a study conducted by (Pollitt, Jacoby and Cueto, 1995), 23 malnourished and 29 well-nourished 9 to 11 year old boys were studied to assess the effects of breakfast on cognitive performance. Each boy served as his own control in a manner comparable to the Jamaica study cited above. Breakfast was a nutritionally fortified beverage and a baked grain product fortified with iron, similar to the meal provided in the government-sponsored school breakfast program. A series of cognitive tests were administered in an experimental setting. Speed in performing a short-term memory test and discrimination of geometric patterns were improved under the breakfast condition in both groups. The effect was more pronounced in the nutritionally disadvantaged children (Pollitt, Jacoby and Cueto, 1995).

Short-term hunger, common in children who do not eat before going to school, results in difficulty concentrating and performing complex tasks, even if the child is otherwise well nourished. Students in school feeding programs have the potential for improved educational attainment, as evidenced by results of several randomized controlled trials. In a study done in Jamaica it was revealed that providing breakfast to primary school

students significantly increased arithmetic scores. The children who benefited most were those who were wasted, stunted, or previously malnourished (Grantham-McGregor, 1989).

Deficiencies of iron and iodine are among the most harmful types of malnutrition with regard to cognition. Iron deficiency renders children listless, inattentive and uninterested in learning. The research literature suggests a causal link between iron deficiency anemia and less than optimal behavior for learning (Nokes, van den Bosch and Bundy, 1998). Poor performance on a wide range of achievement tests among iron deficient children in school has been consistently documented. Remediation of iron deficiency through supplementation has eliminated the differences in school performance and IQ scores between schoolchildren previously deficient in iron and those without iron deficiencies (Seshadri and Gopaldas, 1989).

In the case of iodine, most studies have focused on the differences in test performance between children who lived in communities with and without endemic goiter. The results show differences in favor of the non-goiter areas. In Sicily, for example, the proportion of children with below-normal cognitive scores was 3% in areas with sufficient iodine, 18.5% in areas where iodine was inadequate, and 19.3% where iodine was inadequate and cretinism was endemic (Vaisman, Voet, Akivis and Vakil , 1996). Studies in Indonesia and Spain have documented similar effects on children in areas with insufficient iodine (Bleichrodt, 1987). Having brought more children into school, the challenge is then for children to learn; school feeding programs can also contribute to this, (Bennett, 2003). Poor health and poor nutrition among school-age children diminish their

cognitive performance either through physiological changes or by reducing their ability to participate in learning experiences, or both.

#### **2.5.4 Influence of SFPs on Retention**

It seems reasonable to assume that students who commit themselves to completing their education will be more motivated and perform at higher levels of achievement. Some schools seem more successful than others in retaining students through to completion of the required years. An effective school feeding program is known to influence students' participation in compulsory schooling and completion (Williams, 1987). Ainley, Batten, and Miller (1984) concluded that students' feelings of success and general satisfaction with school resources such as a good feeding program influenced their intention to remain at school. The effects of school feeding program on students' continuation in schooling and beyond have not been as carefully researched. Schools that provide a relevant curriculum and a supportive SFP would be expected to have higher retention rates. However, students' family background also contributes to their commitment to secondary education. Ainley and Sheret (1992) found that by middle years, pupils have educational plans about the level to which they intend to continue at high school. The educational objectives of the WFP's school feeding programme are well defined and associated with clear indicators. Schools which manage to effectively run their program well are guaranteed of keeping children in school. Giving three meals per every school day reduces school transfers since every parent is comfortable with their children's participation in school (Bennett, 2003).



## 2.6 Theoretical Framework

The program theory, also called a logic model or impact pathway is an assumption, implicit in the way the program is designed, about how the program's actions are supposed to achieve the outcomes it intends. The programme theory on the educational benefits of school feeding is generally well established and underpinned by an increasingly robust evidence base: School feeding programs can help to get children into school and help to keep them there, through enhancing enrolment and reducing absenteeism; and once the children are in school, the programs can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially de-worming and providing micronutrients.

