

**IMPACT OF SCHOOL FEEDING PROGRAMME ON PUPILS'
RETENTION RATES IN PUBLIC PRIMARY SCHOOLS IN
FAFI SUB-COUNTY GARISSA COUNTY KENYA**

Wekesa Kevina Nafula

**A Research Project submitted to the Department of Educational
Administration and Planning in partial Fulfillment of the
Requirements for the Award of the Degree of Master of
Education in Educational Administration and Planning
(Educational Planning)**

University of Nairobi

2015

DECLARATION

This research project is my original work and has not been submitted for examination or award of a degree in any other university

Kevina Nafula Wekesa
E55/66947/2011

This research project has been submitted for examination with our approval as the University Supervisors

Dr. Ibrahim Khatete
Lecturer
Department of Educational Administration and Planning
University of Nairobi

Dr. Andrew Riechi
Senior Lecturer
Department of Educational Administration and planning
University of Nairobi

DEDICATION

I dedicate my work to my loving mother Mrs. Selina Nabututu Wekesa

ACKNOWLEDGEMENT

My sincere gratitude and appreciation goes to all those who made the completion of my work a reality. I would like to express my sincere appreciation to my supervisors; Dr. Andrew R. Riechi and Dr. Ibrahim Khatete for guidance and support as well as patience and understanding towards the completion of this project. I heartily acknowledge the moral support of my brother Mr. Patrick Kubasu who behind the scenes was the motivation of my going back for post graduate studies. I also acknowledge the support from child Ivan Kubasu for the great encouragement and understanding as I went through my studies. I thank my loving mom Selina Wekesa who not only nurtured and educated me but also offered her unrelenting prayers and encouragement throughout my studies. In addition, I thank my brothers, sisters, cousins, nephews, nieces, relatives and friends and all those who gave me moral support.

I also acknowledge Fafi Sub-County Education Officer, and the entire Garissa Education Office for the support and encouragement in this study. In the same breadth, I thank the head teachers, teachers and pupils of the public primary schools in Fafi Sub-County for taking part in the study by completing the questionnaires and responding to interview questions. I am also grateful to my colleagues for the good times we shared together, tireless support and advice as we were undergoing the study. My appreciation goes to Mary N. Wasike for tireless typing and typesetting this project report. Lastly, to the Pastors and Elders who prayed for me as I undertook my project. To all I say thank you.

Glory and honour be to God.

TABLE OF CONTENT

| Content | Page |
|--|-------------|
| Title page | i |
| Declaration | ii |
| Dedication | iii |
| Acknowledgement | iv |
| Table of Content | v |
| List of Figures | x |
| List of Tables | xi |
| List of Abbreviations And Acronyms | xiii |
| Abstract | xiv |

CHAPTER ONE

INTRODUCTION

| | |
|--|----|
| 1.1 Background to the study | 1 |
| 1.2 Statement of the problem | 11 |
| 1.3 Purpose of the study | 12 |
| 1.4 Objectives of the study | 12 |
| 1.5 Research questions | 13 |
| 1.6 Significance of the study | 13 |
| 1.7 Limitations of the study | 14 |
| 1.8 Delimitations of the study | 14 |
| 1.9 Basic assumptions | 15 |
| 1.10 Definition of significant terms | 15 |

| | |
|-------------------------------------|----|
| 1.11 Organization of the study..... | 17 |
|-------------------------------------|----|

CHAPTER TWO

LITERATURE REVIEW

| | |
|--|----|
| 2.1 Introduction..... | 18 |
| 2.2 Rationale of school feeding programmes | 18 |
| 2.3 Adequacy of food on retention rates | 19 |
| 2.3.1 Quantity of food on retention rates | 20 |
| 2.3.2 Quality of food disbursed on retention rates | 21 |
| 2.4 Sources of finances for food on retention rates | 23 |
| 2.4.1 Funds for school feeding programme on retention rates | 23 |
| 2.4.2 Forms of school feeding programmes on retention rates..... | 24 |
| 2.5 Frequency and consistence on retention rates..... | 25 |
| 2.6 community involvement on retention rate | 26 |
| 2.7 Summary of literature reviewed..... | 27 |
| 2.8 Theoretical framework..... | 28 |
| 2.9 Conceptual framework..... | 29 |
| Figure 2.1 Impact of school feeding programme on pupils’ retention in public primary schools..... | 30 |

CHAPTER THREE

RESEARCH METHODOLOGY

| | |
|-----------------------------|----|
| 3.1 Introduction..... | 32 |
| 3.2 Research design | 32 |
| 3.3 Target population | 33 |

| | | |
|-----|--|----|
| 3.4 | Sample size and sampling techniques..... | 33 |
| 3.5 | Research instruments | 34 |
| 3.6 | Data collection procedures..... | 34 |
| 3.7 | Instruments validity | 35 |
| 3.8 | Instruments reliability | 35 |
| 3.9 | Data analysis techniques | 36 |

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

| | | |
|-------|---|----|
| 4.1 | Introduction..... | 38 |
| 4.2 | Instruments return rate | 38 |
| 4.3 | Demographic data of the head teachers, teachers and pupils..... | 39 |
| 4.3.1 | Gender of the head teachers, teachers and pupils | 39 |
| 4.3.2 | Head teachers' and teachers' age..... | 40 |
| 4.3.3 | Academic and professional qualifications for head teachers and teachers ... | 41 |
| 4.3.4 | Head teachers' and teachers' response on type of school..... | 42 |
| 4.3.5 | Pupils' response on class level..... | 43 |
| 4.3.6 | Pupils' response on duration in their school | 44 |
| 4.3.6 | Head teachers' and teachers' duration of service | 45 |
| 4.3.7 | Head teachers' and teachers' response on the number of pupils | 46 |
| 4.4 | How adequacy of food in school feeding programme may affect retention rates in public primary schools | 47 |
| 4.4.1 | Head teachers' response on availability of SFP..... | 47 |
| 4.4.4 | Head teachers' response on time food is received for SFP..... | 49 |

| | |
|--|----|
| 4.4.6 Pupils’ response on time food is received for SFP | 50 |
| 4.4.7 Head teachers’ response on quantity of food in school | 51 |
| 4.4.8: Whether food is received in terms of money or dry food..... | 52 |
| 4.4.9 Pupils’ response on quality of food disbursed | 53 |
| 4.5 How the availability of funds for school feeding programmes affects pupils’ retention rates in public primary schools | 54 |
| 4.6 How the forms of school feeding programmes affect pupils’ retention rates in public primary schools | 55 |
| 4.6.1 Head teachers’ response on forms of School Feeding Programmes..... | 55 |
| 4.6.2 Head teachers’ and pupils’ response on number of times food is served | 56 |
| 4.6.3 Head teachers’ response on whether the food served is fortified | 57 |
| 4.6.4 Head teachers’ response on types of nutrients used to fortify food..... | 57 |
| 4.6.5 Pupils’ response on sickness | 59 |
| 4.7 The influence of community involvement in school feeding programmes | 60 |
| 4.7.1 Management and distribution of food in school | 60 |
| 4.7.2 Number of cooks in the school | 61 |
| 4.7.3 Source of cooking fuel in school | 62 |
| 4.7.4 Fuel provision | 62 |
| 4.7.5 Water availability in school | 63 |
| 4.7.6 Head teachers’ responses on who provides water..... | 64 |
| 4.7.7 Teachers responses on pupils’ attendance before community involvement | 64 |
| 4.7.8 Teachers’ responses on pupils’ classroom behavior | 65 |

| | |
|---|----|
| 4.7.9 Teachers’ responses on observable changes in pupils and community members | 66 |
|---|----|

| | |
|--|----|
| 4.8 Suggestions made to improve the school feeding programme | 68 |
|--|----|

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

| | |
|-----------------------|----|
| 5.1 Introduction..... | 70 |
|-----------------------|----|

| | |
|--------------------------------|----|
| 5.2 Summary of the study | 70 |
|--------------------------------|----|

| | |
|----------------------------------|----|
| 5.3 Summary of the findings..... | 71 |
|----------------------------------|----|

| | |
|-----------------------------------|----|
| 5.4 Conclusion of the study | 73 |
|-----------------------------------|----|

| | |
|--|----|
| 5.5 Recommendations of the study | 74 |
|--|----|

| | |
|--|----|
| 5.6 Suggestions for further research | 74 |
|--|----|

| | |
|------------------------|-----------|
| REFERENCES..... | 75 |
|------------------------|-----------|

| | |
|------------------------|-----------|
| APPENDICES..... | 78 |
|------------------------|-----------|

| | |
|---------------------------------------|----|
| Appendix i: Introduction Letter | 78 |
|---------------------------------------|----|

| | |
|--|----|
| Appendix 2: Questionnaire For Headteachers | 79 |
|--|----|

| | |
|--|----|
| Appendix 3: Questionnaire For Teachers | 83 |
|--|----|

| | |
|--|----|
| Appendix 4: Guided Interview Questions To Pupils | 85 |
|--|----|

| | |
|--|----|
| Appendix 5: Authorization Letter | 86 |
|--|----|

| | |
|-----------------------------------|----|
| Appendix 6: Research Permit | 87 |
|-----------------------------------|----|

LIST OF FIGURES

| Figure | Page |
|---|-------------|
| Figure 2.1 Impact of school feeding programme on pupils' retention in public primary schools..... | 30 |

LIST OF TABLES

| Table | Page |
|--|-------------|
| Table 1.1: Overview of gross enrolment at primary level by 2008 | 9 |
| Table 1.2: School Enrollment in Garissa County | 10 |
| Table 1.3 Enrolment of primary school pupils in Fafi between 2010-2014 | 11 |
| Table 4.1: Distribution of head teachers, teachers and pupils by gender | 39 |
| Table 4.2: Distribution of head teachers and teachers by age..... | 40 |
| Table 4.3: Head teachers' and teachers' academic and professional qualifications | 41 |
| Table 4.4: Head teachers' and teachers' response on type of school..... | 42 |
| Table 4.5: Pupils' response to class level | 43 |
| Table 4.6: Pupils' duration in school | 44 |
| Table 4.7: Head teachers' and teachers' response on duration of service | 45 |
| Table 4.8: Head teachers' and teachers' response on the number of pupils | 46 |
| Table 4.9: Head teachers' response on availability of SFP | 47 |
| Table 4.10: Teachers' response on availability of SFP..... | 48 |
| Table 4.11: Pupils' response on availability of SFP | 49 |
| Table 4.12: Head teachers' response on time food is received..... | 49 |
| Table 4.13: Teachers' response on time food is received for SFP..... | 50 |
| Table 4.14: Pupils' response on time food is received for SFP | 51 |
| Table 4.15: Head teachers' response on quantity of food distributed..... | 51 |
| Table 4.16: Whether food is received in terms of money or dry food..... | 52 |
| Table 4.17: Pupils' response on whether food is of quality..... | 53 |
| Table 4.18: Head teachers' response on the source of funds | 54 |

| | |
|--|----|
| Table 4.19: Head teachers’ response on forms of SFP | 55 |
| Table 4.20: Head teachers’ and pupils’ response on number of times food is served | 56 |
| Table 4.21: Head teachers’ response on whether the food served is fortified | 57 |
| Table 4.22: Head teachers’ response on types of nutrients used to fortify food... | 58 |
| Table 4.23: Pupils response on sickness | 59 |
| Table 4.24: Head teachers’ response on management and distribution of food | 60 |
| Table 4.25: Head teachers’ responses on number of cooks in school | 61 |
| Table 4.26: Head teachers’ response on source of cooking fuel..... | 62 |
| Table 4.27: Head teachers’ responses on who provides fuel | 63 |
| Table 4.28: Head teachers’ responses on water availability in school | 63 |
| Table 4.29: Head teachers’ responses on who provides water | 64 |
| Table 4.30: Teachers’ responses on pupils’ attendance before and after community involvement | 65 |
| Table 4.31: Teachers’ responses on pupils’ classroom behavior..... | 66 |
| Table 4.32: Teachers’ responses on observable changes in pupils and community members | 67 |
| Table 4.33: Head teachers’ responses on how to improve the SFP | 68 |

LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|----------|--|
| ASALs | Arid and Semi-Arid Lands |
| AU-NEPAD | African Union- New Partnership for Africa's Development. |
| CDE | County Director of Education |
| CDF | Constituency Development Funds |
| EFA | Education for All |
| FAO | Food and Agricultural Organizations of the United Nations |
| GoG | Government of Ghana |
| GPRD II | Ghana Poverty Reduction Strategy (II) |
| ICBF | Colombian Institute for Family Welfare |
| IFPRI | International Food Policy Research Institute |
| MDG | Millennium Development Goals |
| MoE | Ministry of Education |
| NGOs | Non-Governmental Organizations |
| PCD | Partnership for Child Development |
| PEM | Protein-Energy Malnutrition |
| SCQASO | Sub-County Quality Assurance Officer |
| SFP | School Feeding Programme |
| UNICEF | United Nations International Children Emergency Funds |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WB | World Bank |
| WHO | World Health Organization |
| WFP | World Food Programme |

