

Factors Affecting Implementation of School Feeding Programme in Public Primary Schools in Kenya: A Survey of Emuhaya Sub-County, Kenya

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Abstract: *School feeding programmes have been implemented in many counties over several decades in an attempt to improve health, educational performance and attendance of school age children. The purpose of the study was to assess factors affecting the implementation of School Feeding Programmes in public primary schools in Kenya: a survey of Emuhaya Sub-County, Kenya. The objectives of the study were to establish the extent to which the community participation needs assessment within the Community, financial management, policy and regulatory framework affects the implementation of School Feeding Programme in Emuhaya Sub-County, Kenya. The study employed a descriptive survey research design. The target population was 202 respondents comprising of 101 heads of school and 101 Board of Managers (BOM) chairpersons. Purposive sampling method was used to select the Head teachers and BOM chairperson from the sampled schools. The sample size was 80 respondents comprising of 40 head teachers and 40 School Board of managers. The main data collection tool for this study was structured questionnaires for the heads of schools and schools BOM chairpersons. Piloting was done in 2 public primary schools from the neighbouring sub-county. It comprised of 2 head teachers and 2 BOM chairpersons to assess the validity and reliability of the research instrument. Statistical Package for Social Sciences (SPSS) version 20.0 was used to analyze the quantitative data. The study also used Analysis of Variance (ANOVA) to test the level of significant of the variables on the dependent variable at 95% level of significance. In addition, the study conducted a multiple regression analysis. The study established that needs assessment, community participation, financial management, policy and regulatory framework had a positive and significant effect in SFP implementation in public primary schools in Emuhaya Sub-County, Kenya as indicated by beta values. The relationships ($p < 0.05$) are all significant with needs assessment ($t = 8.451, p < 0.05$), community participation ($t = 3.638, p < 0.05$), financial management ($t = 2.649, p < 0.05$) and policy and regulatory framework ($t = 4.521, p < 0.05$). The study concluded that Community participation enhances the implementation of school feeding programme to a greater extent. Public primary schools that depend on the community to organize and implement SFPs offer certain advantages. Needs Assessment of SFP programme in public primary schools should be carried out to establish the needs for a particular for the programmes by systematically examining stakeholder's interest and knowledge, agency mission, authorities and capability, and its significance of particular environmental conditions or issues. Financial management is an important component of project design. When designing a project, the schools must make a realistic assessment of both the fiscal requirements and the probable availability of funding. Clear policies and regulatory framework on school feeding programmes ensure the sound implementation of school feeding programme in public primary schools. The study recommends that Schools are the destination and feeding centers. They are supposed to mobilize the community to contribute to school feeding programmes. Schools should conduct needs assessment to establish how community leaders, teachers, local government entities or voluntary organizations can participate in identifying the poorest households, though this requires clear criteria that are transparent and not based on political favoritism. The government should instate SFP policies that work toward achievable goals. The school management committee should support the feeding programme in schools by starting income-generating activities to raise funds to supplement the funds issued by the government towards the school feeding programme.*

Keywords: School feeding programme, structured implementation, Community participation, policy, Regulatory Framework, Financial management

1. Introduction

Food is instrumental in providing school children with nutritional supplements, increasing access and establishing attendance in the targeted areas (UNESCO, 1999). School Feeding Programme (SFP) is implemented with the objectives to improve children's capacity to concentrate and assimilate information by relieving short-term hunger, improving attendance rates and reducing afternoon absenteeism SFP handbook, 1999. In Africa, more than 46 million children do not attend school (UNESCO, 2002). To make matters worse, many of them suffer from malnutrition and stunted growth, or experience short-term hunger, which seriously affects their ability to learn. WFP is the largest implementer of school feeding programmes in the world. In

2008, globally, it reached an average of 22 million children in school in around 70 countries. WFP's school meals programme in Kenya is one of the largest and most long-standing (since 1980). From 1999 onwards, responding to increased frequency of food crises resulting from drought and political violence and to the introduction of free compulsory primary education in 2003, the programme in Kenya expanded significantly, peaking at 1.85 million children in over 5,000 schools. In 2008, the Government of Kenya took over responsibility for half the programme. WFP focused on providing meals in primary schools with the lowest education indicators in the most food insecure part of the country (the ASAL's and urban slums of Nairobi & Mombasa). A new programme of Home-Grown School Feeding and a new policy on School Health and Nutrition herald an integrated, cross-sectoral approach,

including commitment to providing a 'balanced' meal at school.

