INFLUENCE OF SCHOOL FEEDING PROGRAMME ON PUPILS' PARTICIPATION IN PRIMARY SCHOOLS IN CONFLICT AREAS: THE CASE OF ISIOLO CENTRAL DISTRICT, KENYA

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DECLARATION

This research project is my original work and has not been presented for any award of degree in any other university

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DEDICATION

This project is dedicated my beloved wife Monica Wangare and children, Morris, Julie, Teresa and Abigael.

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LIST OF ABBREVIATIONS AND ACRONYMS

- ASAL: Arid and Semi Arid Lands
- **EFA:** Education for All
- **FFE:** Food for Education Programme
- **MDG:** Millennium Development Goals
- **KRCS:** Kenya Red Cross Society
- MDG: Millennium Development Goals
- NCST: National Council for Science and Technology
- **SFP:** School Feeding Program
- **SPSS:** Statistical Package for Social Sciences
- **UNICEF:** United Nations Children's Fund
- **WFP:** World Food Programme

ABSTRACT

The proponents of school feeding programme claim that providing food in schools would ostensibly attract vulnerable children to school, improves their attendance and minimizes drop-outs. According to the United Nations World Food Programme, School Feeding Programme is an incentive for vulnerable families to invest in children's education and encourages poor households to send children to school and helps to keep them there. The purpose of this study was to determine the influence of school feeding programme on pupils' participation in conflict prone with major focus on Isiolo Central District. Five research questions were formulated to guide the study. The study used descriptive survey design. The target population for the study included all the 30 head teachers, 479 teachers and 22,534 pupils in Isiolo Central district. The sample consisted of 18 head teachers, 54 teachers and 396 pupils. The questionnaires were used to collect data from the head teachers, teachers and pupils. Data was analysed both qualitatively and quantitatively.

The study established that school feeding program influenced the enrolment of pupils in primary school in Isiolo Central District. The study also established that the school feeding programme influenced the attendance of pupils in schools in Isiolo Central District. The study established that with the introduction of SFP, the participation of the pupils in class has been described as lively. The SFP also influenced the dropout rate of the pupils in Isiolo Central District as hunger was number one reason for dropout. Among the challenged which faced the implementation was insecurity, theft, lack of water and other essentials such as fuel and manpower. The study therefore concluded that school feeding program influenced the enrolment of pupils in primary school; the school feeding programme has influenced the attendance of pupils in schools; the introduction of SFP enhanced active participation of the pupils in class as it has made the pupils to be lively in class; SFP also influenced the dropout rate of the pupils in Isiolo Central District as hunger was number one reason for dropout and among the challenges facing the implementation of SFP was insecurity, theft, lack of water and other essentials such as fuel and manpower. The study recommended that the government should increase the coverage of the areas under school feeding programme especially the regions hard hit with conflict with the view to improving the enrolment rates; the government should ensure there is a constant supply of school meal so as to maintain the pupils attend school regularly; the government and the donors should ensure the school meal has the right nutrients so as to keep the children alert in class to actively participate in the learning process and the government should ensure that all the schools in the conflict regions have SFP so that hunger does not force any child to drop out of school.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In many households, hunger has been a barrier to school participation (Dheressa, 2008). A hunger-stricken child is not only unable to enroll in school at the right age but also cannot attend school properly even if enrolled. Besides, such children are also likely to quit school because they have to deal with their immediate subsistence needs before they get ready for schooling. Thus, low school enrollment, low class attendance, lack of active participation in class activities and high student drop-outs are recurring problems in child education among poor households especially in areas prone to conflict and high food insecurity (Ahmed, 2004; Adelman, Gilligan & Lehrer, 2008).

One of the major contributors of hunger is insecurity as a result of conflict. Conflict represents a major impediment for the realization of the education for all (EFA) and Millennium Development Goals (MDGs), especially for the universal completion of primary education and gender equality in primary education (Buckland, 2005). In fact, over half of the world's primary-aged children out of school are estimated to live in conflict-affected fragile states (Nicolai, 2008). Given that armed conflicts vary in duration, intensity and localization, educational systems may be affected in different ways. Research have exposed many dimensions of the educational system that are negatively affected by conflict, especially with regard to existing inequalities within societies, whether by region, gender or ethnicity. Alderman, Hoddinott and Kinsey (2008) found that Zimbabwean children affected by the civil war in the 1970s completed less grades of schooling and/or started school later than those not affected by the shocks. Similar results were found by Akresh and de Walque (2008) for Rwanda, Angrist and Kugler (2008) and Rodriguez and Sanchez (2009) for Colombia, Chamarbagwala and Morán (2009) for Guatemala, de Walque (2006) for Cambodia, Shemyakina (2006) for Tajikistan and Swee (2009) for Bosnia. However there is no doubt that there are other manifestations other than hunger and conflict which affect school participation among poor households (Dheressa, 2008).

In response to these challenges, various interventions have been undertaken. Prominent policies have been designed both at national and international levels to help households invest on their children's education (Akresh & de Walque, 2008). School Feeding Program (SFP), also known as Food for Education program (FFE), is one such intervention that aims to address some of the nutrition and health problems of school-age children (Del Rosso, 1999). School feeding programmes have been found to be effective in encouraging enrolment, increasing attention span and improving school attendance (Grantham-McGregor *et al.* 1998, UNICEF, 2005). The World Bank Education strategy identifies the following three main objectives for school feeding programme intervention to improve school children's education outcome: first, ensuring children are ready to learn and enroll on time; secondly, keeping children in school and learning by enhancing attendance and reducing drop-out rates and, thirdly, improving learning at school by enhancing cognition and educational achievement (Bundy, 2011).

School Feeding Program has been operated in two modalities: children are either fed inside the school compound (School Meals), or the entire family receives food conditional up on achievement of certain level of school attendance by children (Take Home Rations) (Dheressa, 2008). In the school meals programmes, children are fed breakfast, lunch or both in school. Such incentive directly targets primary school children, as opposed to Take Home Rations which aims to reach other needy members of the household as well (Adelman et al., 2008). Nevertheless, both schemes aim to offer educational opportunity with food-based incentives for children as well as for parents to send their children to school.

In Kenya, the school feeding program has a history of over 30 years. It began in 1979 with a government led school milk programme. The last decade has however experienced continued expansion and refinement (Langinga, 2011). Since the introduction of free compulsory primary education for all Kenyan children in 2003, the WFP-assisted feeding program has developed alongside national policies of increased student health, attendance, and performance (MoE, 2003). From its inception, it has targeted food inequality in the most vulnerable areas of Kenya, including school districts in the ASAL and the informal urban slums of large cities such as Nairobi and Mombasa (Espejo, 2009).

The ASAL, home to roughly 30 percent of the Kenyan population, has suffered through the crippling social effects of recently intensifying droughts and food shortages. The prolonged droughts have resulted into constant conflict among the communities in the region fighting for the control of the dwindling resources. Emphasis has however been put on communities which live in areas prone to drought in which food is scarce, this daily meal provision relieves much of the burden of childrearing. According to field studies, the "magnet effect" of the meal programmes has greatly increased school attendance rates especially among young children. Rural schools that provide meals show higher attendance rates and lower initial dropout rates than schools that do not (Espejo, 2009).

Isiolo Central District being one of the ASAL areas is one of the regions that the government of Kenya and other international non-governmental organizations targeted in the school feeding programme (SFP). The region is predominantly pastoralist occupied with scarce and unreliable rainfall. The district is among the least populated projected at about 144,000 persons and has a growth rate that is estimated at 4.8 percent. There are a number of communities residing in Isiolo

such as Gabra and Turkana with the Borana, pastoralists being the dominant Embu and Meru. The rate of gainful employment is low (Espejo, 2009). According to the Kenya Red Cross Society (KRCS) (2010), there is a resurgent of armed conflict as communities start to compete for fast dwindling resources such as sand harvesting, grazing water and lands which caused conflict and tribal clashes and have therefore affected the school attendance by children. The growing urban centres are taking away land which belonged to the pastoralist communities who believe that the land still belong to them and therefore demand to graze their animals in now 'private land' hence a conflict.

1.2 Statement of the Problem

The proponents of school feeding programme claim that providing food in schools would ostensibly attract vulnerable children to school, improves their attendance and minimizes drop-outs. According to the United Nations World Food Programme, School Feeding Programme is an incentive for vulnerable families to invest in children's education and encourages poor households to send children to school and helps to keep them there (WFP 2008). Empirical studies have revealed that School Feeding Programs indeed have significant positive impact on pupils' participation in school.