ABSTRACT

The government of Kenya introduced major reforms in the education sector to improve access and participation of children to basic education. The reforms include Free Primary Education (FPE), provision of bursaries through Ministry of Education and Constituency Development Funds (CDF). However these reforms could not benefit Fafi sub-county as many school age children stayed away from school due to continuous hunger. This prompted the government to launch school feeding programmes in 2008. Thus the purpose of this study was to determine the impact of school feeding programme on the pupils' retention rates in public primary schools in Fafi district, Garissa County. It particularly focuses on the rationale of school feeding programmes, adequacy of food given to pupils, sources of funds, forms of school feeding programmes, frequency and consistency of disbursement of food to public primary schools and community involvement in the school feeding programme influences pupils' retention rates in public primary schools. Issues that prompted this study were that the government of Kenya introduced major reforms in the education sector to improve access and participation of children to basic education. The aims have been to ensure high retention rates and completion rates in schools. This research was based on Abraham Maslow's theory of human motivation 1943. The investigation was conducted using the descriptive survey design. The target population consisted of 24 public primary schools with 121 teachers and a total of 5461 enrolled pupils. Simple random sampling design was used to select the sample size of 12 head teachers 90 teachers and 60 pupils from the target respondents of 162 for this study. Purposive sampling was used to select 3 schools that took part in the piloting study. Research instruments used were two questionnaires for head teachers and teachers and question guided interviews for pupils. Content validity was used whereby research tools were presented to an expert including my university supervisors. Reliability of the questionnaires was done through piloting and split-half. The study yielded data that required both qualitative and quantitative analysis. Quantitative results of data analysis were presented mainly in tables. From the findings of the study, it was established that retention requires availability of food in school on a regular basis. Data analysis also established that the In-school-feeding should be used as an incentive for children to attend school on a daily basis. From the findings, it was also established that community involvement has a positive impact on pupils' retention rates because it brings about harmony among the community, teachers and pupils, hence smooth learning in most public primary schools. The study recommends that public primary schools should be equipped with basic needs necessary for pupils' participation and achievement at school. Also, the Government of Kenya should collaborate

with World Bank, World Health Organization and World Food Programme to ensure that basic needs are provided to learners. Besides, head teachers and teachers should be on the forefront to ensure that school feeding programme policy is implemented in school. Given the scope and limitations of this study, the researcher recommends a replica of the study to be performed in other public primary schools in other districts in hardship areas in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education is a fundamental right for all human beings and is being recognized by the international law of human rights. The right to education has been laid down in several universal and regional documents. For example the African Charter on the Human and Peoples' Rights article 17 provides that every individual shall have a right to education; African Charter on the Rights and welfare of the Child article 11 articulates that every child has the right to free and compulsory basic education. The other documents are the International Convention on Social and Economic Rights Article 13, the Convention of the Rights of a Child, Articles 28, 29 and 30 all that secure the rights of a child to free and compulsory basic education. The Jomtein Protocols (1990) and the Accra Accord (2002) as a follow up to the Millennium Development Goals (MDG), prohibits discrimination in Education. Kenya like any other states in the world is a signatory to these documents. This implies that citizens can hold the state accountable to the children ages 4 to 17 years not in school and receiving quality education (Robert,2001)

According to Hugh and Hawes (2004) education is sometimes called 'human resource development' which is often taken to mean enabling people to become healthy, more able to cope with their circumstances and to change them to be better and more productive in their line of work. It is clear that on any analysis

calculations, improvement of basic education in the rural areas to ensure a strong foundation for development must be a priority area for education (World Bank, 2007).

Education goes beyond reading, writing, and arithmetic, it is one of the most important investments a country can make in its people and its future (World Bank 2007). Thus investing in education is the single most effective means of reducing poverty. Girls and boys, who learn to read, write and count will provide a better future for their families and countries. In short education has the power to make the world a better place (UNESCO, 2012)

According to Bundy (2009), many developing countries missed the 2005 Millennium Development Goals (MDG) of poverty alleviation and provision of universal education at primary level. Therefore if there is to be any chance of meeting 2015 goals, both developing countries and broader international community must dramatically set up the level and the nature of their financial and technical commitments. More than 100 million children of primary school age are not in school with the worst shortfalls in Africa and South Asia (UNESCO, 2011). In countries such as Bangladesh, Benin, Burkina Faso, Cote de voure, Mali, Morocco, Niger and Senegal, more than half of the children from poor families never enroll at all (UNESCO, 2011). Most of these countries are affected by unavailability of critical food supply as a result of droughts, fuel shortages, economic instability and wars. Around 925 million people around the world among them school-aged children are chronically hungry due to extreme poverty, and 2 billion lack food security due varying degrees of poverty (FAO, 2010). Thus

short term hunger keeps children away from school. The four pillars of food security are availability, access, utilization and stability. The United Nations (UN) recognized the Right to Food in the Declaration of Human Rights in 1948 and has since noted that it is vital for the enjoyment of all the rights. In Kenya the school feeding was included in 2005 sessional paper in education and approved by the parliament. The 2008 National Nutrition and food security Policy contains a section of school meals and calls for expansion.

While universal primary school attendance is a stated goal by many governments and the millennium development goals (MDG), enrollment rates continue to be low in many countries(UNESCO, 2007).To foster enrolments many governments have eliminated school fees as well as establish programmes such school feeding programmes (UNESCO, 2004). At least each country around the world has embraced the fact that in order to retain children in school, food a day is important especially those who are from poor households and who can rarely afford the recommended meals a day (WFP, 2004). A meal at a school acts as a magnet to get children to class. Continuing to provide a daily meal to children as they grow helps keep them in school and is a powerful support to achieve educational goals (WFP, 2013). Ensuring that meals provide nutrition that children need to learn and grow is an investment in the child's future. School meals assure that where quality education is available children are prepared to take advantage of learning opportunities (WFP, 2013). School meals are also a catalyst for development. If linked to agricultural production they can also help to increase the incomes of small-scale farmers and boost rural economies. All high-, middle-, and low-

income countries have learned that school meals are important investments (WFP, 2011)

Today at least every country is seeking to provide meals in some way and to some scale to its school children. This has been seen in the advocacy of sound policy to governments and international stakeholders as they play critical role in quality and sustainability of school feeding programmes (Finan, 2007). For example in India the programme is supported by the Supreme Court, in Brazil school feeding programme is included in the constitution, Honduras passed a national congressional bill on school feeding and in Kenya the 2008 National Nutrition and Food Security policy calls for enhancing and expanding school feeding. In many developing countries school feeding is mentioned in the countries' Poverty Reduction Strategies linked to the education, nutrition or social protection sectors or sectoral policies or plans (Bundy, 2009)

According to Finan (2007) in 2003, African governments included locally sourced school feeding programmes as a key intervention within the food security pillar in the Comprehensive Africa Agriculture Development Programme (CAADP). In the same year the New Partnership for Africa Development (NEPAD), together with the United Nations World Food Programme (WFP), and the Millennium Hunger Task Force (MHTF) launched a Home Grown School Feeding and Health Programme (HGSFHP) in twelve African countries. The twelve countries are Angola, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Nigeria, Senegal, Uganda and Zambia. So far Kenya, Ghana, Mali

and Nigeria are already implementing the national programmes with the support from development partners such as WB, PCD and WFP who have been working together since 2008. This is to support the transition from externally driven school feeding programmes to HGSFP. The Partnership for Child Development (PCD) also launched a new programme “PCDHGSF Programme” that will support governments’ action to deliver sustainable nationally owned school feeding programmes sourced from local farmers in sub-Saharan Africa. The PCDHGSFP supported in part by the Bill and Melinda Gates Foundation is providing direct evidence based and specific support and expertise for the design and management of school feeding programmes linked to the local agricultural production.

In general the objectives that are directly associated with school feeding include the adequacy of food, availability of funds for food procurement, types of school feeding programmes and community involvement in the school feeding programmes. The adequacy of food on retention rates can be viewed in terms of quantity, nutrition frequency and consistence. School meals provided early during the school day alleviate hunger before or while classes are in session should help improve attention, concentration and achievement among the children. A school child should be given a large meal in the middle of the day; this is because the child will not eat at many other times from the family pot (Lawson, 2012). Countries such as Nigeria, Ghana, Namibia and Burkina Faso provide to their school children one nutritious meal at mid day. Niger provides three meals a day and gives a token of take home rations to the girls who attend school (Jacoby, 2009).

According to Ahmed (2004), the quality and composition of school meals varies significantly from one country to another and from one school to another. Alderman (2009) argues that nutrition value of the food provided to the school child is significant. He says that although school aged children are past the critical window of opportunity during early childhood for the greatest gain from good nutrition, increasing food nutrition consumption among school-aged children with low baseline food energy or micronutrient intake can improve weight, height, reduce susceptibility to infection and increase in cognitive function in a short run. As the low income countries are embarking on home grown school feeding programmes, their governments are fortifying the meals with some micronutrient so as to meet the required standards of micronutrients. In Mali they have a school feeding centre for overall planning and nutritional quality norms standards (Ahmed, 2004). In Peru breakfast served is fortified with iron (Pollit, 2002).

According to Jacoby (2002), school meals should be available to school throughout the term in order to keep children in school. Any delay in delivery of school meals or break-ups in delivery could lead to absenteeism as it was experienced in northern Namibia where more than half of children stayed away from school for two weeks until the food were delivered (WFP, 2006). Intermittent funding and food break ups thus lead to inconsistent outcomes.

In the past low income countries relied on donors and WFP for funding. Brazil, Canada, Italy and USDA provided multi-year funding which allowed for long term planning. Later the funding was supplemented with explicit handover

strategies to ensure gradual ownership to the programme. In 2009 WFP, reset its corporate policy on school feeding emphasizing on sustainability, government ownership and more from food aid to food assistance. The Bill and Melinda Gates Foundation has provided resources for WFP to strengthen local procurement through a programme called Purchase for Progress (P4P) that will help farmers to connect with local school feeding markets (Espejo, 2009). For instance, in Mali, in 2010, the government allocated US \$5 million and US \$ 5.8million in 2011 from the national budget for food, cooking equipment and infrastructure (WFP, 2011). The Malian government through the Ministry of Finance channels the funds to the regional offices which in turn are sent to the communes at the district level. Communes purchase food in local markets and ensure adequate school infrastructure then school management committees transport food to the schools (Morgan, 2008). Unlike Mali, the Namibian government procures food through three national-level tenders. Each tender is awarded a region. They blend and deliver food to respective schools (WFP, PCD, 2012).

There are two forms of school feeding programmes; in school (on site) school feeding and take home rations (THR). In school feeding is conditional on the attendance of the child on that specific day while take home rations children need to attend a specified minimum number of days (Lawson, 2012). Countries with well established school feeding programmes like Brazil operate with both forms of school feeding with large number of 26 million children under the programme (Burbano, 2011). Ahmed (2004) advocates for the combination of in school and

take home rations. According to Ahmed, in Burkina Faso and Bangladesh the take home rations had a positive spillover onto the younger children who not in school who increased weight-for-height and weight-for-age. The same intervention is being advocated by WFP(WFP, 2011).

Community participation is an important aspect in the implementation of school feeding programmes. This can be in the form of parental or community contribution whether in cash payment or in-kind. Through donations of food or labour, the programmes tend to be stronger and more successful (WFP, 2004). In countries like Haiti, Mali and Ethiopia school committees made of teachers, parents and children are responsible for preparation of food and distribution to children (Finan, 2009). In Nigeria female community members undertake the role of food vendors. The money is transferred to the accounts of female cooks after every two weeks who then procure and distribute commodities and meals and are also responsible for providing cooked meal for a set number of children each school day. Each cook has the national menu for each day (Burbano, 2011).

The Government of Kenyan equally invests heavily in education every financial year. For instance in the last twenty years, public spending in education as a proportion of Gross Domestic Product (GDP) has increased from 5.1 % in 1980/1981 to 15% 2008/2009. The high GDP to education has been seen in the implementation of Free Primary School Education to meet EFA and MDG which require that all school age children should access school. Though primary

education is free, still a good number of children were not able to go to school in 2008/2009 as shown in the table below.

Table 1.1: Overview of gross enrolment at primary level by 2008

| | |
|-------------------------------|-----------|
| Children enrolment in primary | 6 101 000 |
| Out-of-school children | 1 371 000 |
| Gross enrolment ratio | 105% |
| Survival rate to last grade | 84% |
| Repeaters rate all grades | 5.8% |

Source: adapted from WFP Evaluation report, 2009

From the data in Table 1.1 it is evident that despite FPE good number children 22.47 per cent are out of school. This is because most Kenyans live in rural areas whose livelihood is farming; poor land quality and chronic water shortages put the country in constant food insecurity. Thus reduction in enrolment and retention rates in primary schools (UNESCO, 2005).

To alleviate health and developmental consequences of child malnutrition, increase in enrolment and combat of social pressure that limit education opportunities, the Kenyan government begun the feeding programme in 1980 in partnership with WFP. Its aim was to increase enrolment and retention rates of rural school age children. This was part of the country's intention in achieving the goal of universal education. In cooperation with World Food Programme, the government has been able to implement the school feeding programme especially in Arid and Semi-arid areas (ASALS) (MOEST, 2004). By the year 2008 the

WFP was assisting 1 211 000 school children. Thus the free meals should be used as an incentive to attract school-age children in to class. In 2009, the government of Kenya launched a Home Grown School Feeding Programme targeting children previously assisted directly by WFP. This clearly demonstrates the government's commitment to improve children's participation in school through school feeding. The initiative involves the national funding where cash is transferred to school for local purchases of food and represents continuation long-term handover strategy to the government (WFP, 2009). School feeding programme plays an important role on retention rates of pupils at primary school level (Jacoby, 2002).