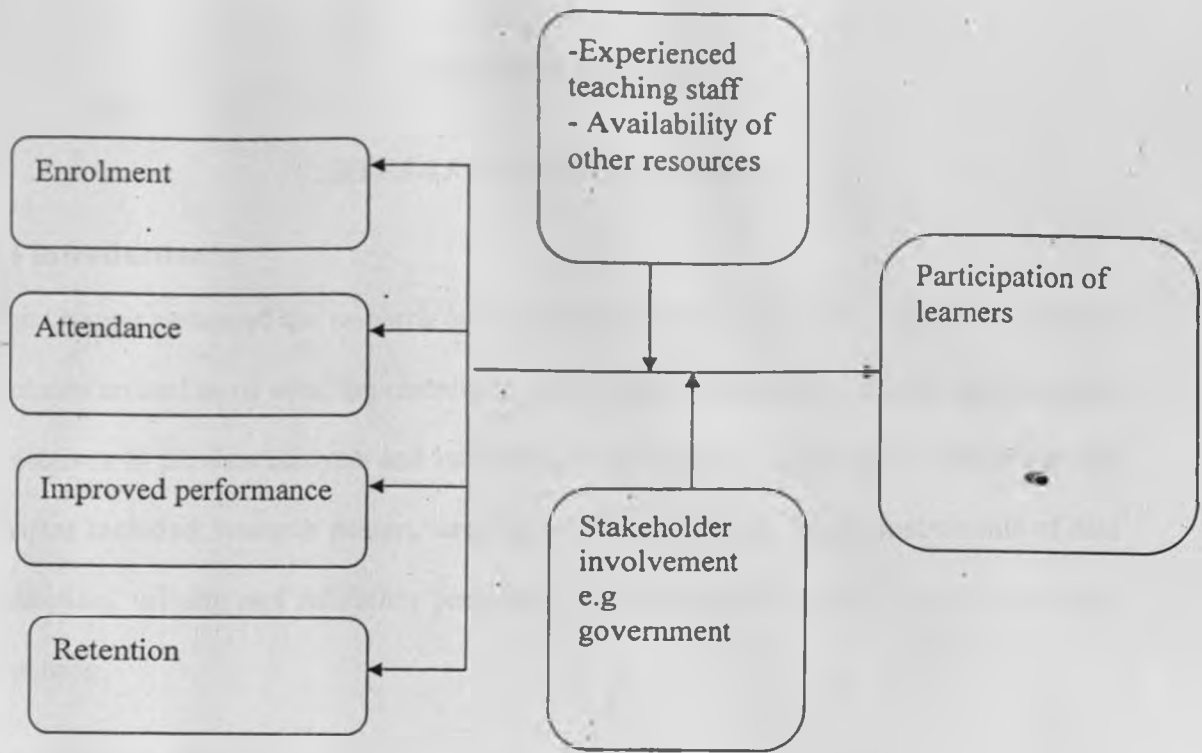
In practice, school feeding programmes are complex interventions with many different possible configurations, involving a broad range of activities by different stakeholders at different levels. Policy makers and implementers can benefit from careful examination of the context, and trade trade-offs associated with the different design options of school feeding. According to the program theory the irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even short-term hunger, common in children who are not fed before going to school, can have an adverse effect on learning (Jacoby, 1998). In early ECED, children who are hungry have more difficulty concentrating and performing complex tasks (Grantham-McGregor, 1998). According to (Jacoby, 1998), educational outcomes included school participation (including enrolment, attendance and drop-out) and school achievement (including

intelligence test scores, psychomotor and mental development, attention, memory, reasoning, verbal fluency, vocabulary, on-task behaviour).

Extending the school feeding programme theory to cover explicitly other nutritional benefits is an important area of ongoing work (Adelman, 2008). The income transfer incentive and the improved health and nutrition status resulting from school feeding service provision would then lead to improved access and learning outcomes. From the educational perspective, these outcomes would then lead to the long term goals of school feeding programmes as captured by the Millennium Development Goals and Education for All Goals.

## **2.7 Conceptual Framework**

In this study the conceptual framework was based on the influence of feeding school feeding program on learners participation reflected through enrolment, retention, attendance as well as improved learning/ performance. Feeding program is the independent variable, while learners' participation was the dependent variable as shown below;



Independent Variable

Dependent Variables

**Figure 2.1: Conceptual Framework**

*Source: (Author, 2012)*

### 2.8 Summary of the literature review

This study was on the influence of school feeding programmes on participation of learners in early childhood development centres. The study considered the influence on school enrolment, attendance, retention as well as on learning outcomes/ performance. The researcher acknowledges that there are other influences such as nutrition health hence creating a research gap to evaluate the extent to which they are influenced. At the same time, the fact that the researcher concentrated on SFP in Bungoma south district means that further research should be carried out to find out whether the effects are the same in other counties in Kenya.

## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presented the research methodology that the study opts to adopt. It therefore includes an outline of what the researcher will do from writing the research questions and objectives to the data analysis and interpretation of findings. The various sections in this chapter included; research design, target population, sampling frame, instruments of data collection, validity and reliability procedures for data collection and; data analysis and reporting.

#### **3.2 Research Design**

This study employed a descriptive survey research design. A descriptive study is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman and Bell, 2003). Thus, this approach was appropriate for this study, since the researcher intends to collect detailed information through descriptions and is useful for identifying variables and hypothetical constructs. According to Orodho, (2003), a descriptive survey design is preferred because it is appropriate for educational fact finding and yields a great deal of information, which is accurate. It also enables the research team to gather data at a particular point in time and use it to describe the nature of the existing contentions (Cohen, 2000).

### 3.3 Target Population

Borg and Gall, (1989) define target population as all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the results of a research study. The target population of this study was collected from 206 ECDE centres in Bungoma South District, which summed up to 618. Data was collected from the school managers, teachers, ECDE representatives and the pupils so as to solicit enough information on the influence of school feeding programme on participation of learners in the ECDE centres. The breakdown of target population was as follows; 206 school managers, 206 teachers- -1 teacher in charge who was used as the informant from each of the centres, 206 ECDE parents' representatives and total target population of 618 possible respondents(Bungoma South District Education Office ECDE Data 2011).

**Table 3.3: Target Population**

Categories	Target Population
1.Head teacher/ Head of school feeding program	206
2.Teachers	206
3. ECDE representatives	206
<b>Total</b>	<b>618</b>

(Source; Author, 2012)

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (1999), defines a sample as a smaller group obtained from accessible population to represent the whole. According to Deming (1990) stratified proportionate random sampling technique produce estimates of overall population parameters with greater precision and ensures a more representative sample derived from a relatively homogeneous population. According to Cooper & Schindler (2000) 10% of the study population will be considered for the study. Stratified random sampling was

applied in this case whereby 63 respondents were picked to fill the questionnaire upon authority from the various managements. Hence the sample population of this study was 63 respondents as shown in the table 3.2 below;

**Table 3.4: Sample Size**

Categories	Target Population	Sample ratio 10%	Sample size
Head teacher/ Head of school feeding program	206	0.1	21
Teachers	206	0.1	21
ECDE Parents Representatives	206	0.1	21
<b>Total</b>	<b>618</b>	<b>0.1</b>	<b>63</b>

Source: (Author, 2012)

### 3.5 Data Collection Instruments

This study used a questionnaire as the only data collection tools. The questionnaire consisted of several items of which the respondent was expected to react in choosing appropriate answers. This data collection tools enabled the researcher to obtain more authentic information on factors influencing performance of learners in the school beyond the limited questionnaire since respondents tend to give more and adequate information besides enabling the researcher have the advantage of comparing both the answers given and the body language hence assist the researcher to determine the authenticity of the information.