In Kenya, children from Arid and Semi Arid Lands (ASAL) districts which are majorly engaged in nomadic pastoralist activities and lifestyle have had a low participation in formal school attendance and learning practices. 70 percent of children in these districts do not participate in the learning process (Ngome, 2006). For instance in Isiolo, the learning has been constantly interrupted due to conflict between the communities of the Turkana, Borana, Gabra, Meru and Embu over sand harvesting, pasture and land. The government and other stakeholders introduced the SFP to keep the children in school. Despite the introduction of the SFP, very few pupils are in school. It is against this background that this study sought to determine the influence of school feeding programme on pupils' participation in primary schools in conflict prone areas in Kenya.

1.3 Purpose of the Study

The purpose of the study was to determine the influence of school feeding programme on pupils' participation in primary schools in conflict regions, a case of Isiolo Central District, Kenya.

1.4 Objectives of the Study

The study was guided by the following objectives:

- i). to determine the influence of school feeding programme on the enrolment of children to primary pupils in primary schools in Isiolo Central District.
- ii). to establish whether school feeding programme has influenced the school attendance by primary school pupils in Isiolo Central District.
- iii). to establish the influence of school feeding programme on the pupils' active participation in class activities in Isiolo Central District

- iv). to find out how the school feeding programme has influenced the drop out rate by primary school pupils in Isiolo Central District.
- v). to determine challenges facing the implementation of school feeding programme in public primary schools in Isiolo Central District

1.5 Research Questions

The study sought to answer the following questions:

- i). how has the school feeding programme influenced the enrolment of children in primary schools in Isiolo Central District?
- ii). to what extent has the school feeding programme influenced the school attendance by primary school pupils in Isiolo Central District?
- iii). what is the influence of the school feeding programme on the pupils' class participation in Isiolo Central District?
- iv). how has the school feeding programme influenced the drop out rate by primary school pupils in Isiolo Central District?
- v). what are the challenges facing the implementation of school feeding programmes in public primary schools in Isiolo Central District?

1.6 Significance of the Study

The findings of the study may be beneficial to the government and education stakeholders by showing how the school feeding programme assist in ensuring that learners in conflict areas participate in school in terms of enrolment, attendance, participation in class and completion of the primary schooling. It may reveal the significant role played by the school feeding programme on attainment of universal primary education on way to realizing EFA, MDGs and the Vision 2030. The study may awaken teachers to maximize their teaching efforts as the pupils are ready and motivated to learn. The study will also contribute to the existing body of literature in the areas of factor influencing the school feeding programme on pupils' participation in primary schools in conflict areas.

1.7 Limitations of the Study

The study was done in Isiolo Central District in Isiolo County. Most of the schools in the study area are in the rural which experience arid climate which means that the results cannot apply to schools in urban areas. The socio-economic and cultural background of the region may equally limit the generalization of the findings.

1.8 Delimitation of the Study

The study was limited to the 30 public primary schools in Isiolo Central District. The whole district was studied. The participants in the study were the headteachers, class teachers and pupils as they had the first hand information about the influence of the school feeding programme on pupils' participation in education.

1.9 Assumptions of the Study

The study was based on the following assumptions;

- i). Provision of food through school feeding programme was regular in the district.
- ii). The records (class register and pupils exercise books) were available and accessible in schools.
- iii). The respondents were free, knowledgeable and fair to provide the required information.

1.10 Definition of Significant Terms

- Attendance refers to the rate at which the pupils are able to attend classes on a daily basis.
- **Dropout** refers to stopping to attend school of a pupil who had been enrolled in a certain school before completing a course.

Participation refers to the pupils actively and lively taking part in teachinglearning activities. This encompasses pupils' enrolment, daily attendance, class learning activities and completion of course. **Enrolment** refers to the number of children registered in a school.

School Feeding Programme refers to the provision of meals or snacks at school to reduce children's hunger during the school day

1.11 Organization of the Study

The study was organized into five chapters. Chapter one which is the introduction focuses on the general background to the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations and delimitations of the study, assumptions of the study and definition of significant terms. Chapter two deals with, reviews of relevant literature on influence of SFP on pupils' participation in school. The chapter addresses the overview of conflict and school participation, the SFP and school participation where it looks at the effect of SFP on school enrolment, attendance, class participation, and dropout rate. It also presents the summary of reviewed literature, theoretical and conceptual frameworks. Chapter three, deals with research methodology of the study. It highlights research design, target population, sampling techniques, data collection instruments, data collection and data analysis techniques. Chapter four presents the results of the data analysis which is organized according to the research questions. Lastly Chapter five deals with summary of the findings, conclusions and recommendations based on the findings and suggestion for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter dealt with reviewed literature that was pertinent to the study. Specifically, it included in the literature review conflict and school feeding programme, school feeding programme and school participation, school feeding programme and enrolment, school feeding programme and class attendant, school feeding programme and dropout, school feeding programme and active participation in class and the challenges facing school feeding programme, summary of the literature review and finally, the theoretical and conceptual framework.

2.2 Overview of Conflict and School Feeding Programme

School feeding programs are a visible social safety net used by political leaders around the world. Communities that participate in these programs can see the tangible benefits to their children, such as their children being fed regularly or families supplied with additional food, and the visibility of such programs can be attributed back to the politicians who support them. Food for Education programs are typically targeted towards populations that are food insecure, reside in areas with high concentrations of low socioeconomic status families, or that face poor attendance and enrollment. In developing countries, SFP is usually not set up to target specific children at a school, but rather all students attending a school are recipients of the program. This may reduce the cost effectiveness of the program if not all students receiving the food from the program belong to families who are food insecure or of low socioeconomic status.

The take home ration programs, on the other hand can be more easily targeted to specific families, such as those of lower socioeconomic or food security status or to families with girls. Both programs, however, may not be able to target all the children who are facing food insecurity. Since school children are the target of these types of interventions, children who are younger than five years old are left out. This is considered one of the limitations of FFE programs as a nutritional safety net. It is now well established that the first one thousand days of a child's life, from conception until the second birthday, is the most vital period during which undernutrition may have its largest impact. Nutritional interventions that occur within this time line are much more powerful in impacting upon a child's survival, health and development (Adelman et al. 2009). Due to the greater impact that pre-natal and pre-school programs may play, and due to their higher costbenefit ratios, it has been pointed out that FFE programs should be considered (and categorized) as educational interventions and not as nutritional interventions, so as to not undermine budgetary resource allocations for nutritional interventions (World Bank 2006).

The potential impact goal of targeting children through Food for Education programs is to increase their educational achievement so as to improve their potential future productivity and earnings. However, improvement in educational achievement due to serving food in SFPs is thought to occur through three pathways. First, FFE programs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in formal education. This leads to more time spent in school and more time spent towards learning. The second is through the alleviation of short term hunger which improves children's cognitive functioning and attention span. The third path is through the improved nutritional status of children by providing them calories and nutrients in addition to their regular diet. This leads to better health and better resistance to infections diseases and illnesses that would keep children from attending school (Buttenheim et al. 2011). Thus, better nutrition indirectly improves educational achievement by increasing school attendance by children.

In stable situations, school feeding programmes are often designed to enhance academic performance and cognitive development. Improved nutritional status of school-age children leads to better attention and cognition, and thus, better educational outcomes (Levinger 1986; Glewwe, Jacoby & King, 1996). The objectives of school feeding have also been expanded to include food security, providing an income transfer to caregivers and reducing the opportunity cost for parents of sending children to school (Hicks, 1996).

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

Keeping schools open in times of crisis provides children with a sense of normality, an unbroken routine and a friendly and structured environment (UNICEF, 1999). This is why, where at all possible, children should continue to go to school. School feeding may itself provide an incentive for keeping schools open. However, in times of crisis, school feeding is more than just an incentive, otherwise programmes that are less costly could be an alternative. Being tied to education, school feeding has the potential to preserve a generation of human capital, an advantage measurably more important in complex emergencies than in normal situations. In situations when other social support structures may be broken down, school feeding could also enhance the role of schools as social support structures for children. It may then be possible for educational, nutritional and Psychological gains to emerge from this existing school infrastructure with benefits accruing synergistically. Various studies have reveal that SFP have indeed positive impact on school participation as measured by school enrollment, class attendance, and student drop-out status (Meng & Ryan 2003; Ahmed 2004; Vermeersch & Kremer 2004). However, most of these findings are based on empirical data obtained from schools where the program was popular and has been relatively effectively implemented.

