

**THE IMPACT OF SCHOOL FEEDING PROGRAMME ON ENROLMENT IN
PRIMARY SCHOOLS IN ARID AND SEMI-ARID AREAS. A CASE OF
KATHONZWENI SUB-COUNTY, MAKUENI COUNTY, KENYA**

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ABSTRACT

Providing school meals can play a critical role in ensuring that children learn well. Many children from poor homes go to school hungry. This leads to poor concentration in class. This study sought to determine the impact of the School Feeding Programme (SFP) on enrolment in primary schools in Arid and Semi-Arid Areas, taking a case of Kathonzweni Sub-County, Makueni County, Kenya. Based on the findings of the study, SFP had a high influence on enrolment of children into primary schools in Kathonzweni Sub-County. The study established that SFP greatly influenced school attendance by pupils in Kathonzweni Sub-County. They had a significant effect on retention of pupils in the learning process. The study also revealed that challenges facing school heads in the course of implementing the school feeding programme included: late funds disbursement, parent's failure to pay funds to cater for the cook, water and firewood shortage. It was therefore recommended that the financiers of the SFP should ensure that enough funds were released in time to give schools' management enough time to purchase enough food stuffs in time.

Key Words: School Feeding Programme (SFP), Meals, Arid and Semi-Arid Areas

1.1 Background of the Study

Providing school meals can play a critical role in ensuring that children learn well. Health, education and nutrition should form an integral part of the early childhood education programme. Until recently, early childhood education was seen as less significant in early childhood. Its importance, however, cannot be over emphasised. Early Childhood Education lays a foundation for creativity, integration, self-reliance and survival (GoK, 2005). Provision of this education has been integrative, which means that it nurtures the personality of the child as well as developing him/ her mentally, socially and emotionally. School feeding is an effective platform for providing micronutrient food supplementation and other health interventions that improve children's' ability to get the most out of food. The SFP has demonstrated sustained results over the years. External evaluations of the programme have found that the activity produces positive results. The average haemoglobin and concentration of children from SFP is 11% higher than the average haemoglobin concentration among children from non-school feeding assisted schools. The World Food Programme (WFP) in Kenya provides assistance to 770,000 primary school children in more than 1,700 schools located in different parts of the country. It launched a school feeding programme in 1980, with the overall objective of supporting the government's goal of ensuring universal primary education and education for all by 2015. Every meal that is provided to a child should contain a balanced diet. Food from each of the three groups should be included in the meal in order to come up with a well-balanced diet.

1.2 Statement of the Problem

Retention and academic performance of learners are serious issues of focus for the Government of Kenya. 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 enrolment increased from 77 percent to 92 percent, enrolment in the ASAL increased from 17 percent to 29 percent. In Kathonzwani sub-county primary schools experienced low enrolment, inconsistent retention of pupil's, truancy and frequent pupils absenteeism before the introduction of school feeding programme. This study therefore, sought to assess the impact of school feeding programme on enrolment in primary schools in arid and semi-arid areas, taking a case of Kathonzwani Sub-County, Makueni County, Kenya.

1.4 Objectives of the Study

The objectives of the study were:

- i). To establish the factors contributing to the retention of primary school pupils in Kathonzwani Sub-County.
- ii). To establish the effects of SFP on enrolment of primary school pupils in Kathonzwani Sub-County.
- iii). To explore the challenges faced by head teachers in the implementation of SFP in Kathonzwani Sub-county.

2.1 Literature Review

2.1.1 An Overview of the School Feeding Programme

A feeding programme is a scheduled activity of providing enough nutrition and balanced diet to a selected group of people. It is a laid down schedule for a school to give food to children to enhance learning and other activities. As early as the 1930s, the United States and the United Kingdom utilized SFP to improve children's health these early programmes took the form of school feeding programmes (SFP), where participants were fed a meal or a snack at school. As a social safety net, SFP programmes have also gained popularity among political leaders and

policy makers in developing countries in Asia, Africa, and Latin America. The 2011 World Food Prize was shared by John Agyekum Kufuor, former president of Ghana, and Luiz Inácio Lula da Silva, former president of Brazil, for the successful social programmes, including school feeding, that each nation has established. Brazil and India have established school feeding programmes by passing legislations. Brazil added school feeding to its constitution (Bundy et al. 2009) while in 2001 in India, the Supreme Court mandated that all state governments must provide cooked meals in targeted schools (Afridi, 2010). The WFP uses fortified food to ensure that children get the micronutrients they need. Studies show that diet and nutrition play a critical role in physical and intellectual development, however, something more is needed to attract the poorest girls to school. In its "*take-home rations*" projects, WFP provides basic food items, often including a sack of rice and a can of cooking oil, to families who send their daughters to school (GoK, 2005). This behavioural change by both the parents and the children is reflected in the rates of increase in such outcomes as enrolment, attendance, and length of schooling, and decrease in dropout rate, tardiness, and absenteeism. This study therefore, sought to assess the impact of school feeding programme on enrolment in primary schools in Arid and Semi-Arid Areas taking a case of Kathonzi Sub-County, Makueni County, Kenya.