#### 3.5.1 Pilot Testing of the instrument

Pilot testing was used to determine the reliability and validity of the instrument. The pretesting of the instrument was done in six (6) schools in Bumula District. The pilot study was done to determine whether there would be ambiguities in any of the items in the questionnaire. The questionnaire will elicit the type of data desired and anticipated. The type of data will meaningful be analyze in relation to the stated questions.

### **3.5.2 Validity of the Instrument**

According to Mugenda and Mugenda (1999), Validity is the accuracy, meaningfulness and the degree to which results obtained from the analysis of data actually represent the phenomenon of the study. This study adopted content validity which refers to whether an instrument measures what it was intended to measure accurately or the degree to which a test measures a concept it is designed to measure accurately (Coolican, 1996; Orodho 2004). To ensure validity of the instruments, the researchers liaised with the supervisors who are experts in the area of study while framing the questionnaires. The supervisors or lecturers in the departments were considered to be experts in research and reliably guided the researcher to develop valid instruments.

### **3.5.3 Reliability of the Instruments**

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Donald, 2006). This research study used the test-retest method which involves administering the same scale or measure to the same group of respondents at two separate times. This is after a time lapse of one or more weeks. A pilot study was conducted in 6 schools in the district of which the results were not be included in the main sample. A correlation coefficient of above 0.76 deemed the instrument as reliable.

### **3.6 Data Collection Procedures**

The researcher secured a research permit and research authorization letter from the National Council of Research before proceeding to the field for data collection. The instrument was administered through personal visits on appointment.

### **3.7 Data analysis Techniques**

This included analysis of data to summarize the essential features and relationships of data in order to generalise from the analysis to determine patterns of behaviour and particular outcomes. The data collected from the field was assessed and comparison made so as to select the most accurate and quality information from the feedback given by various respondents. This involves assessing and evaluating the questionnaires and other sources of both primary and secondary data. Descriptive statistics analysis was employed whereby the SPSS (Statistical Package for Social Sciences) programme is used. Data was grouped into frequency distribution to indicate variable values and number of occurrences in terms of frequency. Frequency distribution table was informative to summarize the data from respondents. Tables was used to present the data collected for ease of understanding and analysis.

### **3.8 Ethical Considerations**

The researcher had a task of assuring the respondents that the responses they gave was only be for academic purposes and that it would be held with utmost confidentiality. This helped in drawing accurate information and views concerning the influence of school feeding program on learners' participation in the ECDE institutions.



## CHAPTER FOUR:

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The results are presented on the influence of feeding programmes on participation of learners in ECDE institution in Bungoma South District. The data was gathered exclusively from questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. To enhance quality of data obtained, Likert type questions were included whereby respondents indicated the extent to which the variables were practiced in a five and four point Likert scales.

#### 4.2 Response Rate

Table 4.1

	Distributed	Not respondent	Response rate
Headteachers	21	21	90%
ECD teachers	21	21	100%
ECD parents' representatives	21	19	100%
<b>Total</b>	<b>63</b>	<b>61</b>	<b>97%</b>

The response rates are as distributed in the table above and also in the figure below; Out of the total sample size of 21 school head teachers, 21 ECD teachers and 21 ECD parents' representatives, 19 school head teacher, 21 ECD teachers and 21 ECD parents' representatives filled and returned the questionnaire. This therefore gave a 90% response rate for the school head teachers, 100% response rate for the ECD teachers and a 100%

response rate for the case of ECD parents' representatives. The overall response rate was therefore 97%.

### 4.3 Respondents' Profile

#### 4.3.1 Gender

**Table 4.5: Gender**

Male	33	54
Female	28	46
Total	61	100

The study sought to establish the gender of the respondents who participated in the study. According to the study findings as presented in the table above, majority of the respondents reached by the researcher were male as shown by 54% while the rest were female as shown by 46% respectively.

#### 4.3.2 Marital Status

**Table 4.6: Marital Status**

Married	54	89
Single	7	11
Total	61	100

The study required the respondents to indicate their marital status. On this question, the study established that majority of the respondents were married as presented in the table above by 89% while the rest were not married as shown by 11% respectively.

#### 4.3.3 Age of Respondents

**Table 4.7: Age Bracket**

18-25yrs	5	26.3
36-45yrs	7	36.8
46-50yrs	5	26.3
above55	2	10.5
Total	19	100.0

The study also established that 37% of the school heads were aged between 36-45 years as shown by 37% while the rest were aged between 18-25 years (26%), 46-50 years (26%) and above 55 years as shown by 11% respectively. On the same question, majority of the teachers in ECD centers were aged between 36-46 years (43%), 26-35 years (29%), 18-25 years (10%) and 46-55 years respectively .

#### 4.3.4 Religion of the Respondents

**Table 4.8: Religion of the Respondents**

Christian	51	84
Islam	10	16
Total	61	100

The study sought to establish the religion of the respondents sampled. On this question, majority of the respondents as presented by 84% in the table above were Christians while the rest were Islam.