Vermeersch and Kremer (2004) conducted a field-study in Western Kenyan preschools between 2000 and 2002 to evaluate the impacts of School Feeding Program on school participation and achievement. Preschoolers, in this context, are defined as children between ages of 4 and 6 who lived within walking distance of school. They found that children in the treatment group participated 35.9 percent of the time compared to 27.4 percent in the comparison (control) group and this difference was statistically significant (Vermeersch & Kremer, 2004). The program increased participation of both children who were previously enrolled (what they call intensive margin) and children who would have gone to school in absence of the program (extensive margin). But they emphasize that any increase in school participation in the absence of qualified teaching falls short of

better educational achievement since there are strong complementarities between teacher characteristics and school meals (Vermeersch & Kremer, 2004).

Nevertheless, their study was on preschools and hence this may not have much relevance for primary school children. Besides, preschoolers are early-age children and may not have family obligations like many primary school age children might have in poor areas. Thus preschoolers are relatively free of duties that could keep them away from school (Adelman et al., 2008).

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

To address historical primary school absenteeism among Kenya's most impoverished and traditional communities, free meals are used as an incentive to attract school-aged children to class. Within rural communities in which food is scarce, this daily meal provision relieves much of the burden of childrearing. The beneficiaries of the program are extremely poor families that are largely unable to provide the minimum recommended daily allowances (RDA) of calories, protein, and essential micronutrients to their children. These poor conditions may irreversibly stunt the mental and physical development of young children, resulting in wasted potentials and lifelong difficulties (Galal 200). The nutritional importance of the school meal (usually around 700kcal) is immense, representing more than half of the consumed RDA values for 40 percent of the participating students (Finan 2010).

According to field studies, the "magnet effect" of the meal programs has greatly increased school attendance rates especially among young children. Rural schools that provide meals show higher attendance rates and lower initial dropout rates than schools that do not (Espejo 2009). The immediate financial and nutritional benefits provided by schooling attract parents struggling to support their children on low yielding subsistence farming. On average, participating families save between four and nine percent of their annual income by taking advantage of school meals and avoiding added food expenditures (Finan 2010).

Additionally, many rural parents have been able to utilize schooling as a form of subsidized childcare, which gives them more time to engage in household chores, farming, or other income-generating activities. The short and long-term benefits to the child are even more pronounced. Studies tracking the impact of school feeding have shown improvements in IQ, immunity to illness, height, and weight among participating children (Galal, 2005). Micronutrient fortification, malaria treatment, and annual de-worming initiatives have been implemented alongside school meal programs and have had considerable effect on increasing overall student health (Galloway, 2009). No longer distracted by hunger and the crippling effects of extreme malnutrition, the students are better able to concentrate, understand new material, and socialize with both teachers and peers.

According to firsthand teacher accounts, children who receive meals are generally healthier, more receptive, energetic, and easier to teach (Galal 2005). Following WFP recommendations, some ASAL school districts have begun providing fortified morning biscuits to get a jumpstart on the cognitive and nutritional benefits of feeding (Finan 2010; Galal 2005). Though significant gains have been achieved throughout the country in terms of educational expansion and accessibility, rural Kenyans continue to lag far behind their urban counterparts. Between the years 2002 and 2007, although Kenya's net primary school enrollment increased from 77 percent to 92 percent, enrollment in the ASAL increased from 17 percent to 29 percent (Finan, 2010).

2.3 School Feeding Program and School Enrollment

As was discussed previously, the availability of subsidized in-school meals will increase school enrollment if the program changes the household's schooling decision for some children who would not have been enrolled in school otherwise. And for these households to enroll their children, they need to be convinced that the "net benefits of participating in the program exceed the gap between direct and opportunity cost of schooling and the expected benefit of schooling (Adelman et al., 2008). In other words, households usually compare the size of the transfer relative to the size of the cost-benefit gap and these comparisons ultimately determine the magnitude of the increase in enrollment rates.

According to Adelman et al. (2008), another important point is about the roles that school meals play in encouraging early enrollment. Even though in-school meals are believed to affect age at entry through an income effect, i.e., by increasing household income and raising the benefit of attending school, yet this income effect should be large enough to make households send their children to school. Adelman *et al* (2008) further noted that school meals affect the age at entry in different ways. First, the provision of food offsets the cost of educating children by making available additional income for households, and consequently raising the benefits of attending school. This is called an income effect of school feeding. When this income effect is large, it can cause households to send their children to possibility

of late entry. Secondly, the "neighborhood effect" resulting from School Feeding Program may also influence the age at entry. That means the act of households to send their children to school earlier with the commencement of School Feeding Program would create a social pressure and prompt similar action on the part of those who haven't enrolled their children yet.

2.4 School Feeding Program and Class Attendance

The second indicator of school participation analyzed in this study is class attendance. It is believed that school meals can be effective at increasing class attendance because children receive the meal only when they attend school. As discussed earlier the opportunity cost of allowing a child to attend school varies across school days and seasons and this cost could even be higher than the expected benefit. For instance in places where child labor forms the integral part of agricultural work during a particular day/season of a year, class attendance could be low. In such cases, school meals may or may not encourage attendance depending on how the beneficiaries value them. Thus, the value of the meal relative to the difference between the cost and expected benefit of schooling also determines attendance (Adelman et al., 2008).

Adelman *et al.*, (2008) show three aspects of nutrition can influence class attendance. First school meals alleviate short term hunger of school children during the school day by providing more nutrients to the child, providing the child

with a meal when he or she would have not otherwise have had one, or replacing a meal that would have been received after school with one during school hours. Thus this aspect of nutrition targets for short term impact and enables a child concentrate and learn more. A study of the effects of school breakfast in rural Jamaica show that overcoming school hours hunger leads to better concentration and learning (Powell & Walker, 1998). Second, school meals may also generate nutritional improvements for a child over long run. The improved nutritional status as a result of school meals will in turn enhance a child's physiological capacity for learning thereby increasing the benefits of schooling and the child's desire to attend school. Third, school meals can also reduce morbidity through improved nutrition and consequently enhance attendance. Morbidity is a cause of absence in many developing countries and school meals help children overcome this problem and learn longer. In this regard school feeding increases micronutrients intake and hence will strengthen children's immunity and avoid infectious diseases among children.

Although not a school feeding program in the traditional sense, school-based food distribution has also been used successfully to improve enrollment and attendance among school-age children, particularly girls. In Bangladesh a program of school-based food distribution increased enrollment by 20% versus a 2% decline in non-participating schools (Ahmed and Billah, 1994). In Pakistan, a program provides an income transfer in the form of one or two tins of oil to families whose girls

attend school for 20 days per month. In its pilot phase the oil incentive program demonstrated that it could make a significant contribution to full attendance. In participating schools enrollment improved by 76% compared to 14% in the province overall.

Attendance increased from 73% to 95% among participants. The program also claims to put additional food into the hands of mothers and to serve as a contact between mothers and teachers on distribution days (WFP, 1996). These food transfer mechanisms do not offer the same potential benefits, for example, meeting short-term hunger and specific nutritional needs, as programs that deliver food directly to beneficiaries. These kinds of programs should therefore be assessed within the context of other food and resource transfer programs.

2.5 The Influence of School Feeding Programme on Pupils' Active Class Participation

Class participation is the act of active participation in learning activities by pupils. This may require that a child be in sound health and mind (physical, psychological and emotional). The WFP (2000) noted that a hungry learner will struggle to concentrate on his/her studies but is easily distracted. The school meal may therefore be the solution to these children who come from poor and conflict areas as will be able to receive meals from school thereby solving the problem of hunger and concentrate in the learning process.

In 1984, a study on the school meals in Tamil Nadu in India showed that school feeding programme increases participation of pupils (WFP, 2002). Another study by Rukmani (2011) in the same place (Tamil Nadu) revealed that school feeding programme improves pupils participation in school. In Kenya, Vermeersch and Kremer (2004) found that pre-school children receiving breakfast in school increased class participation in the treatment group by 8.5 percent than their counterparts who never received breakfast in school. It is therefore clear that the school meals improve pupils' participation in school but it is not clear the pupils' activeness in the learning activities in a classroom situation or in a learning session. This study therefore seeks to determine the influence of SFP on the learners' active participation in class.

2.6 School Feeding Program and Student Drop-out

Adelman *et al* (2008) present the interplay between school meals on one hand and grade repetition, learning achievement, and school performance on the other. They show that this effect works in two mechanisms. First, because school meals improve class attendance, children will spend more time learning in school. So the more time children spend in school, the better they learn and these interplays ultimately result in improved school performance, which thus minimizes the probabilities of drop-out. This is however dependent on other factors such as school quality, availability of learning materials and teacher quality. Thus, unless properly implemented, school feeding has rather the potential to worsen drop-

outs. Second, improved nutrition may also enhance school retention and performance in the short and over long run. In the short run, school meals could alleviate hunger and make children concentrate and learn better so that school performance will be improved and hence drop-out is minimized.