2.1.2 Higher Enrolment and Attendance Rate

In 2000 the WFP fed over 12 million children in schools in 54 countries working with national governments, local authorities and NGO's. WFP used food to attract children to schools where enrolment ratios were lowest. The SFP is one of the most important ways of using food aid for education. In 1993, the pre-primary and primary feeding project accounted for more than half of all WFP development commitments totalling to \$132m out of \$253m (WFP, 2001). In a review evaluation of US bilateral food aid programme spanning 1980-1985, the United States Bureau of

Food, Peace, and Voluntary Assistance came to the conclusion that SFP programme improved enrolment and attendance. School feeding programmes are premised on the expectation that serving food at school will increase enrolment and daily attendance of students. Thus, school feeding programmes are hypothesized to alter the schooling decision for families who would not have sent their children to school otherwise (Adelman, Gilligan, & Lehrer 2008). This study therefore, sought to assess the impact of school feeding programme on enrolment in primary schools in Arid and Semi-Arid Areas taking a case of Kathonzwani Sub-County, Makueni County, Kenya

2.1.2 Children's Performance and Nutrition

Children are the future of any society. For this reason, they should be the starting point of any strategy that emphasises human development. The education of young children in Kenya has become of primary importance to educators, parents and the society as a whole. The problem of child malnutrition continues to plague societies and ends up affecting the education of the child. Researchers have shown that malnutrition in Kenya among pre-school children is on the increase. Thirty percent (30%) of pre-schoolers are severely or mildly malnourished. Research has, therefore, greatly emphasised the first years of life and the necessity for meeting adequately the physical, emotional, social and mental development of every child. It is, therefore, the task of all those who are working with children, whether parents, teachers or members of any community to provide healthcare, nutrition and education during the important and formative years of early childhood (Meyers, 1992). This sentiment is in accordance with the United Nation's declaration of the right of the child.

2.1.3 Effects of School Feeding Programmes on Health

School Feeding Programmes are one of several interventions that can address some of the nutrition and health problems of school-age children. School Feeding Programmes, and other school-based nutrition and health programmes can also motivate parents to enrol their children in school and to see that they attend regularly. The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in schoolchildren : the long distances children have to travel to school, cultural meal practices that include no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply alleviating this hunger in schoolchildren helps them to perform better in school. In Jamaica providing breakfast to primary school students significantly increased attendance and arithmetic scores. The children who benefited most were those who were wasted, stunted, or previously malnourished according to study (Simeon & Grantham-McGregor, 1989).

2.1.4 Improvement of Attendance and Enrolment

In Burkina Faso, Kazianga, de Walque, and Alderman (2009) found that SFP interventions had a statistically significant impact on the overall enrolment and the enrolment of girls. Communities were randomly selected as SFP, or control interventions. In SFP villages, schools increased new enrolment overall by 6.2%, and girls' enrolment increased by 5.6%; schools saw an increase of 5% for new girls' enrolment. (Kazianga, de Walque, & Alderman, 2009). The researchers found that while boys' attendance did not change, girls in SFP schools missed one day more than schools not involved in SFP programme Alderman, Gilligan, and Lehrer (2010) analysed the impacts of SFP on children in refugee camps in northern Uganda. The refugee SFP programmes were administered by WFP and each camp had either SFP or Take Home Ration (THR)

programmes. In the camps with SFP, the programme was found to generate an 8.9% increase in the probability of enrolment of 6-13 year old children, and slightly more for 6-9 year old children at 9.4% (Alderman, Gilligan, & Lehrer 2010). The impacts in Take Home Ratio camps SFP were smaller and not significant, while the difference between Take Home Ratio and SFP was also not significant.