Garissa County is among the areas in the ASALs where most families have inadequate food supply due to unreliable rainfall hence unable to provide minimum recommended daily food ration. Many school age children stay out of school due to short-term hunger (MOEST, 2004). According to KNBS (2012), there are 191 837 primary school age children in Garissa County. Of this 54.8 per cent are boys while 45.2 per cent are girls (KNBS, 2012). The 2009 census report shows the primary school enrolment in the four districts of Garissa county as follows:

Table 1.2: School Enrollment in Garissa County

| | FAFI IJARA | GARISSA | LAGDERA | |
|--------------|-------------------|----------------|----------------|--------------|
| Male | 2123 | 11841 | 17738 | 18687 |
| Female | 1117 | 8157 | 12565 | 12647 |
| TOTAL | 3240 | 19998 | 30303 | 31734 |

Source: Census 2009 report (August, 2010)

From Table 1.2, it shows that Fafi district has low enrolment of pupils compared to other neighbouring sub counties in Garissa County. This trend, if not well checked, can really affect the achievement of Millennium Development Goals and Education for All goals by 2015. According to SCEO Fafi sub-county, one of the main causes of low enrolment is poverty. Many families cannot afford the recommended daily rations. The SCEO sited that since the launching of HGFS in 2009 by the government of Kenya there has been an increase in enrolment for the last five years. The table below shows enrolment in Fafi Sub-county from 2010-2014.

Table 1.3 Enrolment of primary school pupils in Fafi between 2010-2014

| YEAR | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------|-------------|-------------|-------------|-------------|-------------|
| Boys | 2275 | 2872 | 2883 | 2885 | 3219 |
| Girls | 1330 | 1549 | 1913 | 1944 | 2242 |
| Totals | 3605 | 4421 | 4796 | 4829 | 5461 |

Source: Office of the Sub-County Education Officer, Feb 2014

This is why the study is set to investigate how the adequacy of food, source of food, source of finances, frequency and consistence of distribution of food and role of the community may influence retention rates in Fafi sub-county in Garissa County.

1.2 Statement of the problem

The government of Kenya introduced major reforms in the education sector to improve access and participation of children to basic education. The aims have been high retention rates and completion rates and ensure equity to enroll in

schools. Some of the measures include Free Primary Education which was introduced in 2003, provision of Bursaries through Ministry of Education and Constituency Development Funds (CDF), mobilizing community participation and sponsorship of pupils by religious organizations and NGOs (MOEST, 2010). However, these interventions have not benefited children in Fafi. According to the Sub-County Education Officer, Fafi sub-County suffers from high dropouts and low enrolment which affect retention rates. Hence, the research is interested in the need to establish the impact of school feeding programme on pupils' retention rates in Fafi Sub-County, Garissa County. This study, therefore, seeks to determine ways of attaining completion high rates in this era of Education for All.

1.3 Purpose of the study

The purpose of this research study was to assess the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi District of Garissa County in Kenya.

1.4 Objectives of the study

This research study was guided by the following research objectives:

- i. To determine how adequacy of food in school feeding programme may affect retention rates in public primary schools in Fafi sub-county.
- ii. To assess how the availability of funds for school feeding programmes may affect pupils' retention rates in public primary schools in Fafi sub-county.
- iii. To determine how forms of school feeding programmes may affect pupils' retention rates in public primary schools in Fafi sub-county.

- iv. To examine the influence of community involvement in school feeding programmes on retention rates in public primary schools in Fafi sub-County.

1.5 Research questions

- i. What is the effect of the adequacy of food in school feeding programme on pupils' retention rates in public primary schools in Fafi sub-county?
- ii. How does the availability of funds for school feeding programmes affect pupils' retention rates in public primary schools in Fafi sub-county?
- iii. How do the forms of school feeding programmes affect pupils' retention rates in public primary schools in Fafi sub-county?
- iv. To what extent does the community participation on school feeding programmes influence retention rates in public primary schools in Fafi sub-county?

1.6 Significance of the study

This study provides a basis in new paradigms of school feeding programmes. The study sought to examine the impact of school feeding programmes on retention rates hence the information forms a basis for recommendations for relevant adjustments aimed at making the feeding programmes effective and improving its quality so as to meet the target of education for all by 2015.

The viability of the study also lies in the necessity to assist teachers, head teachers, Sub-County Quality Assurance Officer (SCQASOs), County Directors

of Education (CDE) and the Ministry of Education (MoE), Non-Governmental Organizations (NGOs) and other research scholars. To teachers and head teachers in the study were useful in the review of the planning of the program. The SCQASOs and the CDEs would use the findings to plan for the achievement of the 2015 EFA goals. The Non-Governmental Organizations and other philanthropic parties would be able to use the outcomes of the research as a way to plan on how to fund the school feeding programme. Other research scholars would use the findings as a point of reference for their further research. The study therefore focuses on the impact of school feeding programme on retention rates in public primary schools in Fafi Sub-county Garissa County in Kenya.

1.7 Limitations of the study

The research on the impact of school feeding programme on retention rates in Fafi district was likely to be affected by a number of challenges: language and cultural differences between the researcher and the subjects, harsh weather conditions which would affect interviews, insecurity due to terrorist attacks and transport difficulties due to poor road networks.

1.8 Delimitations of the study

Delimitation is the process of reducing the study population and area to manageable size. This study was delimited in terms of the scope that it covered. Firstly, it covered public primary schools where school feeding programmes were being run and not any other levels of education. Secondly, the study focused on public primary schools and excluded privately sponsored (academies) schools.

Lastly, the study focused on school feeding and retention rates and thereby overlooked other factors such as enrolment, drop out and repetition rates which are suitable for other studies.

1.9 Basic assumptions

The study based on the following assumptions:

- i) The school feeding programme had an impact on retention rates.
- ii) The head teachers would allow the researcher to have access on pupils' attendance records for the past five years.
- iii) The SCQASOs would allow the researcher to have access to records on the time the food is received and the quantity received.

1.10 Definition of significant terms

Beneficiaries refer to those who receive benefits of a particular social programme. In this case it is children who receive food from national school feeding programme.

Development Partners refers to an umbrella term for stakeholders and donor organizations supporting national development strategies. Development partners include UN Organizations (WFP, UNICEF,WHO), International Non-Governmental Organizations(Plan International, Save the Children International, world Vision International, Care International, and Relief International) and international organizations such as WB, PCD, International Food Policy Research Institute and the Millennium Villages Project and civil society at the local level.

Enrolment rates refer to the number of children of official primary school age who are enrolled in primary education as a percentage of the total children of the official school age population.

Fortification refers to the practice of deliberately increasing the content of essential micronutrients such as Vitamin A, Iron, Iodine or zinc to foods.

Investment refers to the total budget to school feeding by the government or WFP or an estimation of that budget.

Primary school refers to an institution in which children receive the first stage of compulsory education known as primary or elementary education, usually attended by children aged 4-12 years.

Retention refers to the children who stay in school until the completion of primary education.

Safety nets refer to the programmes that provide cash or in-kind benefits that seek to reduce poverty and vulnerability.

School feeding programme refers to targeted social safety nets that provide both educational and health benefits to the most vulnerable children thereby increasing enrolments rates reduce absenteeism and improving food security at the household level.

Targeting refers to an approach used to concentrate resources of programmes on the poor or vulnerable. In school feeding programmes can be individual, geographical or universal.

1.11 Organization of the study

The study is organized in five chapters. Chapter one focuses on background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitation of the study, basic assumptions and definition of the significant terms. Chapter two includes introduction, rationale to school feeding programmes, sources of funds and food and pupils' retention rates, adequacy of food and pupils' retention rates, Frequency and consistency disbursement of food and funds and pupils' retention rates, role played by the community in school feeding programme, summary of the literature review, theoretical framework, and conceptual framework. Chapter three explores introductions, research design, target population, sample size and sampling procedure, research instruments, instrument validity, instrument reliability, data collection procedures data collection procedure and data analysis techniques. Chapter four focuses on data representation, analysis and interpretation. Chapter five presents summary conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature related to the impact of school feeding programme on the pupils' retention rates in public primary schools. It particularly focuses on the rationale of school feeding programmes, adequacy of food given to pupils, sources of funds, forms of school feeding programmes, frequency and consistency of disbursement of food to public primary schools and community involvement in the school feeding programme influences pupils' retention rates in public primary schools.

2.2 Rationale of school feeding programmes

School feeding is a tool which today effectively enables hundreds of millions of poor children worldwide to attend school in developed and developing countries alike (WFP, 2004). Apart from enabling education, school feeding also has a positive direct and indirect benefits relating to a number of development goals namely gender parity, poverty and hunger reduction, partnerships and cooperation, HIV/AIDS care and prevention and improvements in health (WFP, 2008). Even in the most developed nations, there are hungry children who can be helped by school meals. Millions of school children have benefited from school feeding in Finland, Japan and United States examples of excellent programmes which have been sustained over several decades (UNESCO, 2010).

School feeding can enable children to go to school despite of poverty and hunger. More specifically school feeding can; alleviate short-term hunger, improve school enrolment, attendance and reduce drop-out rates, improve pupils learning, cognitive functions, in class behaviour, academic performance and ability to concentrate, provide a vehicle for micronutrient supplementation, contribute to children's psychological well being, improve household food security, alleviate some of the cost of children's schooling, act as an effective platform for other needs input, mobilize and build capacity of national governments and partners, work as an effective tool against HIV/AIDS and create jobs and provide sector opportunities. Thus school feeding can be scaled up to become the major tool in achieving the goal of Education for all (WFP, 2004). Many governments and other experienced organizations can significantly reach large numbers of children if adequate resources (food and enough cash to manage) were available.

The economics of Education for All are daunting. This calls for donors and recipient governments to focus wholeheartedly on the core necessities. Recipient governments need to clearly state their needs and demonstrate their own commitment that they can organize their resources and priorities to support the feeding programmes (WFP, 2008).

2.3 Adequacy of food on retention rates

The adequacy of food can be viewed in terms of quantity and quality (nutrition).

2.3.1 Quantity of food on retention rates

The best ration is very essential in the SFP. School meals provided early in the school day alleviate hunger before or while classes are in session should help improve attention, concentration and achievement among children. A school child should be given a large meal in the middle of the day; this is because the child will not eat many other times mid-day from the family pot (Lawson, 2012). The nutritional quality and quantity of a ration should always be assessed as well as timing and delivery of ration. A school snack or meal usually provide one-third to one-half of the recommended daily allowance for energy and protein for the school age group targeted by the programme. Adolescents require larger portions to meet increased nutritional needs during this period. On average a child in primary school aged 4-8 years require 1692 calories per day and the one aged 9-13 years of age require 2195 calories per day (Leathers and Foster, 2009).

In Namibia, every child participating in school feeding programme is entitled 125 grams of fortified dry maize flour for porridge with biscuits made from *mahungu*(WFP&PCD, 2011). In Nigeria, each child is served with one cooked meal per day with adequate ration (Burbano, 2011). Inadequacy designed rations results in unsatisfied pupils (Stevenson, 2008). According to WFP (2008), the quantity of food was still low and with same varieties in most of the countries practicing school feeding programmes. This may affect the enrolment hence retention rates in those schools.

2.3.2 Quality of food disbursed on retention rates

The quality of food disbursed during school feeding programme to pupils in public primary schools encompasses the nutrition values of food provided. (Alderman, 2009) argues that although school aged children are past the critical window of opportunity during early childhood for the greatest gains from good nutrition, increasing food and nutrition consumption among school-aged children with low baseline food energy or micronutrient intake can improve weight, height, reduce susceptibility to infection and increase in cognitive function in the short run.

According to the World Hunger Education Service (2012), under nutrition is the biggest cause of the global diseases that contributes to 35 % of child death particularly in developing countries. Families facing poverty food choices are usually limited resulting in nutritionally inadequate, diet that are often deficient in vital micronutrients (Ash, 2009). Thus a universal approach is required to improve the health of these poorest children and the disadvantaged by maximizing developmental potential and lifelong health (Van de Poel, 2008). Study carried out by International Food Policy Research Institute (2008), found out that there was improved cognitive function in Kenyan children who were provided with school meals rich in animal source food. Jamison, (2006) argues that food for education can reduce short term hunger and micronutrient deficiencies which can increase in cognitive function and resistance to intestinal and respiratory infections.

According to Adair (1999), Arsenault et al (2009) children with stunted growth can be able to catch up with their counterpart if provided for with meals fortified with iron or vitamin B-12. The important period of growth and body composition occurs in the early stage of life well, before enrolment in school, but school feeding programme meals or snacks can easily be fortified to help to provide micronutrients that are commonly missing from children's diets. This is especially important for school-age children as brain is sensitive to lack of nutrients in the short term, which maybe especially a problem for malnourished children (Pollit, 1995). Chikuni (2010) concurs that children who were under school feeding programme in Malawi attended school regularly and were punctual with tremendous improve in performance and behaviour with minimal illnesses. Abdullahi (2012) in his study on SFP in Wajir North suggested that quality of food will tremendously improve the health of pupils.

The WFP came up with guidelines on how to ensure that meals given to school pupils are of better quality. Suggested plumpy-nuts for severe state of under nutrition and soya beans and peanuts where extra protein is needed (WFP, 2004). The addition of Micro-Nutrient Powder (MNP) to meals was an effective way of improving vitamin and mineral content in Tanzania and Cambodia. It changed the pupils' behaviour, including low incidences of diseases and improved learning capacity, better attendances and less inattentiveness (Leather and Foster, 2008).