#### 4.3.5 Highest level of Education

**Table 4.9: Highest level of education of the respondents**

Primary	8	13
Secondary	8	13
College	40	66
University	5	8
Total	61	100

On the highest level of education of the respondents, the study found out that majority of the respondents had reached college (66%), primary (13%), secondary level (13%) and university level as shown by 8% respectively.

#### 4.3.6 Duration of being a head teacher in ECDE

**Table 4.10: Duration of being a head teacher in ECDE**

Less than one year	1	5.3
1-3yrs	4	21.1
3-6yrs	11	57.9
6-10yrs	1	5.3
10-15 years	2	10.5
Total	19	100.0

The study sought to establish the duration of the respondents as ECDE head teachers. According to the results presented in the table above, majority of the respondents had taught for duration of between 6-10 years (58%), 1-3 years (21%), 10-15 years (11%), 6-10 years (5.3%) and less than one year as shown by 5.3 respectively. On the same question, the study found out that majority of the respondents had taught in ECE schools for duration 6-10 years (48%), 3-6 years (38%), 1-3 years, less than a year and 10-35 years as shown by 5% respectively

**Table 4.11: Whether children take meal at school**

Yes	34	56
No	27	44
Total	61	100

On the whether children take meals at school, the study established that most of the children took meals in the school as shown by 56% whereas others did not take their meals in their schools as shown by 44% respectively.

#### 4.3.8 Contribution of meals at the ECE centre

**Table 4.12: Contribution of meals at the ECE centre**

Government	9	15
Parents	42	69
Donor	2	3
Government and parents	8	13
Total	61	100

The study wanted to find out the source of meals in the school. On this question, majority of the respondents indicated that parents contributed most towards donating meals in the schools as shown by 69%, the government (15%) as well as other donors (3%) respectively.

#### 4.3.9 Number of meals Per Day

**Table 4.13: Number of meals per day**

One meal	3	15.8
Two meals	15	78.9
Three meal	1	5.3
Total	19	100.0

The school head teachers were required by the study to indicate the number of meals that children take in one school day. According to the study findings, majority of the respondents as presented by 79% indicated that children took 2 meals per day, one meal (16%), and three meals 5% respectively.

#### 4.3.10 Effectiveness of feeding program in the schools

Very effective	7	11
Effective	21	34
Fairy effective	20	33
Not effective	13	21
Total	61	100

The researcher was to find out the effectiveness of feeding program in the schools. On this question, majority of the respondents indicated that the feeding program in the centre was effective (34%), fairy effective (33%), not effective (21%) and very effective as shown by 11%.

#### 4.4 Influence of school feeding program on pupil's enrollment

**Table 4.14: Enrollment of children in every class**

1-10 pupils	8	13.1
11-20	11	18.0
21-30	23	37.7
More than 30 Pupils	19	31.1
<b>Total</b>	<b>61</b>	<b>100.0</b>

The study sought to establish the enrolment levels of children in the class. According to the study findings as presented in the table above, majority of the respondents indicated that their classrooms had an enrolment of between 21- 30 pupils presented by 38%, more than 30 pupils (31%), 11-20 years (18%) and 1-10 years as shown by 13% respectively.

**Table 4.15: Extent the feeding programme in the centre enhance enrolment**

Very great extent	28	45.9
Great extent	10	16.4
Moderate	14	23.0
Little Extent	9	14.8
<b>Total</b>	<b>61</b>	<b>100.0</b>

Respondents were required by the respondents to indicate the extent the feeding programme in the centre enhance enrolment. On this question, majority of the respondents said that feeding programme in the centre enhance enrolment to a very great extent as shown by 46%, moderate extent (23%), great extent (16%) and little extent respectively.

**Table 4.16: Time when enrollment takes place in the centre**

Early every year	25	41.0
Late every year	24	39.3
Midyear	3	4.9
Always	9	14.8
Total	61	100.0

On the question on when enrolment is carried out, the study established that enrolment of most schools is done early every year as shown by 41%, late every year as shown by 39%, always (15%) and mid-year as shown by 5% respectively

**Table 4.17 Extent of agreement with the statements on feeding program effect on school enrolment**

	Mean	Std. Deviation
Most of the parents enquire about the meals provided to make a decision of whether to enroll the children in the centre	2.63	.89508
There has no change on enrolment levels despite the presence of feeding programme	2.79	1.18223
I find my pupils in class every time they take a meal in the school	1.89	1.14962
Most of the parents are always willing to bring their children in the centre where dietary meal are provided	1.84	.958

The study also sought to establish the extent of agreement with the statements on feeding program effect on school enrolment. According to the study findings, majority of the respondents indicated that most of the parents are always willing to bring their children in the centre where dietary meal are provided and that teachers always find pupils in class every time they take a meal in the school as shown by the mean scores of 1.84 and 1.89

respectively. Other respondents fairly agreed that Most of the parents enquire about the meals provided to make a decision of whether to enroll the children in the centre and that there has no change on enrolment levels despite the presence of feeding programme as shown by the mean scores of 2.63 and 2.79 respectively.

#### 4.5 Influence of feeding programmes on school attendance

**Table 4.18 Whether there are cases of children who miss school**

Yes	59	96.7
No	2	3.3
<b>Total</b>	<b>61</b>	<b>100.0</b>

The study was to establish whether there are children who miss school. The results obtained indicated that 97% of the total respondents said that there were cases of children who miss school while 3% that there were no cases of children who miss school respectively

##### 4.5.1 Reasons why most children Miss School

On the question on reasons why most children miss school, most of the respondents said that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students.