2.1.5 Participation, Demand for Schooling and Learner Retention

Schools that depend on the community to organize and implement SFPs offer certain advantages. These advantages include: increasing the contact, and hence communication, between parents and teachers, officials and others; giving parents the opportunity to become more aware of what goes on at schools; and serving to raise the value of education/the school for parents and the whole community. For example, while universal primary school attendance is a stated goal by many governments and the millennium development goals (MDG), enrolment rates continue to be low in many developing countries (UNESCO, 2007). To foster enrolment, many governments have eliminated primary school fees, as well as established programmes such as school feeding food programmes (Levinger, 1986) or conditional cash transfers more recently to increase the demand for schooling. Ghana is the first of 10 countries in Sub-Saharan Africa implementing an SFP modelled to the guidelines of the NEPAD as described in the CAADP. In Ghana several school feeding programmes were already implemented. The formulation of the Ghana SFP started in the year 2004 and the programme run from January 2006 until December 2010. It was preceded by a pilot programme, which was carried out from September to December 2005 (NEPAD, 2005). In the year 2010 the programme intends to serve about 1.04 million children in all 138 districts of Ghana) The long-term objective of the Ghana SFP was to contribute to poverty reduction and food security and to increase school enrolment, attendance and retention.

2.1.6 Challenges in Implementation of SFP

While SFP has its effects on attendance and retention, there are also challenges along its implementation. A recent study by Upton *et al.* (2012) examined two school feeding programmes in Burkina Faso in which one received foods imported from the United States while the other from locally procured sources. Sourcing from local producers resulted in a cost savings of 20% to the agencies purchasing the food, while still meeting the government standards in food quality. Additionally, the local procurement of commodities did not distort the market prices while producers were able to realize higher prices. This was possible because the producers were able to sell their products at times when prices were high since they knew there would be demand throughout the school year, demonstrating that the linkage of food for education with local agricultural procurement can create synergies between the two to enhance multiplier effects in the local agricultural sector (Upton *et al.* 2012). Ahmed & del Ninno (2002) report on take home ration programmes in Bangladesh; in order to improve educational quality in schools with these programmes, the government withholds allocation of food in the lowest quartile. Previous to the study, teachers helped with the implementation of the home ration programmes, but due to concerns by the government of the quality of education, private dealers are now contracted to distribute the food. Ahmed & del Ninno (2002) find that this has led to some problems, including the diversion of some of the food grains to the black market. In one specific case, the authors found “some of the extremely poor participants in a highly distressed union reported that the dealer had lent money to them at exorbitant interest rates. Subsequently, the dealer took their food for education wheat entitlements because they could not repay the loan with interest”. Not surprisingly the authors find that 92% of the surveyed households prefer the previous system where the School Managing Committees oversaw the distribution of the food grains, and 82% of

households believed that there had been no improvement in education quality (Ahmed & del Ninno 2002).

3.1 Research Design

This study was a survey study. The researcher used descriptive survey design for this study. It is a kind of design used in studies that have individual people as the units of analysis. It involved some individual persons who served as respondents or informants. Descriptive research design can be used when collecting information about peoples' attitudes and, opinions according to feelings or any of the variety of education or social issues (Orodho, 2005). Descriptive research is useful in describing the characteristics of a large population. This helps the researcher to ask many questions that provide considerable flexibility in the analysis. The study fitted within the provisions of descriptive survey research design because the researcher collected data and used the findings to report the situation of the SFP and its impact on enrolment in primary schools in Kathonzwani Sub-County without any manipulation of the variables.

3.2 Study Location

The study was conducted in Kathonzwani Sub-County which is found in Makueni County. This county is located in the southern part of Eastern Kenya and borders Kitui County to the East, Taita Taveta County to the South, Kajiado County to the West and Machakos County to the North.

3.3 Target Population

The target population included the head teachers of the public primary schools, parents, teachers, learners and cooks in Kathonzwani Sub-County. There were 88 public schools in Kathonzwani Sub-County and out of these 48 had implemented the SFPs while the 40 had not implemented the

SFPs. The study targeted 88 head teachers, 8800 parents, 35, 000 pupils, 616 teachers and 48 cooks.

3.4 Sampling Procedure

In this study, two approaches were used to determine the sample size. The first approach was for the pupils (35000) and for the parents (8800). It is recommended that in a survey research, 100 subjects are adequate as long as none of the subgroups would be less than 20. Therefore, the researcher adopted this approach because of the relatively very large members for the two groups. This study used 10% of the schools (9 schools out of which 5 had the SFPs and 4 were without SFPs). Random sampling was used to select 9 head teachers, 45 learners, 5 cooks (one cook from each school), 18 teachers and 36 parents for responding to the data collection instruments.