2.4 Sources of finances for food on retention rates

Sources of finances for school feeding programme to public primary schools may have influence on enrolment and retention rates. This can be viewed in terms of Funds and forms and source of food distributed during school feeding programmes.

2.4.1 Funds for school feeding programme on retention rates

There are various ways through which food may be procured for the school feeding programmes (SFP). For instance in the United States of America, each fiscal year, treasury releases money to the agricultural secretary, who in turn makes the money available to the states. Then the state agency disburses money to the school food authority that then purchases the food (Russell, 2014). Until recent past (for example in Kenya in 2009) food for these programmes often came from donations from Development Partners in the form of food aid delivered through organizations such as World Food Programmes (WFP).

These days emphasis has been on local, that's national or community level procurement for the case of Burkina Faso (Upton, 2012). At local level for example Kenya, the Home Grown School Feeding (HGSF) model was introduced to source as much food as possible from local communities to keep down costs and support agriculture. Funds for food procurement (budget fixed as Kshs 7 per child per day) are channeled directly from Ministry of Education to dedicated school bank accounts and school committees purchase food. Another method of school feeding programme is the purchase of food by the government then it is

distributed by the government to school at the beginning of the term (central processing) (MoE, 2009). Carman et al (2011) argues that with increase in global food and fuel prices and also insufficient rains in countries practicing HGSF may lead into breakages of food disbursement or reduced food purchase. In addition the sustainability of the programme is also a great concern as most countries depend on donor funding.

2.4.2 Forms of school feeding programmes on retention rates

The purpose of school feeding is to provide sustainable, secure and nutritious source of food. There are two forms of school feeding programmes; in school feeding and take home rations. In school feeding programs provides meals or snacks to school children on site while Take Home Rations (THR) food mostly dry cereals and oil are provided to children for consumption at home (Lawson, 2012). The benefit of food provided under the in school feeding programme is conditional on the attendance of the child on that specific day. Thus an advantage of the programme is that it serves as an incentive for children to attend school on a daily basis to receive a meal. On the other hand, THR children need only to attend a specified minimum number of days. SFP where children are served with cooked meals onsite or pre-packaged snack or beverage the programme may need to rely on a functional food processing sector at the regional or national level to meet the needs.

Take Home Rations are usually conditional to meeting a minimum threshold of attendance and are usually distributed monthly; for example in Burkina Faso the

WFP managed programmes requires 90% for that month to receive the monthly ration (Kazianga, 2008). This type of programme may be good in targeting specific groups of children or families within a community as the distribution may occur in separate location from the school or may occur outside of regular school hours. In areas where enrollment and attendance for children are lower especially girls, THR may be employed to boost their attendance (thus promote education for girls). In Afghanistan Take-Home-Rations proved to be more effective due to wheat deficiency and poor household access to markets (State of School Feeding Worldwide, 2013). Some SFP may include both onsite meals and THR, while others apply THR or school meals when children are given pre-packaged foods that can be consumed at home and possibly shared with other family members who will also benefit in terms of the micronutrient. However the purchased the food face a challenge to reach the intended beneficiaries due to inaccessibility of the schools. Most schools are based in remote parts of the country with poor infrastructural networks.

2.5 Frequency and consistence on retention rates

The meals provided in school should be available throughout the school day to ensure pupils do not miss. In Nigeria enrollment was one of the oldest in the world; therefore retention rates was next to nil. The WFP assisted by providing three meals a day and when school canteens were closed, immediate high absenteeism and children were withdrawn from school (WFP2004). Therefore retention requires availability of food in a school on regular basis. Regular food intake is vital for the continuity of retention of pupils in schools. In Ghana for

sustainability of the feeding programme in the schools, agricultural input helped them to develop a culture of self reliance by the government of Ghana. Also the school self-reliance projects were encouraged by school committees to establish school gardens and rear livestock to help to replace WFP. Therefore some of the schools were able to supplement WFP as they supplied commodities while others were self-reliant and were able to provide meals to higher grades (Afoakwa, 2005).

2.6community involvement on retention rate

Communities around the school play an important role in the implementation and process of school feeding programmes. Lack of community participation may lead to a failed programme for the case of Afghanistan where the school based bakery failed due to lack of management capacity and community participation (State of school feeding worldwide, 2013).The school feeding programmes that respond to community needs are locally owned, and that incorporate some form of parental or community contribution, whether cash payment or in-kind. Through donated food or labour, the programmes tend to be stronger and most likely to make a successful transition from donor assistance. Programmes that build this component in from the beginning and consistently maintain it have the most success (WFP, 2010). In Malawi, the community is responsible for cooking, bring firewood, store keeping and serving of meals (Chikuni, 2010).

While in Namibia the community members prepare meals at school, construct cooking shelters, construct store rooms, protect the school premises, organize at

least three meetings per annum to discuss the activities in connection to national school feeding programmes, organize fundraising activities, assist with the school vegetable gardens and parents provide plates and spoons (WFP September, 2012). According to Ahmed (2004), meals prepared and served on time will be able to alleviate short term hunger and increase concentration of pupils. Thus the school feeding programme brings about harmony among the community, teachers and pupils hence smooth learning (Abdullahi, 2012).

2.7 Summary of literature reviewed

This chapter has brought to light the impact of school meals on retention rates. School meals have been traced as a tool that can be used to attract children in school and without which the Millennium Development Goals and EFA goals might not be realized.

It has been noted that at least in history every country is trying to give its school children a meal of a certain scale. This is because most of these countries experience low enrolments and high dropout rates leading to low retention hence low completion rates.

The issue discussed here include adequacy of food, sources of finances and food, frequency and consistency in food distribution and community involvement in school feeding programmes and how they impact on retention rates. Most governments are addressing the issue of school meals and retention rates and

Education For all by 2015. Hope this study will add the new impetus towards achieving those goals.

2.8 Theoretical framework

The study is based on Abraham Maslow's theory of human motivation 1943. This theory asserts that while people aim to meet basic needs, they aim to meet successfully higher needs in the form of a pyramid. Maslow's Hierarchy of needs have often been presented in a hierarchical pyramid with five levels with the largest and most fundamental at the bottom and need for self actualization at the top. The four levels referred to as deficiency needs ("D-needs") are all considered as physiological needs while the top as growth needs. The five needs are:

Physiological → safety → love/belonging → esteem → self actualization

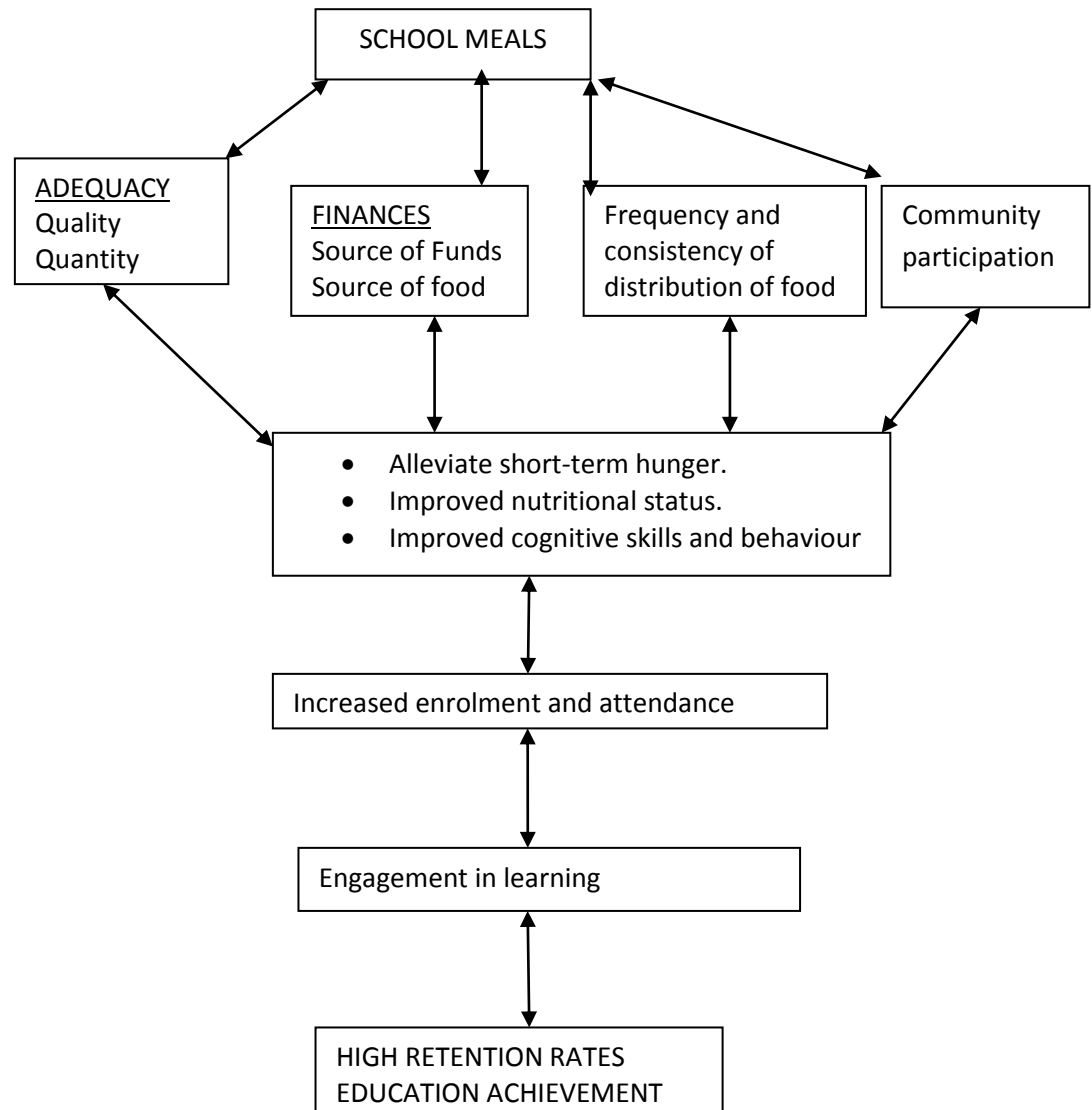
Griffin (1970) attributes that lack of physiological needs creates tension and discomfort within us. He argues that the needs are universal urges and not created by culture, therefore if society denies them then we become ill. Therefore giving meals to a hungry child in school satisfies the first four levels of Maslow's hierarchy of needs. The first level which is the physiological needs such as food and water will be satisfied. In addition, the second level which is the safety need will be satisfied in form of personal security, financial security and health security. As the pupil will be in school learning there will be love and belonging in that the school creates a warm environment as the child has friendship with teachers and fellow pupils. This eventually brings in the self-esteem as the pupil is

being appreciated, accepted and valued by teachers and the rest of the pupils. This retains the child in school which was the ultimate goal for the government; hence the government realizes the EFA goals reaching its self-actualization. Enrolment and retention rates in primary school is therefore a vital component of hierarchy of needs as it is concerned with how the needs are going to be satisfied. When factors of school feeding programmes are organized, planned and implemented logically in primary schools, there is a granted enhanced enrolment and retention rate.

2.9 Conceptual framework

Figure 2.1 represents conceptual framework.

Figure 2.1 Impact of school feeding programme on pupils’ retention in public primary schools



Source: Adapted and modified from Alexander, R. (2008). 'Education for All, the Quality Imperative and the Problem of Pedagogy.'

The conceptual framework provides a means of understanding how retention rates in public primary schools are influenced by school feeding programme. This programme includes; quantity of food to public primary schools, quality of food disbursed to public primary schools, sources of finances for disbursement of food

to public primary schools, community participation in feeding programmes and forms of food disbursed to public primary schools. All these variables have a bearing on primary schooling and will be treated as the independent variables. The intervening variable will be short term hunger, improved nutrition and improved cognitive skills and behaviour of pupils. The dependent variables will be enhanced retention rates and education achievement.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter consists of research design, target population, sample size and sampling techniques, research instruments, data collection procedures, instruments validity, instruments reliability and data analysis techniques.

3.2 Research design

The study utilized a descriptive survey research design (Borg & Gall, 1995). The researcher preferred descriptive survey research design because the research was intended to produce statistical information about the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-County of Garissa County in Kenya. Moreover, the design allowed gathering of information, summarizing, analyzing, presenting and interpreting it for the purpose of clarification. This is in line with Koul (1984) who points out that descriptive survey research design can enable the researcher to collect descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or make more intelligent plans for improving them.

3.3 Target population

Target population refers to an entire group of individuals, events or objects having a common observable characteristic of interest to the researcher (Mugenda&Mugenda 2003). According to Fafi District Education office schools' data, by February 2014, the district has 121 teachers; 84 male teachers and 37 female teachers. In addition, the district has 24 public primary schools with a total of 5461 enrolled, out of which, 3219 are boys and 2242 are girls (Fafi Sub-County Education office, February 2014).

3.4 Sample size and sampling techniques

A large sample was statistically chosen for this study so as to minimize the possibility of sample error. Three (3) schools were used for piloting study. Kombo and Tromp (2006) observed that a sample size of at least 10% of the target population would be representative. Based on this premise, 60% of the remaining 21 public primary schools were adequate for the purpose of this research study. The researcher used a sample size of 12 public primary schools.