**Table 4.19: Rating on attendance level in the school**

Very Good	30	49.2
Good	24	39.3
Fairly Good	4	6.6
Not Good at all	3	4.9
<b>Total</b>	<b>61</b>	<b>100.0</b>

The study sought to establish the respondents rating on attendance level in the schools. According to the results as indicated in the table above, majority of the respondents were of the view that attendance was very good as presented by 49%, good (39%), fairly good (7%) and not good at all as shown by 5% respectively.

**Table 4.20 Extent to which feeding programs enhance retention in the centre**

Very great extent	36	59.0
Great extent	24	39.3
Little extent	1	1.6
<b>Total</b>	<b>61</b>	<b>100.0</b>

The researcher was to find out from the respondents sampled the extent to which feeding programs enhance retention in the centre. According to the results presented in the table above, the study found out that feeding programs enhance retention in the centres to a very great extent (59%), great extent (39%), and little extent presented by 2% respectively.

#### 4.6 Influence of school feeding program on improved learning

**Table 4.21 Level of agreement on the statements related to SFPs effect on improved learning**

	Mean	Std. Deviation
School feeding program increase pupils participation in class assignment duties and discussion	1.4286	.50709
There are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance	2.2857	1.14642
The healthy pupils in the centre are always active and perform well in the exam	1.6190	.92066
A feeding program is important than other factors towards the performance of pupils in the centre	1.5714	.74642

The research was to establish the level of agreement on the statements related to SFPs effect on improved learning. According to the study findings as presented in the table above that; School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program is important than other factors towards the performance of pupils in the centre presented by the mean scores of 1.4286, 2.2857, 1.6190 and 1.5714 respectively.

#### 4.7 Influence of school feeding program on retention of pupils

**Table 4.22 Whether there are cases transfers in the centre**

Yes	35	57.4
No	26	42.6
Total	61	100.0

The study was to establish whether there were transfer cases in the centre. According to the study findings presented in the table above by 57.4%, majority of the respondents said that there were transfer cases in the centre. Other respondents said that there were no transfer cases in the centre as shown by 43%.

The study was to establish whether there were cases of children transfer in the school because of poor feeding. Majority of the respondents also indicated that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

The researcher was to establish whether there are strategies parents have put in place to retain children in school in each learning days in the centre. On this question, most of the respondents said that parents have taken the role of provision of quality food in the ECDE centres. Some parents also indicated that they organize committees in the centres whose main role is to ensure effectiveness and cleanliness on the types of foods prepared. Other respondents indicated that the school management committee prepared a strategic plan which gives guidelines on school feeding programme requirements which attract and enhance retention in the centres.

**Table 4.23: Extent to which the feeding program in the school enhance pupils' retention**

Very great extent	10	47.6
Great extent	8	38.1
Little extent	3	14.3
Total	21	100.0

The study sought to find out the extent to which the feeding programs in the school enhance retention. On this question, 48% of the total respondents indicated that the feeding program in the school enhance retention of pupils to a very great extent, great extent (38%), little extent (14%) as shown in the table above respectively.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents discussion of main finding, conclusions and recommendations as well as on recommendations for further studies as discussed under the research objectives which were; to investigate the extent to which school feeding program affect enrolment of learners in ECDE institutions in Bungoma South District, to establish the effect of school feeding program on attendance of learners in ECDE institutions in Bungoma South District, to find out whether school feeding programmes affect retention of learners in ECDE institutions in Bungoma South District and to examine the extent to which school feeding programmes influence performance in ECDE institutions in Bungoma South District.

#### 5.2 Summary of the findings

This study found out that most of the children took meals in the school and that majority of the respondents indicated that parents contributed most towards donating meals in the schools as shown by 69%. Majority of the respondents as presented by 79% indicated that children took two (2) meals per day and that the feeding program in most of the centres were effective (34%).

- The study found out that majority of the respondents indicated that their classrooms had an enrolment of between 21- 30 pupils presented by 38% and more than 30 pupils (31%) and that majority of the respondents said that feeding programme in the centre enhance enrolment to a very great extent as shown by

46%. The study also found out that enrolment of most schools is done early every year. Finally, as regards to enrollment, majority of the respondents indicated that most of the parents are always willing to bring their children in the centre where dietary meal are provided and that teachers always find pupils in class every time they take a meal in the school as shown by the mean scores of 1.84 and 1.89 respectively. Other respondents fairly agreed that Most of the parents enquire about the meals provided to make a decision of whether to enroll the children in the centre and that there has been no change on enrolment levels despite the presence of feeding programme as shown by the mean scores of 2.63 and 2.79 respectively.

- The results obtained indicated that 97% of the total respondents said that there were cases of children who miss school. The study established that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students. Majority of the respondents were of the view that attendance was very good as presented by 49% and that feeding programs enhance attendance levels in the centres to a very great extent (59%).
- According to the study findings as presented in the table above that; School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program

is important than other factors towards the performance of pupils in the centre presented by the mean scores of 1.4286, 2.2857, 1.6190 and 1.5714 respectively.

- The study found out that majority of the respondents said that there were transfer cases in the centre. Majority of the respondents also indicated that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

### 5.3 Conclusions

- On enrolment, study concludes that feeding programme in the centre enhance enrolment to a very great extent. The study further concludes that the ECD centres sampled by the had enrolment of between 21- 30 pupils and over 30 pupils per school and that enrolment of most schools is done early every year. The study also concludes that most of the parents are always willing to bring their children in the centre where dietary meal are provided and that teachers always find pupils in class every time they take a meal in the school.
- The study concludes feeding programs enhance attendance levels in the centres to a very great extent that there were cases of children who miss school because of the feeding program in place and that children miss school because of sickness, family affairs, lack of school uniform and food at home, poor performances which make them shy away, lack of parental support and guidance as well as poor characteristics developed by students.