Target population	Population	Sample size	Percentage
Learners	35000	45	39.8%
Teachers	616	18	15.9%
Parents	8800	36	31.9%
Head teachers	88	9	8.0%
Cooks	48	5	4.4%
Total	44,552	113	100%

3.5 Research Instruments

The researcher used both primary data and secondary data. The primary data was collected using questionnaires and interview guides. Secondary data consisted of enrolment and attendance register of the classes and was collected using document analysis guide. The structured questions were used in an effort to conserve time and money as well as to facilitate easier analysis as they

are in immediate usable form, while the unstructured questions were used so as to encourage the respondents to give an in-depth and felt responses without feeling held back in revealing of any information. Questionnaires were used to collect data from head teachers, teachers and learners. Observation checklist was formulated to guide the observation of the various items of interest to the study. Observations were made when the researcher visited the respective primary schools. This helped to establish the condition of meals offered, facilities and equipment that were used in the particular primary school to facilitate the SFP. In order to establish the enrolment of the primary schools in the target schools, previous enrolment records in the school were checked from schools with SFP and those without SFP in order to obtain more tangible information for comparison purposes.

3.6 Data Collection Procedure

The researcher visited all the respondents and administered the instruments personally. On arrival in the selected schools, the researcher introduced himself to the head teacher and explained the purpose of the visit. This was also done to the respondent teachers who helped in random selection of respondent learners to whom the purpose of the study was also explained. All respondents were assured of confidentiality in dealing with their responses.

3.7 Data Analysis

The quantitative data was analysed using various statistics including frequency counts, means and percentages. The computer programme, Statistical Package for Social Sciences (SPSS) version 17 was used to enhance efficiency in the data analysis. Results of this data analysis were presented using frequency distribution tables, bar graphs and pie charts. The researcher finally used the results of data analysis to draw explanations, conclusions and recommendations about the study.

4.1 Research Findings

4.1.1 Capacity of Schools

School heads were required to indicate the category of schools that were sampled with regard to the school sessions and enrolment capacity. Attendance registers and enrolments charts from head teacher's office were also used. Information about school enrolment capacities was presented in Table 4.1.

Enrolment	Minimum	Maximum	Sum	Mean	Std. Deviation
Boys enrolment	90	268	1323	147	52.98585
Girls enrolment	92	223	1283	143	42.84014
Total enrolment for boys and girls	187	491	2606	290	94.43002

In Table 4.1, information revealed a relatively equal enrolment of both female and male pupils into schools in Kathonzweni Sub-County. There were 90 boys in the least boy child populated school while the least populated girl child school had registered 92 of them. Results for the most populated schools indicated a higher number of boys (268) while girls followed at 223. Generally, there was a higher enrolment for boy child (1,323, 50.8%) than a girl one (1,283, 49.2%) into a school in Kathonzweni Sub-County. Further analysis of the data from schools implementing SFP and those not, identified that there were more pupils in the school implementing the feeding programme. Statistics were 1,310 pupils from Five (5) school with SFP and 1296 pupils in Four (4) schools without the SFP. These results indicated that SFP had influenced an increase in their school enrolment from the figures as shown above.

4.1.2 School Feeding Programme Beneficiary Schools

The sample contained Nine (9) schools; Five (5) schools benefiting from the school feeding programme while Four (4) were non-beneficiaries. Head teachers from the SFP beneficiary schools put across that the school feeding programme was started in 2008, implying that they have been beneficiaries to the programme for the last Seven (7) years. As such they had really witnessed the significance of the programme and well suited to respond to the research questions. The non- beneficiaries served well as control subjects in the study. The researcher requested pupils from SFP beneficiary schools to state which meal was provided by the school. In response, all pupils (100%) said that they ate lunch at school. Additionally, 88% of the pupils expressed that they liked the food prepared in their school while only 12% expressed dissatisfaction. Similar arguments were expressed in line with the quality of the food as in Figure 4.1 Below