Simple random sampling technique was applied to select the 12 schools out of the total 21 public primary schools in the district because all the 21 public primary schools in the district had the same probability of being chosen. From the 12 sampled primary schools, head teachers were purposively selected to participate in the study because they were key administrators in public primary schools. Eight class teachers from the sampled schools were selected to participate in the study through purposive sampling because they were likely to have more

information about their pupils, since they were always charged with the responsibility of marking class attendance register and constantly interact with pupils, parents and the other teachers. Five pupils from each sampled school were interviewed because they were the direct beneficiaries of the programme. In summary, the research study had a sample size of 168 respondents, which comprised 12 head teachers and 96 teachers and 60 pupils.

3.5 Research instruments

A research instrument is a device or tool used for gathering and collecting data with the view of answering stated research questions (Oso&Onen 2009). Research instruments used were two questionnaires for head teachers and teachers which were utilized for data collection and question guided interviews for pupils. Each questionnaire was divided into two; Part A based on respondents' demographic information while Part B comprised questions about the impact of school feeding programmes on pupils' retention rates.

3.6 Data collection procedures

The researcher carried out the research study for a period of about four months under the guidance of the university supervisors. Upon approval of the research proposal, the researcher first obtained research permit from the National Commission of Science, Technology and Innovation (NACOSTI). Upon being granted the permission to carry out the research study, the researcher reported to Fafi District Education Officer (DEO) for further permission and then proceeded to the selected primary schools with a letter of introduction explaining the purpose of the study and the research permit.

The researcher visited the selected primary schools in the district and further obtained permission from the head teachers in order to access the respondents. The researcher personally administered the questionnaires to class teachers, the head teachers and interviewed pupils.

3.7 Instruments validity

Validity is the degree to which a test measures the variables it purports to (Kathuri & Pals, 1993). There are several types of validity. This study used content validity. Content validity is the degree to which the content of the test are related to the traits for which it was designed to measure. The validity of the research tools was judged by presenting them to an expert including my university supervisors who ascertained their face validity and made commendable corrections especially in the relevance of the tools in the research study objectives (Best & Kahn 1998).

3.8 Instruments reliability

According to Mugenda and Mugenda (2003), the reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. To establish the reliability of the questionnaires, pre-testing through piloting method was done. The reliability r guided the researcher on the magnitude and direction of the relation. It varies from -1.00 to 0 showing negative association and 0 to 1.00 showing positive association. A reliability of 0 shows no relation while that +1 or -1 shows perfect positive or perfect negative reliability respectively. The split-half method was used to determine the

instrument reliability. The split-half involves splitting the questionnaires into two halves for example odd and even number item. Pearson's correlation coefficient r was calculated for the score of the two halves of questionnaires.

The formula is shown below

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

Where r = degree of relationship between odd and even numbers

$\sum x$ = sum of odd number scores

$\sum y$ = sum of even number scores

$(\sum y)^2$ = square of $\sum y$

$(\sum x)^2$ = square of $\sum x$

$\sum x^2$ = sum of square of x

$\sum y^2$ = sum of square of y

$\sum xy$ = sum of product of x and y

N = number of paired odd and even numbers

The spearman Brown prophecy formula was used to calculate reliability (Re) of the test as shown below.

$$\frac{Re}{1+r} = 2r$$

Where

Re = reliability

r = Pearson's reliability

From piloting results, the reliability of the instrument will be established and their suitability for the study.

3.9 Data analysis techniques

After data collection, the researcher checked the questionnaires for completeness, accuracy and uniformity of the information obtained. Different forms of data were expected to be collected. Both descriptive and inferential statistics was used in the analysis. Frequency distribution tables were used to represent the demographic

information of all respondents in Part A of each questionnaire. Analysis of Part B was used to answer rest of the questions on impact of school feeding programmes.

Observation checklist findings were also useful in answering the questions. Then the processed data was presented in form of percentages and tables, upon which the data findings were interpreted easily without strain. All this were done along the specific objectives of this research study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter gives a detailed analysis of the research findings on the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-county of Garissa County in Kenya. Presented are the findings from the field. The findings are based on the objectives set; adequacy of food given to pupils, sources of funds, forms of school feeding programmes, frequency and consistency of disbursement of food to public primary schools and community involvement in the school feeding programme. Data is analyzed both manually and by use of SPSS computer programme.

4.2 Instruments return rate

A total of 96 teachers' questionnaires and 12 head teachers' questionnaires were distributed. Besides, question guided interviews (Best and Kahn, 2006) were used by the researcher to capture responses from 60 pupils. Ninety (90) teachers' questionnaires, 12 head teachers' questionnaires and 60 pupils' question guided interview schedules were returned fully completed. This represented 94.0% and 100% return rates for head teachers and pupils respectively. The return rate was considered reliable for the purpose of study because it was above 70% (Koul, 1984). The data collected was tabulated as per the questionnaires and question

guided interviews for pupils systematically covering all the items as per the research objectives.

4.3 Demographic data of the head teachers, teachers and pupils

It was essential for the study to gather data on head teachers', teachers' and pupils' background in terms of gender and age. Head teachers' and teachers' academic and professional qualifications were also captured. These variables would directly or indirectly have an impact on school feeding programmes and hence influence pupils' retention rates in public primary schools. The head teachers', teachers' and pupils' demographic data are summarized as follows:

4.3.1 Gender of the head teachers, teachers and pupils

Gender was considered important in this study because it could directly or indirectly influence pupils' retention rates in public primary schools. Head teachers, teachers and students were, therefore, required to indicate their gender and data collected was tabulated in Table 4.1.

Table 4.1: Distribution of head teachers, teachers and pupils by gender

| Gender | HTs | % | Teachers | % | Pupils | % | Total | % |
|---------------|------------|--------------|-----------------|--------------|---------------|--------------|--------------|--------------|
| Male | 10 | 83.3 | 66 | 73.3 | 39 | 65.0 | 115 | 71.0 |
| Female | 2 | 16.7 | 24 | 26.7 | 21 | 35.0 | 47 | 29.0 |
| Total | 12 | 100.0 | 90 | 100.0 | 60 | 100.0 | 162 | 100.0 |

Table 4.1 shows that the respondents for this study were predominantly male. Out of 162 respondents, 71.0% were male head teachers, teachers and pupils. One gender dominating in a given school can affect pupils in one way or another especially when it comes to matters of availability of food in a school on regular basis for the continuity of retention of pupils in schools.

4.3.2 Head teachers' and teachers' age

Head teachers and teachers were also asked to indicate their age bracket and the data collected are in Table 4.2.

Table 4.2: Distribution of head teachers and teachers by age

| Age in years | HTs | % | Teachers | % | Total | % |
|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| 21-30 | 0 | 0.0 | 20 | 22.2 | 20 | 19.6 |
| 31-40 | 8 | 66.7 | 56 | 62.2 | 64 | 62.7 |
| 41-50 | 3 | 25.0 | 12 | 13.3 | 15 | 14.7 |
| 51-60 | 1 | 8.3 | 2 | 2.3 | 3 | 3.0 |
| Total | 12 | 100.0 | 90 | 100.0 | 102 | 100.0 |

From Table 4.2, the results indicate that a majority of head teachers (66.7%) and teachers (62.2%) were in the age bracket of 31-40 years respectively. The age of head teachers and teachers indicate that they have good experience, knowledge and understanding when it comes to planning, organizing, coordinating and controlling feeding programmes to enhance retention in schools.

4.3.3 Academic and professional qualifications for head teachers and teachers

Academic and professional qualifications of head teachers and teachers were also factors considered in this study. Head teachers' and teachers' academic and professional qualifications directly or indirectly determine how both feeding programmes and other material resources can be handled in planning of public primary schools. This in turn has an impact on pupils' retention rates in public primary schools in Kenya.' Head teachers' and teachers' academic and professional qualifications are shown in Table 4.3.

Table 4.3:Head teachers' and teachers' academic and professional qualifications

| Qualification | H/Ts | % | Teachers | % | Total | % |
|----------------------|-------------|--------------|-----------------|--------------|--------------|--------------|
| B.Ed | 1 | 8.3 | 6 | 6.7 | 7 | 6.9 |
| Diploma | 2 | 16.7 | 7 | 7.8 | 9 | 8.2 |
| P1 | 9 | 75.0 | 75 | 83.3 | 84 | 82.4 |
| Form 4 | 0 | 0.0 | 2 | 2.2 | 2 | 2.5 |
| Total | 12 | 100.0 | 90 | 100.0 | 102 | 100.0 |

Results from Table 4.3 show that the majority of the head teachers and teachers (82.4%) were P1holders. Another percentage of head teachers and teachers (8.2%) had Diploma. The overall planning of public primary school feeding programmes is vested in the hands of teachers and head teachers. It is, therefore,

imperative that head teachers and teachers be persons with good education and sufficient practical knowledge in educational planning.

4.3.4 Head teachers' and teachers' response on type of school

Type of school was another factor to be considered in this study. Type of school in one way or another, coupled with feeding programme might have impact on pupils' retention rates in public primary schools in Fafi Sub-county of Garissa County in Kenya. Data was collected from head teachers and teachers and results tabulated in Table 4.4.

Table 4.4: Head teachers' and teachers' response on type of school

| Type of school | H/Ts | % | Teachers | % | Total | % |
|------------------------|-------------|--------------|-----------------|--------------|--------------|--------------|
| Mixed boarding | 2 | 16.7 | 16 | 17.8 | 18 | 17.6 |
| Mixed Day | 9 | 75.0 | 60 | 66.7 | 69 | 67.6 |
| Mixed day and boarding | 1 | 8.3 | 14 | 15.5 | 15 | 14.8 |
| Total | 12 | 100.0 | 90 | 100.0 | 102 | 100.0 |

From Table 4.4, the majority of head teachers and teachers (67.6%) indicated that most schools in Fafi sub county in Garissa County are mixed day. These pupils are faced with many challenges compared to those in boarding schools (Finan, 2010). A few schools are given boarding facilities to enhance pupils' retention

and access to education. Boarding facilities could also enable head teachers and teachers to implement the feeding programme effectively.

4.3.5 Pupils’ response on class level

Pupils were required to indicate the grade level and results were tabulated in Table 4.5.

Table 4.5: Pupils’ response to class level

| Class | Pupils | % |
|--------------|---------------|--------------|
| Class 1-2 | 10 | 16.7 |
| Class 3-4 | 25 | 41.7 |
| Class 5-6 | 15 | 24.9 |
| Class 7-8 | 10 | 16.7 |
| Total | 60 | 100.0 |

Results from Table 4.5 show that the distribution of the pupils in classes is high in class 3-4 (41.7%) followed by class 5-6 (24.9%). In lower classes pupils’ enrolment is usually high but when they go up some start dropping out. Interviewed one of the head teacher., he asserted that this was as a result of lack of basic needs, food in particular of which (Finan, 2010) echoes the same sentiments that that lack of this basic needs especially food lead to massive dropout in hunger stricken areas. Class 7-8 is a transition to secondary education that requires pupils to be supported well both at school and home for them to participate well in education. This makes them stay at home to assist parents in

one way or another to acquire basic needs. If supported well at school, through feeding programmes, there is an indicator that most pupils would participate in primary education fully. This would enhance retention rates.

4.3.6 Pupils’ response on duration in their school

Pupils were to respond on the duration in their school. Data collected is tabulated in Table 4.6

Table 4.6: Pupils’ duration in school

| Duration in school | Pupils | % |
|---------------------------|---------------|--------------|
| Below 1 year | 6 | 10.0 |
| 1 – 3 years | 22 | 36.7 |
| 4 – 6 years | 19 | 31.7 |
| 7 – 8 years | 11 | 18.3 |
| Over 8 years | 2 | 3.3 |
| Total | 60 | 100.0 |

Table 4.6 indicates that a slightly fair percentage of pupils had been in that school for at least 1-3 years (36.7%). This indicates that at classes 1-3 the enrolment rate is fairly good. At class 4-6 the enrolment rate drops slightly. At class 7-8 it is a bit low. This call for a way retain the pupils in school, hence the need for feeding programme. On the contrary, duration in school indicates that pupils had good

information on the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-county of Garissa County in Kenya.

4.3.6 Head teachers' and teachers' duration of service

Head teachers and teachers were asked to indicate the duration of service to determine if they had good information on the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-county of Garissa County in Kenya. The data is presented in Table 4.7.

Table 4.7: Head teachers' and teachers' response on duration of service

| Duration of service | H/Ts | % | Teachers | % | Total | % |
|----------------------------|-------------|--------------|-----------------|--------------|--------------|--------------|
| 0-3 years | 0 | 0.0 | 15 | 16.7 | 15 | 6.9 |
| 3-6 years | 1 | 8.3 | 46 | 51.1 | 47 | 46.1 |
| 6-9 years | 3 | 25.0 | 17 | 18.9 | 20 | 19.6 |
| 9-12 years | 5 | 41.7 | 7 | 7.8 | 12 | 11.8 |
| Above 12 years | 3 | 25.0 | 5 | 5.5 | 8 | 15.6 |
| Total | 12 | 100.0 | 90 | 100.0 | 102 | 100.0 |

Table 4.7 indicates that 46.1% of head teachers and teachers had served for 3-6 years. These head teachers and teachers, therefore, had good information on of

school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-county of Garissa County in Kenya.

4.3.7 Head teachers' and teachers' response on the number of pupils

It was also necessary for the researcher to collect data on the number of pupils in schools in Fafi Sub-county of Garissa County, Kenya. Data collected was then presented as follows in Table 4.8.