- On improved learning, School feeding program increase pupils participation in class assignment duties and discussion, there are only a few meals provided during the day hence pupil do not fully participate in class work rendering to low performance, the healthy pupils in the centre are always active and perform well in the exam and a feeding program is important than other factors towards the improved performance.
- On retention, the study concludes that there were transfer cases in the centre and that most parents take their children to private schools citing many reasons which range from poor performance in public early childhood education centres, poor teaching methods, lack of skilled staff in public centres, and to a little extent due to poor feeding habits in the local ECD centres.

#### **5.4 Recommendations**

- On enrolment, the study recommends that the school management be aware of the high congestion in classes which is over 30 pupils since this is normally brought about by effective school feeding program which attracts pupils from all over. The study also recommends the high spirit with the parents towards contribution of food in the school to continue since this has a positive effect on enrolment. The school management may also come up with more and more strategies related expanding the school to cater for a high capacity of children.
- On attendance, the study recommends that the school management make sure that all the factors influencing school attendance be identified so as to reduce transfer cases as was established in the study. The school management should therefore



effect on improving the school feeding program which has been noted to have an adverse effect on enhancing school attendance. To improve the school feeding programme, dietary foods interchangeably should be used.

- On improved learning, the study recommends that a strong feeding program be encouraged since this enhances learning of pupils. The comfort ability created when a child is not hungry in class brings about motivation to read and learn without engaging in other dangerous activities which negatively influence achievement levels of the child in class. The study recommends that high nutritional reach foods be prepared for the children so as to enhance performance.
- On retention, the study recommends that schools sampled and others not included be aware that an effective school feeding always attracts and ensures that children remain in school up to the highest level. This would go along way to ensuring that transfer cases are reduced categorically.

### **5.5 Suggestions for further research.**

This study recommends that further study be done on the effect of school feeding programs on participation of learner's in early childhood education in other regions in Kenya besides Bungoma South District. The study established should aim at finding out whether school feeding programme have the same effect on participation of learners in early childhood education.

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**APPENDIX 1: LETTER OF INTRODUCTION**

Date...../2012.

Dear Sir/Madam,

**RE: DATA COLLECTION**

I am a student currently a Master Of Arts Degree in Project Planning and Management. As part of the requirement for the academic, I am carrying out a study on “**Influence of School Feeding Programs on The Participation of Learners at Early Childhood Development Education Institutions**” in Bungoma South District. You have been chosen to participate in this study. I therefore kindly ask you to respond to the attached questionnaire. To ensure the confidentiality of your opinion, do not write your name anywhere on the questionnaire.

Thank you for your cooperation.

**Yours Faithfully**

.....

**Mohammed Ali Osman**

## APPENDIX 11: QUESTIONNAIRE FOR HEAD TEACHER

The research instrument that will be used for collection of data will be entitled: "A Questionnaire on influence of School Feeding Programme on the Participation of Learners at Early Childhood Development Education Institutions" in Bungoma South District.

### SECTION A. PERSONAL INFORMATION

[ ] Tick or fill in the appropriate response[s]

1. Indicate Your Gender: Male [ ] Female [ ]

2. Marital status Married [ ] Single [ ]

3. Indicate age bracket

18-25 [ ]

26-35 [ ]

36-45 [ ]

46-50 [ ]

Above 55 [ ]

4. Your Religion/ Faith; Christianity [ ] Islamic [ ]

Others \_\_\_\_\_

5. What is your highest level of education?

(a) Primary [ ]

(b) Secondary [ ]

(c) College [ ]



(d) University [ ]

6. For what duration have you been a H/Teacher?

Less than 1 yr [ ]

1-3 yrs [ ]

3-6 yrs [ ]

6 - 10 yrs [ ]

10-15 yrs [ ]

More than 15 yrs old [ ]

7. Do children take meals at school?

Yes [ ] No [ ]

8. If yes, how many meals are there per every school day?

One Meal [ ] Two Meals [ ]

Three Meals [ ] More than 3 meals [ ]

What are the contents in the various meals in the school? Indicate, e.g beans etc.....

.....

9. Who provides/ donates for the meals in the centre?

Government [ ]

Parents [ ]

Donors [ ]

Government and parents [ ]

Church [ ]

10. How effective is the feeding program in your centre?

Very Effective [ ]

Effective [ ]

Fairly Effective [ ]

Not Effective [ ]

**SECTION B; INFORMATION ON INFLUENCE OF SFPs ON PARTICIPATION OF LEARNERS**

**SFPs AND ENROLLMENT**

11. What are the enrolment levels in the centre? .....

12. To what extent do the feeding program in the centre enhance enrollment

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

13. Give reasons for your answer in no. 10 above

.....  
.....

14. When does the enrolment take place in your centre?

Early Every year [ ]

Late every year [ ]

Mid year [ ]

Always [ ]

15. To what extent do you agree with the following statements on feeding program effect on school enrolment? Rate on a scale where; 1 strongly agree, 2 agree, 3 fairly agree, 4 disagree

	1	2	3	4	5
There has been notable increase of number of children in the last few years due to the presence of the feeding program in our centre					
Most of the parents enquire about the meals provided to make a decision on whether to enrol the children in the centre					
There has been no change on enrolment levels despite the presence of the feeding program					
I find my pupils happy in class every time they take a meal in the school					
Most of the parents are always willing to bring their children in the centre where dietary meals are provided					
Other .....					

**SFPs AND ATTENDANCE**

16. Are there children who miss school

Yes [ ] No [ ]

17. What reasons do they give on return?

.....  
.....