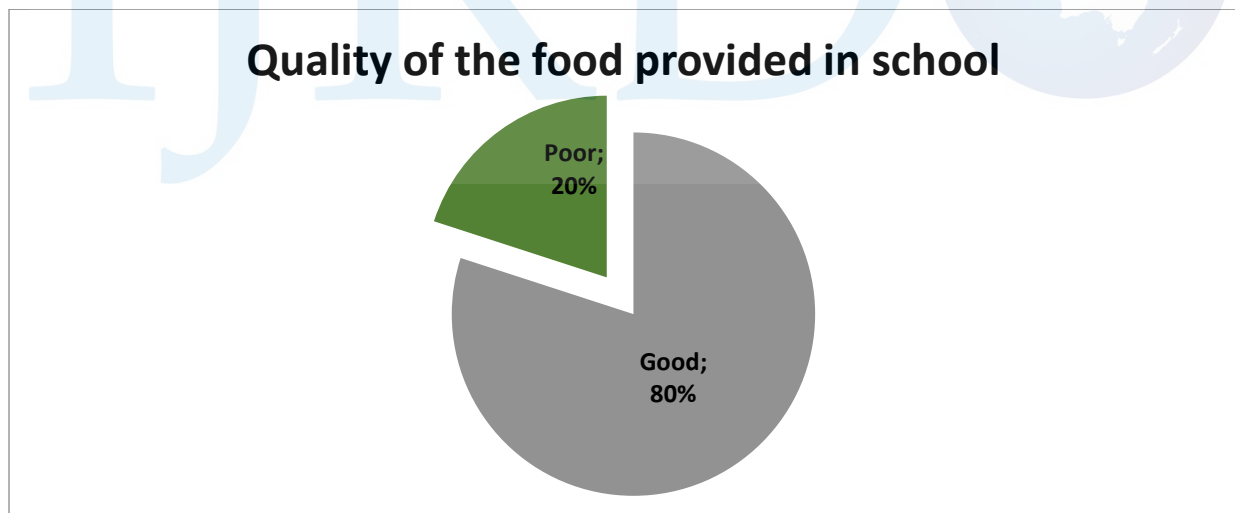


Figure 4.1: Pupils' Opinion on Quality of Food

In Figure 4.1, most pupils (80%) said that the quality of the food provided in the school was good while (20%) expressed dissatisfaction saying they were not pleased with the food prepared because it was of the same type (Maize and beans) all through. However, (92%) of the pupils

indicated that the food was fairly served to them by their cook while 8% expressed dissatisfaction. This can be attributed to them remaining in school.

4.1.3 School Enrolment Rate

Preliminary findings, that is, an item on whether there were known children who were not enrolled in school, confirmed that there were known cases in schools in Kathonzweni as in Table 4.2

Category	Yes		No		Total	
	F	%	F	%	F	%
Head teachers	3	33.3	6	66.7	9	100
Teachers	6	33.3	12	66.7	18	100

From Table 4.2, similar results were obtained from both the head teachers and teachers indicating that at least 33.3% of head teachers and 33.3% teachers knew children who were not enrolled in schools within the study Sub-County. It was thus paramount to investigate the causal factors to this condition. Data from schools implementing and those not implementing SFP was analysed separately and the results compared to identify the difference between the two categories of schools in terms of school enrolment. School enrolment was measured as either declining, static, increasing or unknown. From the results of this study, 100% of the head teachers from schools implementing SFP responded that school enrolment was increasing. On the other hand, 75% of the head teachers from schools not implementing SFP said that their school enrolment was on the decline. 25% indicated that enrolment was static. Teachers were also requested to rate their school's enrolment on the same scale. In their response, all teachers (100%) from the schools under SFP said enrolment was increasing in their schools while all (100%) those from schools not under SFP indicated that enrolment was declining.