Table 4.8: Head teachers' and teachers' response on the number of pupils

| Number of HTs | % | Teachers | % |
|----------------------|-----------|-----------------|--------------|
| Less than 100 | 2 | 1 | 1.1 |
| 100-200 | 4 | 28 | 31.1 |
| 300-400 | 6 | 60 | 66.7 |
| 500- 600 | 0 | 1 | 1.1 |
| Total | 12 | 90 | 100.0 |

Results from Table 4.8 show that the majority of the schools had students ranging between 300 and 400. There were very few schools with less than 200 students. This is a good number to determine the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub county of Garissa County, Kenya.

4.4 How adequacy of food in school feeding programme may affect retention rates in public primary schools

The first objective of the study was an inquiry on the how adequacy of food provided to the pupils affected their retention in the school system. The adequacy of food can be viewed in terms of quantity and quality (nutrition). It was therefore imperative for this study to solicit for the information concerning quantity and quality of food disbursed in schools on retention rates. To operationalise quantity and quality effectively and efficiently, Lawson (2012) highlighted the need for a school child to be given a nutritional quality and quantity of ration which should always be assessed as well as timing and delivery. Hence data was collected and tabulated from head teachers', teachers' and pupils' response on the following items related to how adequacy of food in school feeding programme may affect retention rates in public primary schools in Fafi sub-county.

4.4.1 Head teachers' response on availability of SFP

Head teachers were to indicate whether SFP was available. Data collected was tabulated in Table 4.9.

Table 4.9: Head teachers' response on availability of SFP

| Response | HTs | % |
|-----------------|------------|--------------|
| Yes | 12 | 100.0 |
| Total | 12 | 100.0 |

The results from Table 4.9 indicate that all head teachers accepted that SFP was available in public primary schools in Fafi sub county of Garissa County, Kenya. This shows that SFP was implemented in schools, head teachers being on the forefront of the programme.

4.4.2 Teachers’ response on availability of SFP

Teachers were to indicate whether SFP was available because they have good knowledge and information when it comes to SFP in their schools. Data collected was tabulated in Table 4.10.

Table 4.10: Teachers’ response on availability of SFP

| Response | Teachers | % |
|-----------------|-----------------|--------------|
| Yes | 90 | 100.0 |
| Total | 90 | 100.0 |

The table shows that teachers responded that SFP was available in their schools. Teachers play key role besides the head teacher when it comes to foreseeing that any given programme is successful in public primary schools. Hence, they knew that there is need for a school child to be given a nutritional quality and quantity of ration which should always be assessed as well as timing and delivery.

4.4.3 Pupils’ response on availability of SFP

Pupils were not left out. They were to indicate whether SFP was available. Data collected was tabulated in Table 4.11.

Table 4.11: Pupils’ response on availability of SFP

| Response | Pupils | % |
|-----------------|---------------|--------------|
| Yes | 60 | 100.0 |
| Total | 60 | 100.0 |

Table 4.11 indicates that all pupils affirmed that there was SFP in their schools. It is clear that they are well informed about SFP in their schools and they are accessible to it.

4.4.4: Head teachers’ response on time food is received for SFP

Head teachers were to indicate when the school started receiving food and data tabulated.

Table 4.12: Head teachers’ response on time food is received

| Time of the term | HTs | % |
|-------------------------|------------|--------------|
| Beginning | 10 | 83.3 |
| Middle | 2 | 16.7 |
| Total | 12 | 100.0 |

Table 4.12 indicates that some schools received food for the School Feeding Programme (SFP) at the beginning of the term (83.3%). Two of the head teachers commended that food provided in the middle of the term while classes are in session would interfere with attention, concentration and achievement among children in school and others would opt to drop out hence low retention rates. This

was a delay by the government to disburse food to the affected schools. Retention requires availability of food in a school on regular basis. Therefore regular food intake is vital for the continuity of retention of pupils in schools.

4.4.5 Teachers’ response on time food is received for SFP

Teachers, being key stakeholders in the implementation of SFP, were to indicate when the school started receiving food and data tabulated.

Table 4.13: Teachers’ response on time food is received for SFP

| Time of the term | Teachers | % |
|-------------------------|-----------------|--------------|
| Beginning | 88 | 97.8 |
| Middle | 2 | 2.2 |
| Total | 90 | 100.0 |

Results from Table 4.13 show that a majority (97.8%) of the teachers stated that food was provided during the beginning of the term. Hence, the programme was recognized by all the stake holders, the GoK included, as important and should not be delayed.

4.4.6 Pupils’ response on time food is received for SFP

Pupils were also to affirm by indicating when the school started receiving food and data tabulated.

Table 4.14: Pupils’ response on time food is received for SFP

| Time of the term | Pupils | % |
|-------------------------|---------------|--------------|
| Beginning | 50 | 83.3 |
| Middle | 10 | 16.7 |
| Total | 60 | 100.0 |

The table shows that a majority of pupils (83.3%) affirmed that food was availed in school at the beginning of the term. This is a positive impression meaning that the SFP was implemented in schools effectively and efficiently. A policy concerning a school child to be given a nutritional quality and quantity of ration which should always be assessed as well as timing and delivery was observed.

4.4.7 Head teachers’ response on quantity of food in school

Head teachers were to indicate how much food their schools receive during the distribution. Data was collected from head teachers and tabulated.

Table 4.15: Head teachers’ response on quantity of food distributed

| Amount distributed | HTs | % |
|---------------------------|------------|--------------|
| Below 10 bags | 1 | 8.3 |
| 10-20 bags | 4 | 33.3 |
| 21-30 bags | 5 | 41.7 |
| 31– 40 bags | 1 | 8.3 |
| Over 40 bags | 1 | 8.3 |
| Total | 12 | 100.0 |

Table 4.15 shows that schools received food in different quantities. This would enable the researcher to determine if School Feeding Programme (SFP) plays an important role on retention rates of pupils in public primary schools in Garissa. The highest quantity being 21-30 bags. This was according the number of pupils in school which the head teachers agree that the quantity is enough for the term. According to Jacoby (2002), school meals should be available throughout the term in order to keep children in school. Any delay in delivery of school meals or break-ups in delivery could lead to absenteeism until the food is delivered (WFP, 2006).

4.4.8: Whether food is received in terms of money or dry food

The researcher was to solicit for more information from the head teachers to establish whether food was received in terms of money or dry food. Data collected was then tabulated in Table 4.16

Table 4.16: Whether food is received in terms of money or dry food

| Form in which food is received | HTs | % |
|---------------------------------------|------------|--------------|
| Money | 5 | 41.7 |
| Dry food | 7 | 58.3 |
| Total | 12 | 100.0 |

Results from the Table show that public primary schools in Fafi sub-county, Garissa County can either receive food in terms of money from the government or dry food. Dry food received relates to: thirty four (34) bags of bulger, eight (8)

bags of pulse, three (3) cartons each containing 4kgs of oil, eight (8) bags of CSB, and 25kgs of salt.

4.4.9 Pupils’ response on quality of food disbursed

The quality of food disbursed during school feeding programme to pupils in public primary schools encompasses the nutrition values of food provided. The researcher solicited information from pupils to determine whether food given is of quality. Data captured was tabulated as follows.

Table 4.17: Pupils’ response on whether food is of quality

| Good quality food | Pupils | % |
|--------------------------|---------------|--------------|
| Yes | 48 | 80.0 |
| No | 12 | 20.0 |
| Total | 60 | 100.0 |

Table 4.17 indicates that at least food provided is of quality (80.0%). Alderman (2009) argues that although school aged children are past the critical window of opportunity during early childhood for the greatest gains from good nutrition, increasing food and nutrition consumption among school-aged children with low baseline food energy or micronutrient intake can improve weight, height, reduce susceptibility to infection and increase in cognitive function in the short run. According to the World Hunger Education Service (2012), under nutrition is the

biggest cause of the global diseases that contributes to 35 % of child death particularly in developing countries.

4.5 How the availability of funds for school feeding programmes affects pupils’ retention rates in public primary schools

Another objective of the study was an inquiry on the how adequacy of food provided to the pupils affected their retention in the school system. Sources of finances for school feeding programme to public primary schools may have influence on enrolment and retention rates. There was need for head teachers to clarify the source of funds to facilitate the SFP in public primary schools in Fafi sub county, Garissa County. Data was then tabulated.

Table 4.18: Head teachers’ response on the source of funds

| Source of funds | HTs | % |
|------------------------|------------|--------------|
| WFP | 7 | 58.3 |
| Government | 5 | 41.7 |
| Total | 12 | 100.0 |

Table 4.18 indicates that most schools receive funds from WFP and government. Parents and community don’t give any money. This is a positive indicator that donors and recipient governments focus wholeheartedly on the core necessities of SFP. Recipient governments need to clearly state their needs and demonstrate their own commitment that they can organize their resources and priorities to support the feeding programmes (WFP, 2008) so as to enhance retention rates.

For instance, the Government of Kenya can come up with various ways through which food may be procured for the school feeding programmes (SFP).

4.6 How the forms of school feeding programmes affect pupils' retention rates in public primary schools

The purpose of school feeding is to provide sustainable, secure and nutritious source of food. There are two forms of school feeding programmes; in school feeding and take home rations. In school feeding programs provides meals or snacks to school children on site while Take Home Rations (THR) food mostly dry cereals and oil are provided to children for consumption at home (Lawson, 2012). The researcher, therefore, was to determine which form of SFP schools had adopted to enhance retention rates.

4.6.1 Head teachers' response on forms of School Feeding Programmes

The head teachers were asked to state the kind of School Feeding Programme adopted in school. Data collected was presented in Table 4.14 below.

Table 4.19: Head teachers' response on forms of SFP

| Form of SFP | HTs | % |
|--------------------|------------|--------------|
| In-school-feeding | 10 | 83.3 |
| Take Home Rations | 2 | 16.7 |
| Total | 12 | 100.0 |

Table 4.19 shows that majority of the head teachers (83.3%) prefer In-school-feeding to Take Home Rations. The benefit of food provided under the in school feeding programme is conditional on the attendance of the child on that specific day. Thus an advantage of the programme is that it serves as an incentive for children to attend school on a daily basis to receive a meal. This is the best way of retaining children in school to attain high completion rates in Fafi sub county, Garissa County.

4.6.2 Head teachers’ and pupils’ response on number of times food is served

Head teachers and pupils were to indicate how many times food was served in a day. Their responses were tabulated in Table 4.15

Table 4.20:Head teachers’ and pupils’ response on number of times food is served

| Number of times | HTs | % | Pupils | % | Total | % |
|------------------------|------------|--------------|---------------|--------------|--------------|--------------|
| Twice | 10 | 83.3 | 58 | 96.7 | 68 | 94.4 |
| Thrice | 2 | 16.7 | 2 | 3.3 | 4 | 5.6 |
| Total | 12 | 100.0 | 60 | 100.0 | 72 | 100.0 |

From Table 4.20, it is evident that in most schools food is served twice a day (94.4%).On the other hand, THR children need only to attend a specified minimum number of days. Children are served with cooked meals onsite or pre-

packaged snack or beverage. This programme may need to rely on a functional food processing sector at the regional or national level to meet the needs.

4.6.3 Head teachers’ response on whether the food served is fortified

School Feeding Programme meals or snacks can easily be fortified to help to provide micronutrients that are commonly missing from children’s diets. The head teachers were to indicate whether food served to children is fortified. Data was then presented in Table 4.21

Table 4.21: Head teachers’ response on whether the food served is fortified

| Response | HTs | % |
|-----------------|------------|--------------|
| Yes | 10 | 83.3 |
| No | 2 | 16.7 |
| Total | 12 | 100.0 |

The results indicate that food is fortified (83.3%). This is especially important for school-age children as brain is sensitive to lack of nutrients in the short term, which maybe especially a problem for malnourished children (Pollit, 1995). Abdullahi (2012) in his study on SFP in Wajir North suggested that quality of food will tremendously improve the health of pupils.

4.6.4 Head teachers’ response on types of nutrients used to fortify food

The quality of food disbursed during school feeding programme to pupils in public primary schools encompasses the nutrition values of food provided. The

important period of growth and body composition occurs in the early stage of life, well before enrolment in school, but school feeding programme meals or snacks can easily be fortified to help to provide micronutrients that are commonly missing from children’s diets. This is especially important for school-age children as brain is sensitive to lack of nutrients in the short term, which maybe especially a problem for malnourished children (Pollit, 1995). Head teachers were, therefore, to give responses on types of nutrients used to fortify food during SFP in Fafi sub county, Garissa County.

Table 4.22: Head teachers’ response on types of nutrients used to fortify food

| Number of times | HTs | % |
|------------------------|------------|--------------|
| Iron | 1 | 8.3 |
| Vitamins | 3 | 25.0 |
| Proteins | 8 | 66.7 |
| Total | 12 | 100.0 |

Results show that food was fortified with proteins mostly (66.7%) and some slight vitamins (25.0%) plus iron (8.3%). This makes children who are under school feeding programme in Fafi sub county, Garissa County attended school regularly and be punctual with tremendous improve in performance and behaviour with minimal illnesses. Quality of food tremendously improves the health of pupils.

4.6.5 Pupils' response on sickness

Pupils were to indicate whether they have been sick due to food since SFP was introduced. Data were collected and tabulated in Table 4.18

Table 4.23: Pupils response on sickness

| Whether sick | Pupils | % |
|--------------|-----------|--------------|
| Yes | 5 | 8.3 |
| No | 55 | 91.7 |
| Total | 60 | 100.0 |

Table 4.23 indicates that since SFP was introduced in the schools, a good percent of children have not faced challenges of sickness. This is because of the nutrients they are given from the fortified food. Quality of food tremendously improves the health of pupils. Families facing poverty food choices are usually limited resulting in nutritionally inadequate, diet that are often deficient in vital micronutrients (Ash, 2009). Thus a universal approach is required to improve the health of these poorest children and the disadvantaged by maximizing developmental potential and lifelong health through funding (Van de Poel, 2008). Study carried out by International Food Policy Research Institute (2008), found out that there was improved cognitive function in Kenyan children who were provided with school meals rich in animal source food. This calls for government's and donors' support through financing.