18. How do you rate the attendance levels in your centre?

Very Good [ ]

Good [ ]

Fairly good [ ]

Not good at all [ ]

19. To what extent does the feeding program enhance attendance in the centre?

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

**SFPS AND IMPROVED LEARNING**

20. What is your level of agreement on the following statements related to SFPs effect on improved learning? 1 strongly agree, 2 agree, 3 fairly agree, 4 disagree

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

25. What challenges do face on the implementation of the feeding program in your centre? Indicate

.....  
.....

THANK YOU.

	1	2	3	4	5
School feeding program increases pupils participation in class assignments, duties and discussions					
There are only a few meals provided during a day hence pupils do not fully participate in class work rendering to low performance					
The healthy pupils in my class are always active and perform well in the exams					
A feeding program is important than other factors towards the performance of pupils in the centre					
Other .....					

### SFPS AND RETENTION

21. Are there cases of children transfers in the centre?

Yes [ ] No [ ]

22. If yes, how many children were transferred from your class because of poor feeding in the centre?

.....

23. Are there strategies in place to retain children in school in each learning days and is the feeding program a priority strategy in the centre? Explain

.....  
 .....

24. To what extent does the feeding program enhance retention in the centre?

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

25. What challenges do face on the implementation of the feeding program in your centre? Indicate

.....  
.....

THANK YOU.

## APPENDIX 11I: QUESTIONNAIRE FOR TEACHERS

The research instrument that will be used for collection of data will be entitled: “A Questionnaire on influence of School Feeding Programs on the Participation of Learners in Early Childhood Development Education Institutions” in Bungoma South District.

### SECTION A. PERSONAL INFORMATION

[ ] Tick or fill in the appropriate response[s]

18. Indicate Your Gender:      Male [ ]      Female [ ]

19. Marital status                      Married [ ]      Single [ ]

20. Indicate age bracket

18-25      [ ]

26-35      [ ]

36-45      [ ]

46-50      [ ]

Above 55      [ ]

21. Your Religion/ Faith; Christianity [ ] Islamic [ ]

Others \_\_\_\_\_

22. What is your highest level of education?

(a) Primary                      [ ]

(b) Secondary                      [ ]

(c) College                      [ ]



(d) University [ ]

23. For what duration have you been a teacher?

Less than 1 yr [ ]

1-3 yrs [ ]

3-6 yrs [ ]

6 - 10 yrs [ ]

10-15 yrs [ ]

More than 15 yrs old [ ]

24. Do children take meals at school?

Yes [ ] No [ ]

25. Who provides/ donates for the meals in the centre?

Government [ ]

Parents [ ]

Donors [ ]

Government and parents [ ]

Church [ ]

26. How effective is the feeding program in your centre?

Very Effective [ ]

Effective [ ]

Fairly Effective [ ]

Not Effective [ ]

**SECTION B; INFORMATION ON INFLUENCE OF SFPs ON PARTICIPATION OF LEARNERS**

**. SFPs AND ENROLLMENT**

27. How many children are there in your class?

0 to 10 pupils [ ]

11-20 pupils [ ]

21-30 pupils [ ]

More than 30 pupils [ ]

28. To what extent do the feeding program in the centre enhance enrollment

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

29. Give reasons for your answer in no. 10 above

.....  
.....

30. When does the enrolment take place in your centre?

Early Every year [ ]

Late every year [ ]

Mid year [ ]

Always [ ]

31. To what extent do you agree with the following statements on feeding program effect on school enrolment? Rate on a scale where; 1 strongly agree, 2 agree, 3 fairly agree, 4 disagree

	1	2	3	4	5
There has been notable increase of number of children in the last few years due to the presence of the feeding program in our centre					
Most of the parents enquire about the meals provided to make a decision on whether to enroll the children in the centre					
There has been no change on enrollment levels despite the presence of the feeding program					
I find my pupils happy in class every time they take a meal in the school					
Most of the parents are always willing to bring their children in the centre where dietary meals are provided .					
Other .....					

32. Please indicate the number of pupils in your class before and after initiation of SFPs.

Before SFPs	After SFPs
1 – 10	1- 10
11- 20	11- 20
21 – 30	21 – 30
31 – 40	31 – 40
Over 40	Over 40

**SFPs AND ATTENDANCE**

33. Are there children who miss school

Yes [ ]      No [ ]

34. What reasons do they give on return?

.....  
 .....

35. How do you rate the attendance levels in your centre?

Very Good      [ ]

Good      [ ]

Fairly good      [ ]

Not good at all      [ ]

36. To what extent does the feeding program enhance attendance in the centre?

Very great extent      [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

37. Please indicate on how you agree with the following.

38. Indicate how you agree with the following on attendance

	1	2	3	4	5
School feeding program has increased number of pupils attending school each day					
Due to SFPs parents are encouraging their students to attend school.					
Majority of pupils would be at home were it not for SFP					
SFPs provided acts as a form of income savings/benefit as they do not have to spend as much on food, hence able to cater for other services e.g books					

THANK YOU

## APPENDIX IV: QUESTIONNAIRE FOR PARENT REPRESENTATIVES

The research instrument that will be used for collection of data will be entitled: **"A Questionnaire on influence of School Feeding Programme on the Participation of Learners at Early Childhood Development Education Institutions"** in Bungoma South District.