4.1.4 Description of School Attendance of Pupils

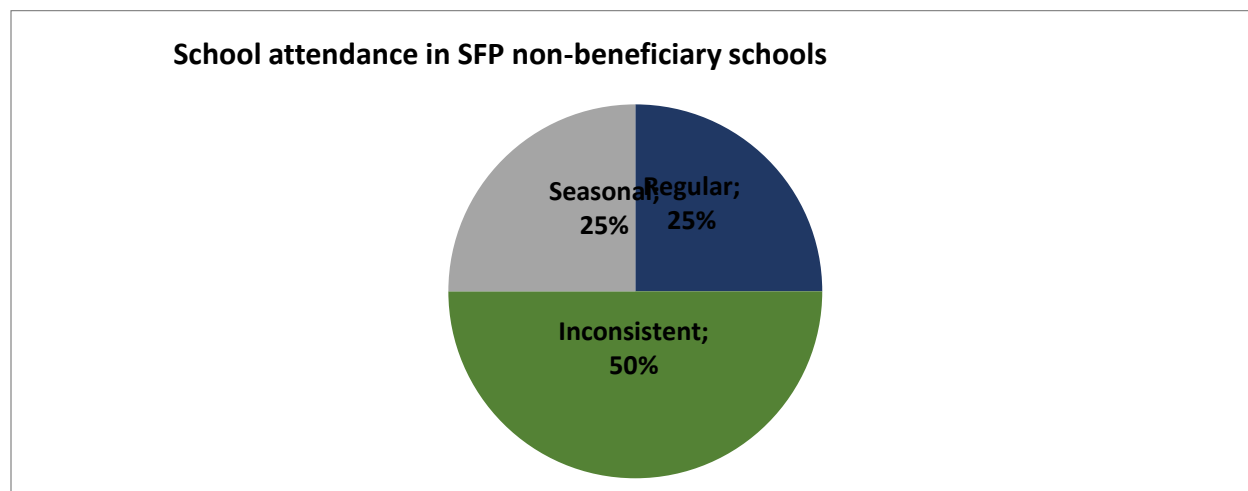


Figure 4.2: Attendance in schools without SFP

As shown in Figure 4.2, a small section (25%) of pupils in schools that did not implement a SFP was able to regularly attend school. Majority, 75% were inconsistent in the way they attended school. This information sets out a clear difference between the two school categories. Thus, it implied that there were pupils who at times temporarily disappeared from school for short or long durations due to feeding related issues. Information by teachers is contained in Table 4.2.

4.1.5 Influence of Drought on Pupils' School Attendance

Drought is a common phenomenon in the ASALs of Kenya and Africa at large. It has a direct effect on the feeding trends in those areas mainly being associated with acute food shortage. If such happens, definitely pupils would be forced to stay out of school and look for food thus affecting school attendance and retention by the pupils. Teachers and head teachers were requested to indicate whether drought had an impact on the rate of pupils' school attendance. Results from the analysis specified that all head teachers (100%) from both school categories stated that drought influenced pupil's school attendance and retention in schools. Additionally, 90% of the teachers from schools implementing SFP identified drought as a factor that

influenced school attendance. One hundred percent of their counter parts from schools without SFP concurred to this finding. Therefore, drought which is the major cause of food shortage is a cause to poor attendance and retention in schools by pupils. Besides, results have indicated that with meals, more pupils enrol into schools and attend the same regularly. One hundred percent head teachers and 90% teachers, respectively, from schools under SFP stated that pupils will attend school more regularly when meals are offered at school. Information by school heads and teachers from the SFP non-beneficiary schools agreed to this finding. This is because food is an important component of child development and therefore, more learners will be glad to go to school if they knew food will be provided.

4.1.6 Extent to which SFP Influence Pupils' School Attendance

From prior results, it was evident that SFP had a tangible effect on the trends in pupil school attendance. The researcher therefore, sought to establish the extent to which this was true. A scale; Very small extent, Small extent, Moderate extent, Large extent and Very large extent was used to rate that influence. Table 4.3 contains details of this finding;

Schools implementing SFP											
Statement		Very small extent		Small extent		Moderate extent		Large extent		Very large extent	
		HT	T	HT	T	HT	T	HT	T	HT	T
SFP influence pupil school attendance		0	0	0	0	2 (40%)	2 (20%)	3 (60%)	7 (70%)	0	1 (10%)
Schools not implementing SFP											
Statement		Very small extent		Small extent		Moderate extent		Large extent		Very large extent	
		HT	T	HT	T	HT	T	HT	T	HT	T
SFP influence pupil school attendance		1 (25%)	0	0	0	0	0	1 (25%)	6 (75%)	2 (50%)	2 (25%)

Results in Table 4.3 depict a relatively similar opinion across all respondents in the two school categories. Head teachers and teachers from school implementing SFP indicated that SFP had at least a moderate influence on pupil school attendance. 60% and 70% head teachers and teachers, respectively jointly identified the influence as large with 10% of the teachers defining it as very large. The results resemble those obtained from school without the SFP except a small proportion of head teacher (25%) who thought that SFP had very little influence on school attendance. The rest, 25% head teachers and 75% teachers believed it had a large effect while 50% and 25% of head teachers and teachers respectively expressed that its influence was very large. Provision of meals at school therefore can be termed as one of the major factors that influence pupils' school attendance.