In the long run, school meals could enhance learning provided that school meals improve the nutritional status of children and if nutritional status also affects learning. Back to Ahmed's (2004) study in Bangladesh, School Feeding Program has a statistically significant negative impact on student drop-out. This study reveals that the primary school drop-out rate in the program rural area was 29 percent and that the overall completion rate in this area is 6 percentage points higher than control rural areas. Controlling for child and household characteristics, he found that school meals reduce the probability of dropping out of school by 7.5 percent.

In Kenya, the average completion rates hovered at around 43 percent in arid and 57 percent in semi arid districts disparity as the percentages were below what Kenya expected to meet in order to achieve the first three MDGs (eradicate poverty and hunger, attain UPE and have gender equality in education) by 2015 (Ministry of Education 2004). From 2004 up to today is a long period of time meaning that there is need to improve the completion rate through reduction of pupils' dropout rate. For instance Obonyo (2009) in Yala Division Siaya County

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found that school feeding programme is an effective tool in reducing pupils' dropout rate. However, the similar studies need to be done in various parts of Kenya to establish the reality concerning completion rates. This study therefore, seeks to determine the influence of school feeding programme of the dropout rate of the pupils in conflict prone areas of Kenya.

2.7 Challenges Facing School Feeding Programme in Conflict Areas

School feeding initiatives serve the developmental goal of building human capital as an investment in the future. Yet, implementing school feeding operations in an emergency, however, has more than its share of challenges and concerns. The major areas of concern relate to security, the political nature of the crisis and related vulnerability analysis, nutritional issues such as targeting and programme design, availability of teachers and school infrastructure, availability of complementary health activities, as well as gender-related issues.

The first issue of concern is security. Relative security is a prerequisite for all activities in emergencies to ensure access to the targeted areas, mobility of children and teachers to and from school, transport of food commodities to the target areas and, importantly, delivery of food to its intended beneficiaries. Complex emergencies are highly political and of long duration, in addition, war strategies are often aimed at particular social, ethnic or political groups

who are not necessarily the poorest (Duffield 1994; De Waal, 1994). Therefore, understanding the political interplay that causes vulnerability, and incorporating this understanding into assessment and scope of school feeding programmes, is important to ensure that they effectively cater to those most in need (Jaspars & Shoham 1999). In the case of children, vulnerability is often physiological and emotional, and possibly social, economic and political. School feeding goals would then be best served if the programmes are part of the wider nutritional strategy for the area experiencing conflict. This strategy might livelihoods protection, food security and nutrition address rehabilitation programmes, based on comprehensive needs assessment and the community priorities specific to the region.

2.8 Summary of Literature Review

The reviewed literature reported increase in pupils' enrolment, attendance and active class participation. The review further revealed that the SFP resulted into reduction in the dropout rate of the pupils. This have a strong relationship with the effective implementation of school feeding programme as measure of solving the unequal provision of education to the disadvantaged children. However, other studies have equally shown that SFP does not directly influence the pupils' participation in education. For instance, Bundy et al (2009) concluded that onsite meals alone do not retain the girls' enrolment which calls for attention. Another study by Obonyo (2009) in Yala Division found that school feeding programme

does not affect pupils' attendance, enrolment and performance except reducing pupils' dropout only.

From the literature review, it would be interesting to establish the effect of the school feeding programme on the pupils' in the conflict prone regions participation in education. This study will analyse the influence of school feeding programme on the pupils' participation in public primary schools in Isiolo Central District.

2.9 Theoretical Framework

This study was guided by Maslow's theory of motivation. Maslow posited a hierarchy of human needs based on two groupings: deficiency needs and growth needs. Within the deficiency needs, each lower need must be met before moving to the next higher level. Once each of these needs has been satisfied, if at some future time a deficiency is detected, the individual will act to remove the deficiency. The first four levels are: physiological: hunger, thirst, bodily comforts; safety/security: out of danger; belongingness and Love: affiliate with others, be accepted; and esteem: to achieve, be competent, gain approval and recognition. According to Maslow, an individual is ready to act upon the growth needs if and only if the deficiency needs are met. Maslow's initial conceptualization included only one growth need--self-actualization. Self-actualized people are characterized

by: being problem-focused; incorporating an ongoing freshness of appreciation of life; a concern about personal growth; and 4) the ability to have peak experiences.

The pupils in Isiolo are in the first level where they are seeking to alleviate their hunger pangs and calm from the conflict in the region. The school feeding programme assures the pupils that their need for food will be met once in school and are therefore motivated to attend the school. The parents who would have otherwise kept their children from school will be motivated by the fact that the children will receive food in school hence lessen their burden.

2.10 Conceptual Framework

The study was based on the concept that the school feeding programme would attract more pupils participate in the learning through increased enrollment, attending school regularly, participating actively in the learning process and to completing the course.

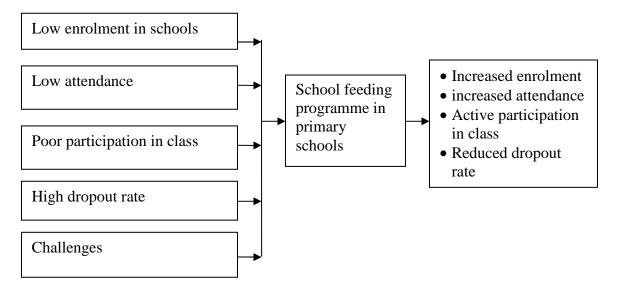


Figure 2.2: How School Feeding Programme Influences Pupils' Participation

The school feeding programme is the independent variable while pupil's participation is the dependent variable. They will be influenced by school feeding programme as it acts as a strong motivating factor to the disadvantaged children who are either in displacement camps of have lost everything in violence to attend school and acquire education. Therefore the incentive of SFP on education will lead to increased pupil enrolment, attendance, class participation and completion rate hence enhance achievement of universal primary education.

The framework illustrates that the pupils' participation results from the motivating factor (SFP) and the pupils interest and expectation of acquiring reward (good meal and education to be successful in future). It will result in achieving increased pupils' participation in school.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter dealt with methodology, specifically it deals with research design, target population, sample size and sampling techniques, research instruments, instrument validity and reliability, data collection procedures and data analysis techniques.

3.2 Study Design

The study used descriptive survey design. Descriptive research design determines and reports the way things are (Mugenda & Mugenda, 2003). This approach is appropriate for this study because it involves fact finding and enquiries from both the pupils and the teachers about the influence of SFP on the participation of pupils in primary schools. The design explored and evaluated in details the relationship between the variables (for this matter the relationship between independent variable, school feeding programme and dependent variable; pupils' participation in education - enrollment, attendance, class participation and dropout). Descriptive survey can also be used to investigate a population by collecting sample to analyse and discover occurrences.

3.3 Target Population

The target population for the study included all the primary school pupils and teachers from all the public primary schools in Isiolo Central District. According to the District Education Office in Isiolo Central District (2013) there were 30 public primary schools in Isiolo Central District. The district had 22,534 pupils and 479 teachers and 30 head teachers.

3.4 Sample Size and Sampling Techniques

The study used both stratified and simple random sampling to select samples from the population. The study used simple random to sample 18 primary schools out of 30 primary schools in the region. This is approximately 60 percent which is representative of the population since according Gay and Airasian (2003) a sample size of between 10 percent and 20 percent of the total population is representative. The study sampled 18 head teachers, 54 teachers and 324 pupils resulting into a sample size of 396 respondents. This was arrived at using the formula as proposed by Borg and Gall (2003).

$$n = \frac{Z^2 pq}{d^2}$$

Where:

n = the desired sample size (if target population is greater than 10,000) z = the standard normal deviate at the required confidence level. P = the proportion in the target population estimated to have characteristic being measured.

q = 1-p

d = the level of statistical significance set.

Assuming 50 percent of the population have the characteristics being measured, q=1-0.5

Assuming we desire accuracy at 0.05 level. The Z-statistic is 1.96 at this level Therefore:

$$n = \frac{(1.96)^2(.5)(.5)}{(.5)^2}$$

= 384.

Purposive sampling was used to select three teachers from each of the sampled schools who are the class teachers of classes 6, 7 and 8. Purposive sampling was also used to select the head teachers of the sampled schools. The purposive sampling technique, also called judgment sampling, is the deliberate choice of a respondent due to the qualities the respondent possesses. The study then used stratified simple random sampling to select 18 pupils from each and every sampled school. The classes formed the strata and the pupils were selected from class six to eight. Simple random sampling was then used to select six pupils from the strata. Simple random sampling gives each member of the population a chance of being selected (Mugenda and Mugenda, 2003).