4.7 The influence of community involvement in school feeding programmes

Communities around the school play an important role in the implementation and process of school feeding programmes. The school feeding programmes that respond to community needs are locally owned. Lack of community participation may lead to a failed programme. Head teachers were to provide information concerning community participation in SFP in public primary schools in Fafi sub county, Garissa County and data collected and tabulated in tables below basing on parental contribution like providing plates and spoons and community contribution in some form of: donated labour like cooking, bringing firewood, store-keeping, serving meals, constructing cooking shelters, constructing store rooms, protecting the school premises, organizing at least three meetings per annum to discuss the activities in connection to national school feeding programmes, organizing fundraising activities, and assisting with the school vegetable gardens.

4.7.1 Management and distribution of food in school

Head teachers were to provide information on who assists the school in management and distribution of food to enhance pupils' retention rates. Data collected was then tabulated in Table 4.19

Table 4.24: Head teachers' response on management and distribution of food

| Who manages and distributes food | HTs | % |
|---|------------|--------------|
| Parents | 2 | 16.7 |
| School feeding committee | 7 | 58.3 |
| Teachers | 3 | 25.0 |
| Total | 12 | 100.0 |

Results in Table 4.24 indicate that the school feeding programmes in most public primary schools in Fafi sub county incorporate some parents to assist in the distribution of food. This shows that community involvement is important in SFP. Programmes that build this component from the beginning and consistently maintain it have the most success (WFP, 2010).

4.7.2 Number of cooks in the school

The head teachers were to give the number of cooks assisting in preparation and serving of meals for pupils in school. Their responses were then tabulated in Table 4.25

Table 4.25: Head teachers' responses on number of cooks in school

| Number of cooks | HTs | % |
|------------------------|------------|--------------|
| Male | 10 | 83.3 |
| Female | 2 | 16.7 |
| Total | 12 | 100.0 |

The table shows that the community provides men and women who are responsible for cooking and serving of meals. Both male and female genders are involved in making the school feeding programmes successful.

4.7.3 Source of cooking fuel in school

Head teachers were also to give light on source of cooking fuel in school. Data obtained was tabulate in Table 4.26.

Table 4.26: Head teachers’ response on source of cooking fuel

| Source of fuel | HTs | % |
|-----------------------|------------|--------------|
| Fire wood | 12 | 100.0 |
| Charcoal | 0 | 0.0 |
| Solar energy | 0 | 0.0 |
| Electricity/paraffin | 0 | 0.0 |
| Total | 12 | 100.0 |

From this table, the main source of fuel is firewood (100%). This is because it is the cheapest and easily available from the community members.

4.7.4 Fuel provision

Head teachers were to clarify on who provides fire wood in the school. Their responses were the tabulated in Table 4.27

Table 4.27: Head teachers' responses on who provides fuel

| Fuel provision | HTs | % |
|--------------------------|------------|--------------|
| Parents | 10 | 83.3 |
| School feeding committee | 2 | 16.7 |
| Total | 12 | 100.0 |

Table 4.28 indicates that parents play a vital role in the provision of firewood to sustain School Feeding Programmes (SFP). This is a clear indicator that parents are involved in attaining high retention rates in public primary schools in Fafi sub county, Garissa County. There is need for government to step in and provide for other sources of power like electricity, paraffin and solar energy that seem to be expensive for the parents.

4.7.5 Water availability in school

Head teachers were also supposed to indicate if water is available in school. Their responses were as tabulated below.

Table 4.28: Head teachers' responses on water availability in school

| Water availability | HTs | % |
|---------------------------|------------|--------------|
| Yes | 4 | 33.3 |
| No | 8 | 66.7 |
| Total | 12 | 100.0 |

The table shows that some schools do not have water (66.7%). This shows that head teachers have to seek for assistance to acquire water so as to facilitate the school feeding programmes.

4.7.6 Head teachers’ responses on who provides water

Head teachers were to provide more information on who provides water in school.

Responses were tabulated in Table 4.30

Table 4.29:Head teachers’ responses on who provides water

| Water provision | HTs | % |
|--------------------------|------------|--------------|
| Parents | 9 | 75.0 |
| School feeding committee | 2 | 16.7 |
| Government | 1 | 8.3 |
| Total | 12 | 100.0 |

Table 4.30 indicates that water is mainly provided by parents. Through donated water or labour, the school feeding programmes tend to be stronger and most likely to make a successful transition from donor assistance.

4.7.7 Teachers responses on pupils’ attendance before community involvement

The school feeding programme brings about harmony among the community, teachers and pupils, hence smooth learning (Abdullahi, 2012). Teachers were to give more information concerning the trend of pupils in public primary schools in

Fafi sub county in Garissa County based on school feeding programmes. They were to indicate how the involvement of the community has influenced pupils' retention rates in schools.

Table 4.30: Teachers' responses on pupils' attendance before and after community involvement

| Attendance before | Teachers | % | Attendance after | Teachers | % |
|--------------------------|-----------------|--------------|-------------------------|-----------------|--------------|
| Poor | 78 | 86.7 | Poor | 0 | 0.0 |
| Average | 12 | 13.3 | Average | 4 | 4.4 |
| High | 0 | 0.0 | High | 86 | 95.6 |
| Total | 90 | 100.0 | | 90 | 100.0 |

The results from table 4.31 indicate that before community was involved in matters of school feeding programmes, pupils' attendance was poor (86.7%) and thereafter it shifted to a high attendance of 95.6%. Community involvement has a positive impact on pupils' retention rates in most public primary schools in Fafi sub county, Garissa County.

4.7.8 Teachers' responses on pupils' classroom behavior

Teachers were to respond on whether they observed any changes in pupils' classroom behaviour since the school feeding programme started and community members involved in realizing the programme. Their responses were then tabulated in Table 4.31.

Table 4.31: Teachers’ responses on pupils’ classroom behavior

| Response | Teachers | % |
|-----------------|-----------------|--------------|
| Yes | 90 | 100.0 |
| Total | 90 | 100.0 |

Teachers’ responses as the table indicates is that there is a strong positive impact on pupils’ classroom behavior since SFP started and community members were ready to assist in making it a success.

4.7.9 Teachers’ responses on observable changes in pupils and community members

Teachers were, therefore, to rate the observable changes made in both pupils and community members whether they were positive or negative changes. Teachers’ responses were then tabulated as follows:

Table 4.32: Teachers’ responses on observable changes in pupils and community members

| Observable behaviour | Positive change | | Negative change | |
|--|-----------------|-------|-----------------|------|
| | Teachers | % | Teachers | % |
| Pupils’ attentiveness in classroom | 80 | 88.9 | 10 | 11.1 |
| Pupils’ cognitive and learning abilities | 75 | 83.3 | 15 | 16.7 |
| Pupils social behaviour with one another | 69 | 76.7 | 21 | 23.3 |
| Increased attendance in the morning | 90 | 100.0 | 0 | 0.0 |
| Increased attendance in the evening | 90 | 100.0 | 0 | 0.0 |
| Community participation in the school | 86 | 95.6 | 4 | 4.4 |

From the table, community participation in the school has been rated 95.6%. This shows that community members play vital role in providing people who are ready to assist the success of SFP by: preparing meals at school, constructing cooking shelters, constructing store rooms, protecting the school premises, organizing at least three meetings per annum to discuss the activities in connection to national school feeding programmes, organizing fundraising activities, assisting with the school vegetable gardens and parents providing plates and spoons. Thus the school feeding programme brings about harmony among the community, teachers and pupils hence smooth learning (Abdullahi, 2012).

4.8 Suggestions made to improve the school feeding programme

It was important for the researcher to capture responses from the head teachers on how to improve the school feeding programme in schools. Data collected was then tabulated in Table 4.33

Table 4.33: Head teachers' responses on how to improve the SFP

| Suggestions | HTs | % |
|---|-----|-------|
| Provision of milk to extreme malnourished | 12 | 100.0 |
| Provision of utensils | 8 | 66.7 |
| Provision of clean water | 12 | 100.0 |
| Including meat and rice in the tired | 5 | 41.7 |
| Provision of fruits | 4 | 33.3 |

N=12

The results indicate that all head teachers were for the suggestion of the government providing of milk to extremely malnourished pupils and clean water for cooking and drinking to prevent sickness. Besides, provision of cooking utensils was also very essential (66.7%).

Summary

The chapter attempted to statistically establish whether the variables under study would have an impact on pupils' retention rates in public primary schools in Fafi Sub-County of Garissa County in Kenya. Data analysis established from Table 4.10 shows that schools received food in different quantities. Results in Table 4.24 also indicated involvement of the community members in School Feeding Programme (SFP) in Fafi sub county, Garissa County which would positively

impact on pupils' participation in public primary school education and raise the retention and completion rates. The study established that teachers must know about the pupils they are teaching, some of them come from poor backgrounds whereas others from able families but due to unfavourable climatic conditions, they lack food and other necessary basic needs to enable them participate fully in primary education. The provision of funds from the government and donors like WFP to support SFP by ensuring that food and other basic needs like clean water, milk to health services, and uniform are given to pupils is a sense of belonging and self-esteem that makes them comfortable and concentrates in their academic work. The school feeding programme, therefore, brings about harmony among the community, teachers and pupils, hence smooth learning.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a brief summary of the study, conclusions and recommendations of the study. The study also offers suggestions for further research.

5.2 Summary of the study

The main purpose of the study was to assess the impact of school feeding programme on pupils' retention rates in public primary schools in Fafi Sub-County of Garissa County, Kenya. The study focused on the stated objectives by targeting head teachers', teachers' and pupils' demographic data. In addition, the study focused on the effect of adequacy of food given to pupils, sources of funds, forms of school feeding programmes, availability of funds and disbursement of food to public primary schools and how community involvement in the school feeding programme influences pupils' retention rates in public primary schools in Fafi sub county of Garissa County in Kenya. Thereafter, research questions were formulated.

To generate and refine the study ideas, the literature review was essential to provide more ideas and clarity to research questions formulated. The variables of the study were summarized in the conceptual framework that showed their interrelatedness.

The study used descriptive survey design and simple random sampling technique to select head teachers, teachers and pupils who participated in answering questionnaire and interview items. Data was collected using head teachers' and teachers' questionnaire, and pupils' interviews which were analyzed using mainly descriptive statistics, particularly frequencies and percentages. Statistical package for social sciences (SPSS) was used for effective analysis of data. To realize the objectives of the study, findings were presented and conclusions drawn.

5.3 Summary of the findings

The following is a summary of the findings that was arrived at after the analysis of data basing on research objectives.

Adequacy of food on retention rates

Findings in this study indicated that schools received food in terms of money or dry food for the School Feeding Programme (SFP), but sometimes there was a delay by the government to disburse food to the affected schools. Retention requires availability of food in school on regular basis. Therefore regular food intake is vital for the continuity of retention of pupils in schools.

Effect of the availability of funds on retention rates

Sources of finances for school feeding programme to public primary schools in Fafi Sub-county in Garissa County has an impact on enrolment and retention rates. Head teachers indicated that most schools received food from WFP. This was a positive indicator that donors and recipient governments focus wholeheartedly on the core necessities SFP. Other findings pupils indicated at least 80.0% of food provided was of good quality and a good percent of children have not faced challenges of sickness.

Forms of school feeding programmes on retention rates

Results from head teachers on the kind of School Feeding Programme adopted in school show that majority of the head teachers (83.3%) prefer In-school-feeding to Take Home Rations. The head teachers viewed In-school-feeding as an incentive for children to attend school on a daily basis to receive a meal. Hence, the best way of retaining children in school to attain high completion rates in Fafi sub county, Garissa County. Besides, School Feeding Programme meals or snacks were fortified with proteins mostly (66.7%) and some slight vitamins (25.0%) and iron (8.3%) to help to provide micronutrients that are commonly missing from children's diets.

The influence of community involvement in school feeding programmes

School Feeding Programmes in most public primary schools in Fafi district incorporate some form of parental or community contribution. Head teachers and teachers indicated that community involvement has a positive impact on pupils'

retention rates in most public primary schools in Fafi sub county, Garissa County. It brings about harmony among the community, teachers and pupils, hence smooth learning. Besides, teachers observed that there was a strong positive impact on pupils' classroom behavior since SFP started and community members were ready to assist in making it a success.

5.4 Conclusion of the study

From the findings of the study, several conclusions were arrived at:

- i) Retention requires availability of food in school on regular basis. Therefore regular food intake is vital for the continuity of retention of pupils in schools.
- ii) Donors and recipient governments should focus wholeheartedly on the core necessities SFP. Besides, food provided has to be of good quality to avoid cases of sickness.
- iii) In-school-feeding should be used as an incentive for children to attend school on a daily basis.
- iv) Community involvement has a positive impact on pupils' retention rates in most public primary schools in Fafi sub county, Garissa County. It brings about harmony among the community, teachers and pupils, hence smooth learning.
- v) Every primary school in Garissa County to implement school feeding programme to raise pupils' participation and attendance.