4.1.7 Influence of SFP on Pupils Retention in School - Retention Rates

Head teachers and teachers were supposed to rate pupil retention in schools as; Very high, High, Moderate or Low. Head teachers from schools implementing SFP gave information as in Table 4.4

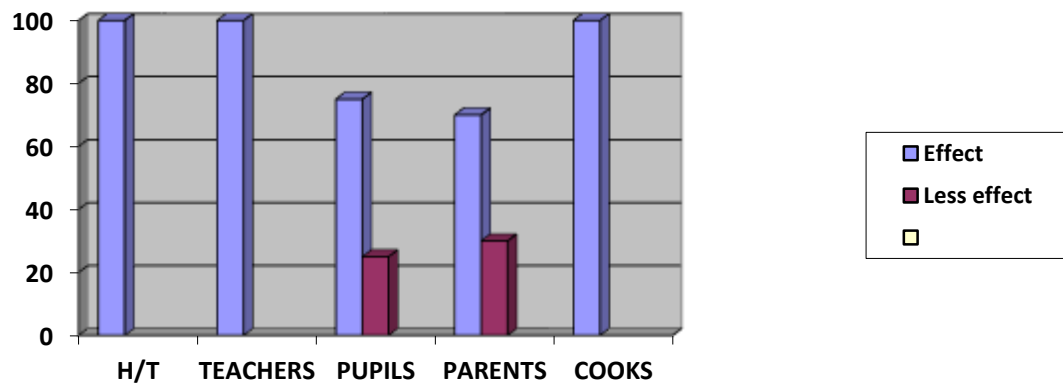
Rate of retention	Frequency	Percentage(%)
Very high	3	60
High	2	40
Total	5	100

From Table 4.14, 40% of the head teachers indicated that pupil retention in their school was high, while 60% responded that it was very high. As such, it was evident that schools with SFP had high rates of pupil retention. Similar results were obtained from teachers of these schools. Thirty percent of them indicated that retention was moderate, 40% high and another 30% stated

that it was very high. The situation was different for schools that did not implement SFP. Seventy five percent of the heads to these school described retention as being moderate while 25% said it was low.

4.1.8 Challenges in the Implementation of SFP

Respondents to this study including head teachers, teachers, pupils, parents and cooks mainly from the schools implementing the SFP highlighted several relative similar challenges facing the school feeding programme. These factors were coded and summarized into fewer most common challenges. The most eminent challenges enlisted included; Late funds disbursement by the programme funders which affected the process of procuring food stuff; parents inability to meet school requirements, hence, maintain their children in school all the time, lack of cook's pay as a result of parents not remitting their payments in time. Severe water shortages and lack of cooking firewood forcing pupils to bring firewood and water, child labour which was identified in this study as one of the major factors that lead to pupils' absenteeism, increase school enrolment without increase in food supply, lack of enough classrooms and understaffing. Therefore, delayed funding for SFP had an adverse effect on pupils' attendance and retention in the schools as shown in Figure 4.3.



5.1 Summary of Findings

From the results of this study, 100% of the head teachers from schools implementing SFP responded that school enrolment was increasing. On the other hand, 75% of the head teachers from schools not implementing SFP said that their school enrolment was on the decline. Teachers (100%) from the schools under SFP said enrolment was increasing in their schools while all (100%) those from schools not under SFP indicated that enrolment was declining. Further, majority of the head teachers (80%) indicated that SFP influenced enrolment to a large extent. Parents (100%) and cooks (100%) from schools that were beneficiaries to SFP stated that enrolment in their schools was low before the start of the feeding programme after which the enrolment went high. This implied that in the ASALs of Kenya especially Kathonzi Sub-County, introduction of SFP would serve appropriately to reduce the number of children within the communities that were not registered into schools.

In their opinions, 80% of head teachers in schools implementing SFP in Kathonzi Sub-County stated that among other factors that influenced school enrolment. The findings on enrolment, therefore, portrayed a clear difference between SFP beneficiary and non-beneficiary schools thus implying that SFP had the most significant influence among other factors that affect children enrolment into primary schools. Regarding influence of SFP on school attendance, 100% of the head teachers in schools under SFP indicated that school attendance in their schools was regular. At least 80% of the teachers also indicated that school attendance was consistent. However, according to head teachers, only a small section (25%) of pupils in schools that had a SFP were able to attend school regularly. Majority (75%) of the pupils were inconsistent in attending school. Other results from the analysis specified that all head teachers (100%) from both school categories stated that drought influenced pupil's school attendance and retention.

Additionally, 90% of the teachers from schools implementing SFP identified drought as a factor that influenced school attendance. All (100%) of their counter parts from schools without SFP concurred to this finding. Therefore, drought resulted to poor school attendance by pupils. Besides, 100% head teachers and teachers, respectively, from schools under SFP stated that pupils will attend school more regularly when meals were offered at school. Information by school heads and teachers from the SFP non-beneficiary schools agreed to this finding. At least 60% and 70% head teachers and teachers respectively jointly identified the influence of SFP on school attendance as great with 10% of the teachers defining it as very large. Moreover, 25% head teachers and 75% teachers believed drought had a large effect while 50% and 25% of the head teachers and teachers, respectively expressed that its influence was very large. At least 95% of the parents from schools that did not implement SFP stated that attendance by pupils was greatly inconsistent. More information by cooks (100%) confirmed that school attendance without meals was inconsistent.