 Table 3.1: Sample Size

Population	Sample Size	
30	18	
479	54	
22,534	324	
23,043	396	
	30 479 22,534	

3.5 Research Instruments

Research instruments consisted of questionnaires developed by the researcher. The questionnaires were used to collect data from the pupils, teachers and the head teachers with each category of the respondents having separate set of questionnaires. Questionnaires were divided into four parts. Part A sought demographic information, part B sought information on influence of SFP on enrolment, part C sought information on pupils' attendance, part D was on dropout rate and E on active class participation. Finally, section five sought information on the influence of school feeding programme on class participation by pupils.

3.6 Instrument Validity

Validity is the degree to which a test measures what it purports to measure (Borg and Gall 2003). To test the content validity of the instruments, the researcher conducted a pilot study using three schools from a district not part of the study (30 pupils, 6 teachers and three head teachers) who were selected using random sampling (Mugenda & Mugenda 2003). The pilot study data was analysed, interpreted and the instruments reviewed in readiness to the main data collection study. After scrutiny, the researcher amended the instruments according to the supervisors' comments.

3.7 Instrument Reliability

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials Mugenda and Mugenda (2003). The split half method was used to establish instrument reliability. The researcher administered the questionnaires to the same group of persons after one week. Computation of the correlation between the scores was done by first splitting the tests into two halves. The tests were then assigned odd and even number items. Correlation of scores between the two halves were then be computed by using the Pearson r formula (Shiundu, 2008).

To compute the coefficient, the researcher will use the formula:

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

Where Re = reliability of the original test

r = reliability of the coefficient resulting from correlating the scores of the odd items with the scores of the even items.

The research instruments were deemed reliable if the reliability coefficient lies between 0.5 and above. The study used the Cronbach's Alpha test to test the reliability of the instruments. The study got a Cronbach's Alpha coefficient of 0.672 which is within the recommended value as it is more that 0.5. The instruments were therefore considered reliable.

3.8 Data Collection Procedures

A permit that authorized data collection was applied for and obtained from the National Council for Science and Technology (NCST). A copy of the permit was given to the District Education Officer, Isiolo Central district. The researcher then booked appointments with the head teachers to conduct interviews. The researcher administered the questionnaires personally to the respondents. The researcher waited for the questionnaire to be filled in and collect them once completed. The researcher assured the respondents of their confidentiality.

3.9 Data Analysis Techniques

Data was edited to identify and eliminate errors made by respondents. Coding was then done to translate question responses into specific categories. The coded items were analysed with the aid of Statistical Package for Social Sciences (SPSS) software. Data was analysed both qualitatively and quantitatively. Quantitative data was analysed by use of descriptive statistics such as frequency distribution and percentages with the aid of computer software. Qualitative data was analysed by the use of content analysis which involves categorizing and indexing of responses and other field notes into common themes.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter dealt with data analysis, presentations, interpretation and discussions of study findings. The presentations were done based on the research questions which formed the sub-headings in the chapter.

4.2 Questionnaire Response Rate

Questionnaire return rate is the proportion of the sample that participated as intended in all the research procedures. In this study out of 18 principals, 54 teachers and 324 pupils sampled, 11 principals (61 percent), 44 teachers (81.4 percent) and 221 pupils (68.2 percent) returned the questionnaires. These percentage return rates were deemed adequate for the study.

4.3 Demographic Information

This section the study sought to determine the demographic information of the respondents. First the study sought to determine the gender of the respondents. The findings are presented in Table 4.1.

	Head tea	Head teachers Teachers Pupils		Teachers		ls
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Gender	n	%	n	%	n	%
Male	7	63.6	14	31.8	112	50.7
Female	4	36.4	30	68.2	109	49.3
Total	11	100	44	100	221	100

Table 4.1 Distribution of Teachers by Gender

The study established that for the majority of the head teacher respondents (63.6 percent) were male. The results also show that 50.7 percent of the pupil respondents were male. However the results show that 68.2 percent of the teachers respondents were female. The results show that only 36.4 percent of the headteacher respondents were female. This means that the primary school administration in Isiolo Central which is in a conflict area is male dominated. The findings can also be interpreted to mean that the enrolment of boys and girls is near equal.

The pupil respondents were asked to indicate their ages. The study findings are presented in Table 4.2.

A	Frequency	Percent	
Age	n	%	
9 and below years	2	1.0	
10-12 years	13	6.8	
13-14 years	127	57.4	
15 years and above	79	35.7	
Total	221	100	

 Table 4.2: Age of Pupils

The study established that most of the pupil respondents (57.4 percent) are in the age bracket of 13 to 14 years while 35.7 percent of the respondents were aged 15 years and above. This revealed that most of the pupils who responded were aged more than 13 years.

The study also sought to establish the level of education of the head teacher and teacher respondents. The findings of the study are presented in Table 4.3 Below.

	Head Te	achers	Teachers		
	Frequency	Percent	Frequency	Percent	
Qualification	n	%	n	%	
Untrained	0	0	3	6.8	
P1	1	9.0	19	43.2	
S1/SII	7	63.6	16	36.4	
Graduate	3	27.3	6	13.6	
Total	11	100.0	44	100.0	

Table 4.2: Education Qualification for Head Teachers and Teachers

According to the findings of the study, majority of the head teacher respondents (63.6 percent) have an S1/SII education while 27.3 percent were graduates. The findings show that most of the teacher respondents (43.2 percent) are PI while 36.4 percent are SI/SII. The study shows that 13.6 percent of the respondents are graduates. The results of the study may be interpreted to mean that only a few teachers have pursued high education which may be attributed to the conflict in the region which makes many to be unsettled to think of pursuing higher learning.

4.4 Influence of School Feeding Programme on Enrolment

In this section the study sought to determine the influence of SFP on enrolment. The findings are presented in the subsequent sections.

4.4.1 Enrolment Changes in Schools

Respondents were asked to describe the enrolment changes in their schools. The findings are presented in Table 4.4.

Table 4.5: Enrolment Changes in Schools

	Head teache	ers	Teachers	
	Frequency	Percent	Frequency	Percent
Enrolment Changes	n	%	n	%
Static	1	9.1	2	4.6
Increasing	10	90.9	39	88.6
Don't know	.0	.0	3	6.8
Total	11	100.0	44	100.0

The study findings show that majority of the head teacher respondents (90.9 percent) described the pupils enrolment in the schools as increasing. The results also show that 88.6 percent of the teacher respondents described the enrolment rate in schools as increasing. These mean that the enrolment of pupils in schools in Isiolo Central have been on the increase despite being in a conflict area

4.4.2 Enrolment Attributed to School Feeding Programme

The study sought to determine the extent to which the enrolment rate was attributed to school feeding programme (SFP). The findings are presented in Table 4.6 below.

	Head teachers		Teachers	
	Frequency	Percent	Frequency	Percent
Effect of SFP on Enrolment	n	%	n	%
Small extent	0	.0	4	9.1
Moderate extent	3	27.3	8	18.2
Large extent	7	63.6	18	40.9
Very large extent	1	9.1	14	31.8
Total	11	100.0	44	100.0

Table 4.6: Extent School Feeding Programme is attributed to Enrolment

The results of the study show that 72.7 percent of the headteacher respondents attributed to a large extent the increase in enrolment to the SFP. The results also show that 72.7 percent of the teacher respondents attributed the increase in the enrolment to SFP to a large extent. The study findings may be interpreted to mean that the School Feeding Programme contributed to the increased enrolment in primary schools in Isiolo Central District.

The student respondents were asked to give reasons for attending school. The findings are presented in Table 4.7.

Reasons given for attending school	Frequency	Percentage
	(n)	(%)
There is no regular meals at home	21	9.5
Am assured of free meals in school	94	42.5
Education is free	106	47.9
Total	221	100.0

Table 4.7: Student Responses to Reasons for Enrolment

The study findings show that according to 47.9 percent of the pupil respondents, they enrolled in school because education was free while 42.5 percent of the respondents enrolled because they were assured of free meals in schools. The study findings may be interpreted to mean that to great extent, the pupils enrolment improved because of the free school meals.

4.4.3 Class with highest Enrollment

The head teacher respondents were asked to indicate the class that was enrolled the most due to the SFP. The findings are presented in Table 4.8 below.