5.5 Recommendations of the study

Basing on the already stated findings and conclusions, the study recommends the following.

- i) Public primary schools should be equipped with basic needs necessary for pupils' participation and achievement at school. The Government of Kenya should collaborate with World Bank, World Health Organization and World Food Programmes to ensure that basic needs are provided to learners.
- ii) Head teachers and teachers should be on the forefront to ensure that school feeding programme policy is implemented in school.

5.6 Suggestions for further research

The following are the suggested areas for further research:

- i) The influence of school feeding programmes on the pupils' achievement in KCPE examinations.
- ii) The influence of provision of basic needs on pupils' participation in primary schools education in other hardship areas in Kenya.

REFERENCES

- Abdullahi, M. (2012). Effects of School Feeding Program on Access and Retention among School Pupils in Nomadic Families in Wajir District, Kenya. Unpublished Thesis, Kenyatta University.
- Ahmed, A. U & Sharma, M. (2004). “*Food for education Programmes With Locally Produced Food: Effects on Farmers and Consumers in Sub-Saharan Africa*” International Food Policy Research Institute, Washington, DC.
- Ahmed, A.U (2004). “*Impact of Feeding Children in School; Evidence From Bangladesh*” International Food Policy Research Institute, Washington, DC.
- Alderman, H., et al (2006). *Long – term Consequences of Early Childhood Malnutrition*, Oxford Economic Papers, Volume 58, issue 3.
- Alderman, H., et al (2009). *The Challenge of Hunger and Malnutrition*. Cambridge University Press: Copenhagen Consensus 2008 Challenge Paper
- Alexander, R. (2008). ‘Education for All, the Quality Imperative and the Problem of Pedagogy.’ CREATE Pathways to Access No 20. Consortium for Research on Educational Access, Transitions and Equity: University of Sussex.
- Arsenault, J. E., et al (2009): *Provision of School Snack*.
- Betteinheim, A. M., Alderman, H., & Friedman, J. Arnold. (2011). *Impact Evaluation of School Feeding Programmes in Lao PDR*, World Bank Policy Research Working Paper Series, 5518.
- Bogonko, S. N. (1992). *A History of Modern Education in Kenya (1895-1991)*. Nairobi Kenya. Evans Brothers (Kenya).
- Bundy, D. et al (2009). *Rethinking School Feeding: Social Safety Nets, Child Development and Education Sector*, Washington DC: World Bank/ World Food Programme.
- Burbano, C., Neeser, K. & Bundy, D.A.P. (2009): *Cost Analysis of SFP and School Health Options in Malawi*; London PCD.
- Chikuni, R. N. (2010). *Effects of school Feeding Programme on Pupils school Attendance and retention*. A Case Study of Primary Schools in Zomba District, Malawi.

- Del Rosso, J. M. & Marek, T. (2002). *'Class Action: Improving School Performance in the Developing World Through Health and Nutrition,'* Directions in Development, World Bank.
- Finan, T. (2010). *Impact Evaluation of WFP, School Feeding Programmes in Kenya (1999-2008) a Mixed Methods Approach*. Rome: World Food Programme.
- Glewwe, P. & Jacoby, H. (2004). *School Enrolment and Childhood Nutrition in Ghana*, Working Paper Numbers 98, World Bank, Washington DC.
- Jacoby, H. G. (2002). *Is There an Intrahousehold 'Flypaper Effect?'* Evidence from School Feeding Programme. *The Economic Journal*, 112.
- Jomaa, L. H., McDonnell, E. & Probart, C. (2011). *School Feeding programmes in Developing countries. Impacts on Children's Health and Education Outcomes*. *Nutrition Review*, 69. 83-98
- Kenya Institute of Public Policy Research and analysis, Kenya Medical Research Institute, NjaaMarufuku Kenya and PCD (under final Government review). *The Case Study of NjaaMarufuku Kenya*. London PCD.
- Ministry of Agriculture. (2010) *Agricultural Sector Development Strategy, 2009-2020*, Nairobi: Government of Kenya.
- Ministry of Education, Science and Technology. *A Policy Framework for Educational Training and Research*. Nairobi: Government of Kenya. (2004).
- Oso, W. Y. & Onen, D. (2008). *Agenda Guide to writing research proposal and report*, Kampala, Makerere university printer.
- Partnership of Child Development (PCD) (2013). *Home Grown School Feeding in Kenya*. A Country Profile Case Study.
- Pollit, E. (2000). *Malnutrition and Infection in the Classroom*, UNESCO.
- Singh, S. (2012). *SFP, a review of the Policy and legal Framework*; Paper commissioned with by the partnership of child Development and WFP.
- UNESCO Nairobi Office (2005). *Challenges of Implementing Free Primary Education in Kenya*, Assessment Report, Nairobi.
- UNESCO, (2011). *World Data on Education*. UNESCO Information Bureau of Education, Geneva.
- Vos, R. & Arjun B. (2004). *Working Paper no. 46*, Nairobi. Kenya Institute of Public Policy Research and Analysis.

World Bank (2012). *Managing Risk, Promoting Growth; Development System for Social Protection in Africa. The World Bank's Africa Social Protection Strategy 2012-2022*, Washington DC, World bank.

World Food Programme (WFP) (2002). *Global School Feeding Report*, WFP school Feeding Support Unit, Rome

World Food Programme Policy (2009). *Policy Issues Agenda Item 4*.

APPENDICES

APPENDIX I

INTRODUCTION LETTER

Wekesa Kevina Nafula
Department of Educational Administration & Planning
University of Nairobi
P.O. BOX 30197
Nairobi

Dear Sir/Madam

RE: REQUEST TO FILL IN THE QUESTIONNAIRE

I am a Master of Education student from the University of Nairobi, Department of Administration and Planning, Educational Planning. I am conducting a research on the **'Impact of School Feeding Programme on Pupils' Retention Rates in Public Primary Schools in FafiSub county, Garissa County, Kenya.'**

This research is part of the requirements for my academic work. You are kindly requested to take part in the study be one of the respondents.
Your assistance will be highly appreciated.

Yours faithfully,

Wekesa Kevina Nafula

APPENDIX 2

QUESTIONNAIRE FOR HEADTEACHERS

PART A: DEMOGRAPHIC INFORMATION

Please indicate the response by ticking (✓) in the appropriate box.

1. What is your gender? Male () Female ()
2. What is your age bracket?
21-30 years () 31-40 yrs () 41-50 yrs ()
51-60 yrs () Over 60 yrs ()
3. (a) How long have you served in your present school?
0-3 yrs () 3-6 yrs () 6-9 years ()
9-12 years () above 12 years ()
(b) How long have you served in other schools? _____
4. Please indicate your school type
Boys' Boarding () Boys' Day () Girls' Day ()
Girls' Boarding () MixedBoarding() Mixed Day ()
5. How many pupils does your school have?
Less than 100 pupils () 100-200pupils ()
200-300 pupils () 300-400 pupils ()
400-500 pupils () 500-600pupils()
Over 600 pupils ()

PART B: IMPACT OF SCHOOL FEEDING PROGRAMME ON PUPILS RETENTION RATE IN PUBLIC PRIMARY SCHOOLS IN FAFI DISTRICT, GARISSA COUNTY, KENYA

Please give your response by filling in the answers.

6. Do you receive any food for the school feeding programmes?
Yes () No ()
7. Do you receive food in terms of money or dry food? Dry food () Money ()

8. What was the source of food/money?
- Provided by WFP ()
 - Provided by the government ()
 - Parents and community ()
9. If you receive food in form of money (a)who purchases the food?
 b) where do you purchase the food from?
 Community () parents () market ()
10. When did the school start receiving food?_____
11. How much food did your school receive during the last distribution?

12. a)Was the food received on time? Yes () No ()
 b) If No,
 why?_____
13. Were there any loses during transportation? Yes () No ()
14. a) Are all the pupils participating in the school feeding programme? Yes ()
 No ()
 b)If No,
 why?_____
15. Was the ration available at the school for the rest of the year? Yes () No ()
)
16. What happens incase there is delay in release of funds or food distribution?

17. Which type of food do you receive?
 Flour () Cereals () Cooking oil () Vegetables () Barley () Rice ()
 Sugar () Soya () Snacks ()
18. a) Are the food fortified? Yes () No ()
 b) If yes, with Iron() Vitamins () Proteins ()
19. What is the source of cooking fuel?

Firewood()Charcoal()Solar energy()

Paraffin () Electricity ()

20. How is the fuel provided?

21. (a) Is water available in school? Yes () No ()

(b)If no who provides water in school?

22. Who manages distribution of food in school?

School feeding committee()Parents()Teachers()

Others.....

23. How many cooks are there in school?

| | | |
|--------|--|--|
| Male | | |
| Female | | |
| TOTAL | | |

24. a) Is the food provided onsite or given to pupils as take-home rations?

Onsite () Take-home rations ()

(b) (i) If onsite, how many times is the food served?

Once a day () Twice a day() Thrice a day()

(ii) At what time do you serve the food? Morning () Mid morning ()

Afternoon ()

(c) If take-home rations, what type of food each pupil given?

Snack () Cereals () Flour () Preserved vegetables()

25. Suggest any measures that can be put in place to improve the school feeding programmes.

.....

.....

.....



APPENDIX 3

QUESTIONNAIRE FOR TEACHERS

PART A: DEMOGRAPHIC INFORMATION

Please indicate the response by ticking (√) in the appropriate box.

1. What is your gender? Male () Female ()
2. What is your age bracket? 21-30 years () 31-40 yrs ()
41-50 yrs () 51-60 yrs () Over 60 yrs ()
3. Please indicate your school type
Boys' Boarding () Boys' Day () Girls' Day ()
Girls' Boarding () Mixed Boarding () Mixed Day ()
4. (a) How long have you served in your present school?
0-3 yrs () 3-6 yrs () 6-9 years ()
9-12 years () above 12 years ()
(b) How long have you served in other schools? _____

PART B: IMPACT OF SCHOOL FEEDING PROGRAMME ON PUPILS

RETENTION RATE IN PUBLIC PRIMARY SCHOOLS IN FAFI

DISTRICT, GARISSA COUNTY, KENYA

Please give your response by filling in the answers.

5. Do you have any school feeding programme in your school? Yes () No ()
6. If yes, at what time of the term does the programme start?
At the beginning of the term () middle of the term ()
7. Before the start of the programme, how was the school attendance?
Poor () Average () High ()

8. What is the pupils' attendance in case there is a delay in food distribution?

Poor () Average () High ()

9. A) Did you observe changes in pupils' classroom behaviour since the school feeding programme started? Yes () No ()

b) If yes, please list the changes that you observed;

| <u>change</u> | <u>Positive change</u> | <u>No</u> |
|--|------------------------|-----------|
| • Pupils' attentiveness in classroom | () | () |
| • Pupils' cognitive and learning abilities | () | () |
| • Pupils social behaviour with one another | () | () |
| • Increased attendance | | |
| | Morning () | () |
| | Afternoon () | () |
| • Community participation in the school | () | () |

10. How has been the pupils performance at the end of the term during school feeding?

Increasing () Same () Declining ()

APPENDIX 4

GUIDED INTERVIEW QUESTIONS TO PUPILS

1. Gender of pupil
Male () Female ()
2. Grade of pupil
Lower primary () Upper primary ()
3. How long have you been in this school?years andmonths
4. a) Are you provided with food at school? Yes () No ()
b) If Yes, are you satisfied with the quantity of food at school? Yes ()
No () b) if not satisfied please explain why
.....
What time of the term do you start receiving food?
.....
5. How often do you feel sick after the start of school feeding programmes?
6. Do you like the food? Yes () No ()
7. Would you like the change of the type of food you are given? Yes ()
No ()
8. How many times are you served food during the day
Once () Twice () Thrice ()
9. When are you served food? Morning () Mid morning () Afternoon ()
10. Do you lack food in the school at any time of the term? Yes () No ()
11. Any comments by the pupil.

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

THANK YOU

APPENDIX 5

AUTHORIZATION LETTER



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241548, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote:

9th Floor, Utalii House
Utalii Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. _____ Date: _____

27th February, 2015

NACOSTI/P/15/1530/4764

Kevina Nafula Wekesa
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Impact of school feeding programme on pupils retention rates in public primary schools in Fafi Sub-County Garissa County Kenya"* I am pleased to inform you that you have been authorized to undertake research in **Garissa County** for a period ending **31st August, 2015.**

You are advised to report to **the County Commissioner and the County Director of Education, Garissa County** before embarking on the research project.

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


SAID HUSSEIN
FOR: DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner
Garissa County.

The County Director of Education
Garissa County.

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified

APPENDIX 6

RESEARCH PERMIT

CONDITIONS

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit**
- 2. Government Officers will not be interviewed without prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

REPUBLIC OF KENYA
NACOSTI
National Commission for Science, Technology and Innovation
RESEARCH CLEARANCE PERMIT

THIS IS TO CERTIFY THAT:

MS. KEVINA NAFULA WEKESA
of UNIVERSITY OF NAIROBI, 915-70100
garissa, has been permitted to conduct
research in Garissa County
on the topic: IMPACT OF SCHOOL
FEEDING PROGRAMME ON PUPILS
RETENTION RATES IN PUBLIC PRIMARY
SCHOOLS IN FAFI SUB-COUNTY GARISSA
COUNTY KENYA
for the period ending:
31st August, 2015

Permit No. : NACOSTI/P/15/1530/4764
Date Of Issue : 27th February, 2015
Fee Received :Ksh. 1000