### SECTION A. PERSONAL INFORMATION

[ ] Tick or fill in the appropriate response[s]

1. Indicate Your Gender: Male [ ] Female [ ]

2. Marital status Married [ ] Single [ ]

3. Indicate age bracket

18-25 [ ]

26-35 [ ]

36-45 [ ]

46-50 [ ]

Above 55 [ ]

4. Your Religion/ Faith; Christianity [ ] Islamic [ ]

Others \_\_\_\_\_

5. What is your highest level of education?

(a) Primary [ ]

(b) Secondary [ ]

(c) College [ ]

(d) University [ ]

6. For what duration have you been a teacher?

Less than 1 yr [ ]

1-3 yrs [ ]

3-6 yrs [ ]

6 - 10 yrs [ ]

10-15 yrs [ ]

More than 15 yrs old [ ]

7. Do children take meals at school?

Yes [ ] No [ ]

8. Who provides/ donates for the meals in the centre?

Government [ ]

Parents [ ]

Donors [ ]

Government and parents [ ]

Church [ ]

9. How effective is the feeding program in your centre?

Very Effective [ ]

Effective [ ]

Fairly Effective [ ]

Not Effective [ ]

**SECTION B; INFORMATION ON INFLUENCE OF SFPs ON PARTICIPATION OF LEARNERS**

**SFPs AND ENROLLMENT**

10. How many children are there in the class/ses you represent?

0 to 10 pupils [ ]

11-20 pupils [ ]

21-30 pupils [ ]

More than 30 pupils [ ]

11. To what extent do the feeding program in the centre enhance enrollment?

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

12. Give reasons for your answer in no. 10 above

.....  
.....

13. When does the enrolment take place in centre?

Early Every year [ ]

Late every year [ ]



Mid year [ ]

Always [ ]

14. To what extent do you agree with the following statements on feeding program effect on school enrolment? Rate on a scale where; 1 strongly agree, 2 agree, 3 fairly agree, 4 disagree

	1	2	3	4	5
There has been notable increase of number of children in the last few years due to the presence of the feeding program in our centre					
Most of the parents enquire about the meals provided to make a decision on whether to enroll the children in the centre					
There has been no change on enrollment levels despite the presence of the feeding program					
I the children happy in school every time they take meals					
Most of the parents are always willing to bring their children in the centre where dietary meals are provided					
Other .....					

**SFPs AND ATTENDANCE**

15. Are there children who miss school in the class you represent?

Yes [ ]      No [ ]

16. What reasons do they give on return?

.....  
.....

17. How do you rate the attendance levels in the class you represent?

Very Good      [ ]

Good      [ ]

Fairly good      [ ]

Not good at all      [ ]

18. To what extent does the feeding program enhance attendance in the class you represent?

Very great extent      [ ]

Great extent      [ ]

Moderate      [ ]

Little extent      [ ]

No extent at all      [ ]

**SFPS AND IMPROVED LEARNING**

19. What is your level of agreement on the following statements related to SFPs effect on improved learning? 1 strongly agree, 2 agree, 3 fairly agree, 4 disagree

	1	2	3	4	5
School feeding program increases pupils participation in class assignments, duties and discussions					
There are only a few meals provided during a day hence pupils do not fully participate in class work rendering to low performance					
The healthy pupils in centre are always active and perform well in the exams					
A feeding program is important than other factors towards the performance of pupils in the centre					
Other .....					

**SFPS AND RETENTION**

20. Are there cases of children transfers in the centre?

Yes [ ] No [ ]

21. If yes, how many children were transferred from your class because of poor feeding in the centre?

.....

22. Are there strategies parents have put in place to retain children in school in each learning days in the centre? Explain

.....

23. To what extent does the feeding program enhance retention in the centre?

Very great extent [ ]

Great extent [ ]

Moderate [ ]

Little extent [ ]

No extent at all [ ]

**THANK YOU.**

**APPENDIX V: RESEARCH WORK PLAN.**

NO	ACTIVITY	Nov 20'11	DEC '12	Dec- April '12	April- June '12	June, July '12	July Aug 2012.	August 2012
0	Topic selection							
1	Title writing							
2	Concept papers writing							
3	Concept papers presentations							
4	Proposal paper writing							
5	Proposal defense							
6	Data collection							
7	Data analysis							
8	Project report writing,							
10	Project binding							
11	Project submission							
12	Others							

**APPENDIX VI: RESEARCH BUDGET**

<b>No.</b>	<b>Item Description</b>	<b>Quantity/Number</b>	<b>Unit Cost</b>	<b>Total Cost</b>
1	Commuting to library for literature review	10 days	100	1000
2	Internet and printing	2000 pages	10	3000
3	Typing and printing of proposal	35 pages	30	1050
4	Purchase stationeries, pens, erasers, pencils and scientific calculator	Assorted	-	3,000
5	Printing of data collected	120x5 pages	30	8000
6	Research assistants and training	5x4 days	500	10000
8	Transport within the study area for supervision / monitoring	5 days	2000	10000
9	Printing and binding of dissertation	50x5 pages	5	1250
10	Contingencies		5000	5000
	<b>Grand total</b>			<b>43200</b>

## APPENDIX VII: RESEARCH AUTHORIZATION LETTER

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

P.O. Box 20623-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/012/706**

Date: **5<sup>th</sup> June, 2012**

Mohammed Ali Osman  
University of Nairobi  
P.O. Box 30197-00100  
Nairobi

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*A study on influence of school programs on the participation of learners at early childhood development education institutions. A case of Bungoma South District,*" I am pleased to inform you that you have been authorized to undertake research in Bungoma South District for a period ending 30<sup>th</sup> May, 2013.

You are advised to report to the District Commissioner and the District Education Officer, Bungoma South District 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 HSC**  
**DEPUTY COUNCIL SECRETARY**

Copy to:

The District Commissioner  
The District Education Officer  
Bungoma South District.

*"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development."*