Table 4.8: Headteachers	Responses to	o Class with	Highest Enrollment

Class with Highest Enrollment	Frequency (n)	Percent (%)
Standard 1 -3	8	72.7
Standard 4 -5	3	27.3
Total	11	100

The study findings show that the classes with the highest enrolment (72.7percent) due to school feeding programme is classes one to three. The results of the study show that 27.3 percent of the respondents indicated that classes four and five were most enrolled because of the school meal. The findings may be interpreted to mean that the pupils in the lower classes are enrolled more than those in the upper classes.

4.4.4 Factors Influencing Enrolment

The head teacher respondents were asked to indicate the factors which influenced the pupils enrollment in school in terms of importance. The findings are presented in Table 4.9.

	Neither									
Factors	Μ	ost			Impor	tant or			V	ery
Influencing	Impo	ortant	Imp	ortant	Unim	portant	Unim	portant	Unim	portant
Enrolment	n	%	n	%	n	%	n	%	n	%
School feeding	5	45.5	3	27.3	0	0	2	18.2	1	9.1
meals										
Free Primary	4	36.4	2	18.2	0	0	3	27.3	2	18.2
Education										
School	0	0	4	36.4	3	18.2	2	18.2	2	18.2
performance										

The findings of the study show that ranked as number one factor which influenced pupils enrolment by the head teachers was school feeding programme (72.8 percent). The study show that ranked number two factor that influenced pupils enrolment in terms of importance was free primary education (54.6 percent). The results show that past school performance ranked the least. The study findings are therefore interpreted to mean that the SFP was the major influence of pupils enrolment in Isiolo Central District.

These findings the SFP increased the enrolment rate of the pupils support the findings of Adelman et al., (2008) who noted that subsidizing school meals will increase school enrolment as it will change the households schooling decision for some children who would not have been enrolled in school otherwise.

4.4.5 Children not Enrolled in School

The head teacher and teacher respondents were asked to indicate whether there were children they knew who were not enrolled in school. The findings are presented in Table 4.10.

Table 4.10: Children not Enrolled in School

	Head	teacher	Teacher	
Children not enrolled	F	%	F	%
Knew children not enrolled	10	90.9	19	43.2
Did not know children not enrolled	1	9.1	25	56.8
Total	11	100.0	44	100.0

According to the findings of the study majority of the head teacher respondents (90.9 percent) indicated that indeed there were children who were not enrolled in school while 43.2 percent of the teacher respondents also indicated there were children not enrolled in schools. However, most of the teacher respondents (56.8 percent) indicated that they were not aware of any child who was not enrolled in school. The study findings can be interpreted to mean that there are children not enrolled in schools.

The headteacher and teacher respondents were asked to indicate reasons they perceived to be the cause of non enrollment of children in schools. The findings of the study are presented in Table 4.11 below.

	Head 1	teacher	Teacher		
Reasons for Non-enrolment		Percentage		C	
	(n)	(%)	(n)	(%)	
Lack of motivation	1	9.1	4	9.1	
Child labour	6	54.5	4	9.1	
Lack of food	1	9.1	5	11.4	
Insecurity	1	9.1	5	11.4	
No motivation	2	18.2	10	22.7	
No response	0	.0	16	36.4	
Total	11	100.0	44	100.0	

Table 4.11: Reasons for Non Enrolment

The findings of the study show that 54.5 percent of the headteacher respondents indicated that child labour was the main reason why the children are not enrolled in schools. Other reasons given by the respondents include lack of food at home (11.4 percent), insecurity (11.4 percent) and lack of motivation (9.1 percent). The findings of the study may therefore be interpreted to mean that child labour was the major reason why the children are not enrolled in school in Isiolo Central District.

4.5 Findings on the Influence of School Feeding Programme on Attendance

In this section the study sought to determine the influence of school feeding on attendance. The findings of the study is presented on the subsequent sections.

4.5.1 Description of Attendance of Pupils in School

The headteacher and teacher respondents were asked to describe the attendance of pupils in school. The findings are presented in the Table 4.12.

	Head teache	r	Teacher	
	Frequency	Percentage	Frequency	Percentage
Attendance	(n)	(%)	(n)	(%)
Regular	10	90.9	35	79.5
Inconsistent	1	9.1	9	20.5
Total	11	100.0	44	100.0

 Table 4.12: Description of attendance

The results of the study show that majority of the head teacher and teacher respondents (90.9 percent and 79.5 percent respectively) described the enrolment as regular. Only a minority of the respondents (9.1 percent and 20.5 percent respectively) indicated that the attendance was irregular. The findings of the study may be interpreted to mean that the pupils attendance in schools is regular.

4.5.2 School Meals reason for Regular School Attendance

The study sought to determine whether the school meal was the reason for regular attendance of school by pupils. The findings are presented in Table 4.13.

School	Head t	eacher	Tea	cher	Pu	pils
Meals Reason for	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
School	(n)	(%)	(n)	(%)	(n)	(%)
Attendance						
Yes	11	100	39	88.6	87	39.4
No	0	0	5	11.8	134	60.6
Total	11	100	44	100.0	221	100.0

Table 4.13 School Meals Reasons for School Attendance

The study findings show that majority of the head teacher and teacher respondents (100 percent and 88.6 percent respectively) indicated that indeed the school meals was the reason for the regular attendance of school by the pupils. However, according to majority of the pupil respondents (60.6 percent), the school meals was not the reason for regular attendance of school by pupils. The results revealed that only 39.4 percent of the pupil respondents indicated that the school means was the reasons for the regular attendance. These findings mean that to a large extent the regular school attendance was not a result of the school meal. Asked to explain their answers, respondents indicated that because of the school meals, pupils do not disappear during lunch hours. Respondents indicated that since the pupils were assured of the mid day meals, they attended school regularly.

The findings of the study agree with Adelman et al., (2008), who observed that school meals can be effective at increasing class attendance because children receive the meal only when they attend school by alleviate short term hunger of school children during the school day by providing more nutrients to the child, providing the child with a meal when he or she would have not otherwise have had one, or replacing a meal that would have been received after school with one during school hours. But these findings may not hold according to Adelman et al (2008) who noted that the influence of SFP will depend on the prevailing opportunity cost where he gave an example of places where child labor forms the integral part of agricultural work during a particular day/season of a year, class attendance could be low. In such cases, school meals may or may not encourage attendance depending on how the beneficiaries value them.

The pupil respondents were asked to indicate the reasons for attending school. According to the findings presented in Table 4.14, Majority of the respondents (96 percent) indicated that they went to school with a reason to learn and this was the main reason for the regular attendance, to learn. From the findings of the study it can be interpreted that the pupils have different reasons for regular attendance from that of the head teacher and the teacher respondents.

Table 4.14: Reasons for Attending School

Reasons for Attending School	iding School Frequency (n)	
Want to learn	212	95.9
Education is free	9	4.1
Total	221	100

4.6 Findings on Influence of School Feeding Programme on Class

Participation

In this section the study sought to establish the influence of SFP on pupils' class participation in primary schools in Isiolo. The findings are presented in the subsequent sections.

4.6.1 Participation of Pupils in Class

The teacher respondents were asked to describe the participation of pupils in class. The findings of the study are presented in Table 4.15 below.

Participation in Class	Frequency (n)	Percent (%)
Very active	5	11.4
Lively	30	68.1
Inactive	5	11.4
Dull	4	9.1
Total	44	100

Table 4.15: Teachers Responses on Level of Participation of Pupils in Class

According to the findings of the study, majority of the teacher respondents (68.1%) described the pupil class participation as lively while 11.4 percent described it as very lively. The study findings show that 11.4 percent of the respondents described the participation of pupils in class as inactive. The findings are interpreted to mean that the pupils are active in class.

4.6.2 School Meals Influence on Level of Participation

The teacher respondents were asked to indicate the extent to which the schools meals influenced the level of participation of the pupils in class. The findings are presented in Table 4.16.

SFP Influence of Participation	Frequency (n)	Percent (%)
No extent	0	0
Small extent	3	6.8
Moderate extent	14	31.8
Large extent	13	29.5
Very large extent	14	31.8
Total	44	100

Figure 4.16: Extent School Meals Influence Pupils Level of Participation

The findings of the study show that according to 61.3 percent of the respondents, the school meals influenced participation in class to a large extent. The results further show that 31.8 percent of the respondents indicated that the school meals influenced participation to a moderate extent. These findings may be interpreted to mean that school meals influenced pupil participation in class.

The findings of the study agree with Vermeersch and Kremer (2004) who found in his study that the school feeding programme increased participation of children. However, they noted that the SFP did not result into better performance of pupils in class.

4.7 Findings of Influence of School Feeding Programme on Dropout of Pupils

In this section the study sought to establish the influence of school feeding programme on the pupils' dropout from school in Isiolo Central District. The findings are presented in the subsequent sections.