While establishing the effects of SFP on pupil retention in school, 40% of the head teachers in school under SFP indicated that pupil retention in their school was high while 60% responded that it was very high. Thirty percent of the teachers indicated that retention was moderate, 40% high and another 30% stated that it was very high. The situation was different for schools that did not implement SFP. Seventy five percent of the heads in these school described retention as being moderate while 25% said it was low. Majority of the teachers from those schools indicated that retention was moderate while 12.5% described it as low. There was, therefore, a difference between the two categories in terms of pupil retention in the school. All parents (100%) from the schools under SFP expressed that retention in their schools was poor before the start of the SFP a situation that changed to good after the start of the programme. Parents in the schools that did not

implement SFP said that retention rate in their schools was poor. Further, results gotten from pupils asserted that SFP results to a high pupil retention in the school. All pupils (100%) indicated that provision of meals in their schools had contributed to retaining them in school. Therefore, school feeding has major remedial influence on the rate of pupils' truancy and absenteeism. SFP therefore, was associated with increased pupil retention in the school implying that these pupils were more likely to reduce truancy and absenteeism more than those schools that do not offer meals to pupils. More information provided by parents and cooks from schools implementing SFP confirmed that SFP had a high influence on pupils' retention in school.

5.2 Conclusions

The following conclusions were made with reference to the findings of this study.

- i. School feeding programme has a high influence on enrolment of children into primary schools in the Arid and Semi-Arid areas of Kenya particularly Kathonzwani Sub-County. Schools implementing SFP recorded increasing enrolment rates while those that did not implement the SFP recorded decreasing enrolment. Therefore, SFP causes an increase in the number of children being enrolled into schools in the ASALs.
- ii. School feeding programme greatly influence school attendance by pupils in the Arid and Semi-Arid areas in Kenya. Attendance in schools under SFP was regular while attendance in schools that did not implement SFP, the attendance was inconsistent. Information on attendance indicated that this greatly depended on the availability of meals at school. Thus, SFP resulted to regular school attendance by pupils in the ASALs.

- iii. School feeding programme had a significant effect on retention of pupils in the learning process. In the schools implementing SFP, high rates of pupil retention were recorded, reduction of truancy and absences, improved punctuality while the same was low for SFP non-beneficiary schools. High pupil retention leads to better academic outcomes. Therefore, SFP causes high pupil retention and further reduces truancy and pupils absenteeism.
- iv. There are several challenges facing school heads in the course of implementing the school feeding programme. They include; late funds disbursement, parents failure to pay funds to cater for the cooks, water, firewood shortage, enough classrooms and understaffing. These challenges could however be reduced by ensuring that the programme funds were released in time, more teachers employed and posted to these schools, enough classrooms built and parents commit themselves to pay funds in time to honour their school policies.

5.3 Recommendations

To better the implementation of SFP in schools in the ASALs, the following suggestions were made.

- i. The financiers of the school feeding programme should ensure that enough funds were released in time to give schools' management enough time to purchase enough food stuffs in time, so that this does not only help increase enrolment but also improve on attendance and retention rates. The government to employ more teachers to counteract understaffing situation in these schools.
- ii. SFP led to increased school enrolment, regular attendance, improved retention, reduction of truancy and absences and improved punctuality of pupils. Therefore, the

- government should ensure that these benefits spread to all schools in the ASALs like Kathonzwani by funding them to start providing meals at school.
- iii. The school Board of Management members and head teachers of the schools implementing SFP should device strategies to ensure that little costs that are not addressed in the SFP financier's budget were taken care of to enhance a smooth implementation of the programme. This would lead to more benefits.
 - iv. School heads and parents in schools that do not implement SFP should device a mechanism to obtain food stuffs, at least, to provide a single simple meal to their pupils as the advantages of providing a meal to pupils in the learning process are quite significant.

5.4 Areas of Further Research

In relation to the findings and the conclusion in this study, the researcher recommends that further studies should be done on other sub-counties on impact of school feeding programme on the performance of pre-school children, as well as, children in day secondary schools in ASAL areas in Kenya like Kathonzwani Sub-county in Makueni County. There is need to replicate this study in other sub-counties in Kenya under ASALs to get broader picture of the impact of SFP on enrolment, attendance, retention and challenges faced in its implementation in primary schools.

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