4.7.1 Drop out Rate of Pupils

The study sought to determine the dropout rate of pupils in Isiolo Central District. The findings are presented in Table 4.17

	Head t	Head teacher		eacher
Dropout Rate	F	%	F	%
High	2	18.2	3	6.8
Moderate	3	27.3	8	18.2
Low	6	54.5	33	75.0
Total	11	100.0	44	100.0

Table 4.17: Dropout Rate

The findings of the study show that majority of the head teacher and teacher respondents (54.5 percent and 75 percent respectively) described the dropout rate as low while 27.3 percent of head teacher respondents and 18.2 percent of teacher respondents described the dropout rate as moderate. The study findings can be interpreted to mean that the dropout rate is low in Isiolo Central District.

4.7.2 Meals Attract Pupils to Remain in School

The respondents were asked to state whether the meals attracted the pupils to remain in schools. The findings are presented in Table 4.18.

	Headteacher		Tea	acher
	\mathbf{F}	%	F	%
Yes	11	100.0	40	90.9
No	0	0.0	4	9.1
Total	11	100.0	0	100.0

 Table 4.18: Meals Attract Pupils to Remain in School

The results of the study show that all the headteacher respondents indicated that indeed the meals attracted the pupils to remain in school while 90.9 percent of the teacher respondents indicated that the meals attracted the pupils to remain in school. The findings of the study may be interpreted to mean that the meals attracted the pupils to remain in schools.

4.7.3 Reasons for Dropout

The respondents were asked to provide reasons for the dropout of pupils from primary schools in Isiolo Central District. The findings are presented in Table 4.19

	Head tea	cher	Teacher	
Reasons for dropout	F	%	F	%
Hunger	7	63.6	15	34.1
Insecurity	3	27.3	9	20.5
Lack of motivation	0	0.0	14	0.3
Child labour	1	9.1	6	13.6
Total	11	100.0	44	100.0

 Table 4.19: Reasons for Dropout

The study findings show that according to most of the head teacher and the teacher respondents (63.6 percent and 34.1 percent respectively) the dropout rate in Isiolo was caused by hunger. The study findings also show that the dropout rate was caused by insecurity (27.3 percent and 20.5 percent respectively). These findings may be interpreted to mean that the dropout in Isiolo Central District is largely due to hunger and insecurity to small extent.

The findings of the study agree with Adelman et al., (2008) and Ahmed (2004) who argued that school feeding programme enhanced school retention and performance both in the short and in the long run. In the short run, school meals could alleviate hunger and make children concentrate and learn better so that school performance will be improved and hence drop-out is minimized.

4.8 Findings on Challenges Facing the Implementation of School Feeding Programmes in Public Primary Schools

In this section the study sought to determine the challenges facing the implementation of SFP I public primary schools in Isiolo Central District. The findings are presented in the subsequent sections.

4.8.1 Extent Theft is a Challenge to Implementation on School Feeding Programme

Respondents were asked to identify whether theft was a challenge to the implementation of school feeding programme in Isiolo Central District. The findings are presented in Table 4.20.

Table 4.20: Extent Theft is a Challenge to Implementation on School FeedingProgramme

6	
	54.5
3	27.3
1	9.1
1	9.1
0	0
11	100

The findings of the study show that majority of the respondents indicated that majority of the respondents (81.8 percent) indicated that theft was a challenge only to a small extent. However, according to 9.1 percent of the respondents, theft was a challenge especially during conflict or tribal clashes when the stores are left unattended. The findings are therefore interpreted to mean that theft was a challenge only to a small extent.

4.8.2 Supply of Food

The study sought to establish whether inadequacy of food was a challenge to the implementation of SFP. The findings are presented in Table 4.21.

Adequate of food supply	Frequency	Percent
Very small extent	1	9.1
Small extent	4	36.4
Moderate extent	3	27.3
Large extent	0	0
Very large extent	3	27.3
Total	11	100

Table 4.21: Extent Supply of Food was adequate

The study results show that 50 percent of the respondents indicated that the food was getting finished before the stipulated time only to a small extent. The results show that according to 25 percent of the respondents the food getting finished before time was a challenge to a small extent while the same proportion indicated that the food getting finished was a challenge to a very large extent. The study findings can be interpreted to mean that while some schools had enough food, others never had enough food to take them for the whole season which hampered the implementation of SFP in the region.

The respondents were further asked to state some of the challenges the school feeding programme implementation was facing. Three respondents indicated that the recurrent water shortage was a challenge to the implementation of SFP in the district. Two respondents indicated that due to poverty, some parents are unable to give money for the cooks which makes the implementation of the programme to be a challenge. Three respondents indicated that the other challenge was the delay in the delivery of the food by the supplier. The study established that four respondents also indicated that the preparation of the food also require others inputs such as fuel such as firewood and charcoal which are not available sometimes. Two respondents indicated that Isiolo being in a conflict area, the implementation of the SFP sometimes become a challenge due to insecurity.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, recommendations, and suggestions for further research.

5.2 Summary of the study

The proponents of school feeding programme claim that providing food in schools would ostensibly attract vulnerable children to school, improves their attendance and minimizes drop-outs. According to the United Nations World Food Programme, School Feeding Programme is an incentive for vulnerable families to invest in children's education and encourages poor households to send children to school and helps to keep them there. The purpose of the study was to determine the influence of school feeding programme on the pupils' participation in primary schools in conflict regions with main focus on Isiolo Central District. Research question one sought to examine how the school feeding programme influenced the enrolment of children in primary schools. Research question two aimed at establishing the extent the SFP influenced the school attendance by primary school pupils Research question three sought to determine the influence of SFP on pupil's class participation. Research question four aimed at determining the influence of SFP on the dropout rate by primary school pupils while research

question five sought to establish the challenges facing the implementation of school feeding programme in public primary schools.

The study used descriptive survey design in which it targeted 18 principals, 54 teachers and 324 students sampled from Isiolo Central District out of which 11 principals, 44 teachers and 221 students responded by completing the questionnaire and returning to the researcher. The data was collected by use of questionnaires. Data was analysed both qualitatively and quantitatively.

5.3 Major Findings of the Study

The study established that according to majority of the respondents (90.9 percent head teachers and 88.6 percent teachers) the schools in Isiolo Central District experienced increasing enrollments. The study further established that the increasing enrolments was attributed to the school feeding programme as was indicated that 72.7 percent head teacher and teacher respondent. The study however show that 88 percent of the pupil respondents indicated that school meals was not the reason why they enrolled in school. Most of the student respondents indicated that free education was the main reason as to why they enrolled in schools. The study also show that 42.5 percent of the pupils indicated that they enrolled because in school they were assured of meals. The classes enrolled most according to 75 percent of the head teacher respondents was the lower classes. The factors which were mostly found to influence enrolment were school feeding

meals and FPE. The study established that one of the factors which Kept children out of school was child labour (54.5 percent).

The study established that the attendance of the pupils was described as regular by 90.9 percent headteacher and 79.5 percent teacher respondents. The study further established that according to all the head teacher respondents and 88.6 percent teacher respondents, school meals was the reason for school attendance. The study however show that 60.6 percent of the pupil respondents do not believe that school meal is the reason for attending school. Majority of the pupils (96 percent) cited desire to learn as the reason for attending school.

The study findings revealed that the participation of pupils in class was described by 80 percent of the respondents as lively. The study findings show that most of the respondents (61 percent) indicated that the school meal influenced participation by pupils in class to a large extent. The findings further show that 32 percent of the respondents indicated that school meal programme influenced participation in class to a moderate extent.

The study established that most respondents both head teachers and teachers (54.5 percent and 75 percent respectively) described the dropout rate as low. Asked whether the school meals influenced the dropout rate, majority of the head teacher and the teacher respondents (100 percent and 90.9 percent respectively) indicated

that indeed school meals attracted the pupils to remain in school. Hunger and insecurity were the main reasons for the dropout of pupils in Isiolo Central District.

Some of the challenges affecting the implementation of SFP include inadequaecy where the food runs out before the date that was stipulated (50 percent), insecurity, water shortages and lack of essentials fuel.

5.4 Conclusions of the Study

From the findings of the study, the researcher concludes that school feeding program influenced the enrolment of pupils in primary school in Isiolo Central District.

The study further concludes that the school feeding programme has influenced the attendance of pupils in schools in Isiolo Central District.

The study also concludes that the introduction of SFP enhanced active participation of the pupils in class as it has made the pupils to be lively in class.

The study concludes that SFP also influenced the dropout rate of the pupils in Isiolo Central District as hunger was number one reason for dropout.

Finally, the study concludes that among the challenges facing the implementation of SFP was insecurity, theft, lack of water and other essentials such as fuel and manpower.

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5.5 Recommendations from the Study

The following are the recommendations for the study:

- i). The study recommends that the government should increase the coverage of the areas under school feeding programme especially the regions hard hit with conflict with the view to improving the enrolment rates.
- ii). The study further recommends that the government should ensure there is a constant supply of school food so as to maintain the pupils attend school regularly.
- iii). The study recommends that the government and the donors should ensure the schools have constant supply of food so as to keep the children alert in class to actively participate in the learning process.
- iv). The study recommends that the government should ensure that all the schools in the conflict regions have SFP so that hunger does not force any child to drop out of school.

5.6 Suggestions for Further Research

The study suggests the following for further research:

 This study was done in Isiolo Central District only, the study suggests that the study be replicated in other conflict regions such as Turkana, Pokot and Marsabit to determine the effect of SFP of pupils participation in school. ii). The study was limited to enrolment, attendance, active participation in class and dropout rate. The study recommends that further study should be done on other variables such as academic performance.

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APPENDICES

APPENDIX I

LETTER OF INTRODUCTION

University of Nairobi, Dept of Educational, Administration & Planning, P.O. Box 30197 – 00100, Nairobi. Date: _____.

The Headteacher,

P.O Box_____

Isiolo Central District.

Dear Sir/Madam

REQUEST FOR COLLECTION OF RESEARCH DATA

I am a Master of Education (Med) student at the University of Nairobi. As part of the requirement for the award of the degree, I am expected to undertake a research study. I am requesting for your participation in a study that examines "**The Influence of School Feeding Programme on the Pupils Participation in Public Primary Schools in Conflict Prone Areas: a Case of Isiolo Central District**". Please fill in the questionnaires. The research results will be used for academic purposes only and information provided will be treated with confidentiality. Your cooperation will be appreciated.

Yours sincerely, Martin Chege

APPENDIX II

QUESTIONNAIRE FOR HEADTEACHERS

Instructions

Please respond to the items given in this scale as honestly and accurately as possible.

Please read each statement carefully and tick ($\sqrt{}$) against the appropriate answer.

Fill in the blank spaces with correct information.

Part A: Background Information

- 1. What is your gender? Male [] Female []
- 2. What is your highest level of education?

Untrained	[]	PI	[]	SI/SII []	Graduate
[]					

3. What is the pupil population in your school?_____

- 4. Is there school feeding programme in your school? Yes [] No[]
- 5. When was the SFP introduced in your school?_____

Part B: Influence of SFP on Enrolment

6. How would you describe the enrolment rate in your school?

Declining [] Static [] Increasing []

```
Don't Know [ ]
```

7. To what extent would you attribute the rate of enrolment to the introduction of SFP?

	Very small extent	[]	Small	extent
[]	Moderate extent	[]	Large	extent
[]	Very large ext	tent	[]	

- 8. Which classes in your opinion registered the highest enrolment due to SFP? Standard 1 3 [] Standard 4 5 [] Standard 5 8 []
- 9. In your opinion, what factors mostly influence pupil enrolment in the school ranked in terms of most important as 1 and least important as 5?

								I	2	3	
	4	5				Schoo	l feedin	ıg meal	S	[]
	[]	[]	[]	[]		Free	prim	ary	educati	on
	[]	[]	[]	[]	[]		Past		scho	ool
	performance	[]	[]	[]	[]	[]				
~	.							c 1			

- 10. In your opinion, are there some children you know of who are not enrolled in school? Yes [] No []
- 11. If yes, what are the reasons

Lack of motivation	[]	Child labour []	Lack of food
[] Insecurity	[]	Others (specify)	

Part C: Influence of SFP on Attendance

12. How would you describe the attendance of pupils in your school?

Regular	[]	Inconsistent	[]	Seasonal	[]
13. Explain your answer					

14. With the school meals, do the pupils attend school regularly?

Yes [] No []

15. Explain your answer_____

16. In your pinion, how has the school meal influenced the pupil attendance in school?_____

Part D: Influence of SFP on Dropout Rate

17. How would you describe the dropout rate of pupils in your school?							
	Very high	[]	High []	Mode	rate []	Low	[]
18. Do the	e meals attract	and reta	in pupils in sc	chool?	Yes	[]	No
	[]						
19. If yes,	, give reason						
20. What would be some of the reasons for the dropout rate?							
	Hunger	[]	Insecurity	[]	Lack	of	motivation
	[]	Child	labour []				

Challenges

21.	Τc) W	hat	exter	nt ar	e the	e follo	wii	ng c	chal	leng	ges fa	cing	the i	imp	len	nent	atio	n of
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	sc	hoo	ol?_																

APPENDIX III

QUESTIONNAIRE FOR TEACHERS

Instructions

Please respond to the items given in this scale as honestly and accurately as possible.

Please read each statement carefully and tick ($\sqrt{}$) against the appropriate answer.

Fill in the blank spaces with correct information.

Part A: Background Information

- 1. What is your gender? Male [] Female []
- 2. What is your highest level of education?

Untrained [] PI [] SI/SII [] Graduate

3. What is the pupil population in your school?_____

4. Is there school feeding programme in your school? Yes [] No

Part B: Influence of SFP on Enrolment

5. How would you describe the enrolment rate in your school?

Declining [] Static [] Increasing [] Don't Know []

- To what extent would you attribute the rate of enrolment to the introduction of SFP? Very small extent [] Small extent [] Moderate extent [] Large extent [] Very large extent []
- In your opinion, are there some children you know of who are not enrolled in school? Yes [] N []

	If yes, what are the reasons					
	Lack of motivation	[]	Child labour	[] La	ick of fo	oc
	[] Insecurity	[]	Others (specif	y)	·	
Pa	rt C: Influence of SFP on A	ttendar	166			
	How would you describe the			n vour scho	ol?	
2.	Regular []			•	[]	
10.	Explain answer				yo	ou
	With the school meals, do th Yes [] Explain your answer	No	[]			
13.	In your pinion, how has the school?					ir
art D		s Partici	ipation			
	How would you describe the	e partici	pation of the pu	pils in clas	s?	
14.	now would you describe un					
14.	Very active []	Lively	[] Inactiv	re []	
14.	-	Lively	[] Inactiv	re []	
	Very active []	-				0
	Very active [] Dull []	ool mea	n influence the	level of par	rticipation	0

Very large extent []

Part E: Influence of SFP on Dropout Rate

16. How would you describe the dropout rate of pupils in your school? High [] Very high [] Moderate [] Low [] 17. Do the meals attract and retain pupils in school? Yes [] No [] 18. If yes, give reason_____ 19. What would be some of the reasons for the dropout rate? Hunger [] Insecurity [] Lack of motivation [] Child labour []

APPENDIX IV

QUESTIONNAIRE FOR PUPILS

Instructions

Please respond to the items given in this scale as honestly and accurately as possible.

Please read each statements carefully and tick ($\sqrt{}$) against appropriate answers. Fill in the blank spaces with correct information.

Questions

- 1. What is your gender? Male [] Female[]
- 2. What is your age? 9 and below years [] 10 12 years [] 13 14 years [] 15 years and above []
- Is there school feeding programme in your school? Yes [] No
 []
- 4. Were you attracted to enroll in school because of free meals? Yes [] No []
- 5. If yes, give reasons

There is no regular meals at home [] Is assured of free meals in school []

6. What are some of the reasons why you attend school regularly?

I get means in school [] Want to learn [

1

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Education is free [ ]
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7. Do the school meals help you attend school regularly? Yes [] No

[]

8. Is school meal the only regular meal for you? Yes [] No []

9. Do you contemplate dropping out of school? Yes [] No []

What could be your reason?_____

APPENDIX V: LETTER OF AUTHORIZATION

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550 Mobile: 0713 788 787, 0735 404 245 Fax: 254-020-2213215 When replying please quote secretary@ncst.go.ke P.O. Box 30623-00100 NAIROBI-KENYA Website: www.ncst.go.ke

Our Ref: NCST/RCD/14/013/724

Date: 20th May 2013

Martin Chege Kiragu University of Nairobi P.O Box 30197-00100 Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated 3rd May, 2013 for authority to carry out research on "*Influence of school feeding programme of pupils*" *participation in primary schools in conflict regions: The case of Isiolo District, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in Isiolo District for a period ending 31st July, 2013.

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

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

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

Copy to: The District Commissioner The District Education Officer Isiolo District

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

APPENDIX VI: RESEARCH PERMIT

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