2. Statement of the Problem

The primary sponsorship of School Feeding Programme SFP in Kenya is primarily through the World Food Programme (WFP) initiatives (WFP, 2008). However, there have been efforts by the Government to ensure a sustainable approach to the programme without WFP support. In an effort to transit away from WFP assistance, the then Ministry of Education also began implementing Homegrown School feeding programme (HGSFP) in July 2009 that was after school enrollment increased due to the introduction of free primary education in 2003 (Espejo, 2009). The first phase of HGSFP designed in realization of Millennium Development Goal one; Eradicating extreme poverty and hunger and two; Achieving universal primary education was initiated in 2009. The programme failed in its overall implementation necessitating a second phase. (UNESCO Assessment Report. Nairobi, 2011). The second phase, Home-Grown School Feeding and Health Programme (HGSFHP) has been designed to link School Feeding Programme to health and agricultural development through the purchase and use of locally and domestically produced food. Clearly, therefore, there is need to determine the factors that influence implementation of School feeding programme in Kenya given the imminent pull out of the WFP in funding the programme (Agricultural sector development strategy 2009-2020, GOK 2010)

3. Purpose of the Study

The general purpose of the study was to assess factors affecting the implementation of School Feeding Programmes in public primary schools in Kenya a survey of Emuhaya Sub-County. The study was guided by the following four objectives: Community participation in the feeding programme, Needs assessment within the community, policy and regulatory framework and the financial management in the implementation of the School Feeding Programme. By making relevant recommendations, the study could enable school managers and school feeding programme committee members to take the necessary measures to improve operational efficiency of the programmes on the ground, act as a form of monitoring and evaluation tool for development partners, and advise organizations on future policy directions to improve operational efficiency

4. Research Methodology

The study employed a descriptive survey research design. Descriptive survey research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002). Mugenda and Mugenda (2003) on the other hand give the purpose of descriptive research as determining and reporting the way things are. Borg & Gall (1989) noted that descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and

educators. The study suited within the provisions of descriptive survey research design because the researcher intended to collect data and report the way things were given by respondents without manipulating any variables. Emuhaya Sub-County has 101 public primary schools comprising of 26, 21, 26 and 28 public primary schools in East, South, North and West zones respectively. Therefore the target population was 202 respondents comprising of 101 heads of school and 101 Board of Managers (BOM) chairpersons. Purposive sampling method was used to select the Head teachers and BOM chairperson from the sampled schools. The sample size was 80 respondents comprising of 40 head teachers and 40 School Board of managers. Quantitative data was analyzed using both descriptive and inferential statistics. Descriptive used includes; mean, standard deviation, percentages, and frequencies. While inferential statistics involved; correlation and regression to determine variables relationship. And qualitative data was analyzed using content analysis.

5. Results and Analysis

From the findings on demographic characteristic of respondents, the study established that 57.5% of the BOM Chairpersons were male and 42.5% were female. On the other hand, majority 58.9% of the head teachers were male and 41.0% were female. This implies that the study highly involved both genders and thus the finding of the study did not suffer from gender bias.

The findings indicated that majority 55.7% of the respondents were aged between 36 and 45 years, 34.2% were over 45 years old, 10.1% were aged between 26 and 35 years. Neither the head teachers nor the BOM Chairpersons were aged 25 years and below. Age could have an impact on the implementation of school feeding programs since previous researches such as Rabkin and Redmond (2006) have shown that age tends to affect administrative performance of institution heads.

Work experience indicated that majority 42.5% of the BOM Chairpersons had served for between 10 and 15 years, 27.5% had served for 5 to 9 years, 22.5% for a period of over 15 years and 7.5% for a period less than 5 years. The head teachers indicated majority 41.0% had served for a period between 10 and 15 years, 25.6% for over 15 years, 20.5% between 5 and 9 years and 12.8% for a period between of less than 5 years. The respondents further indicated that they had served for a period ranging from 8 to 15 years in the current station. These findings imply that majority of the respondents had worked for long periods, which shows that they had wealth of experience which would enable them not only to contribute to the research adequately, but also to implement school feeding programmes.

The findings on education Level indicated Majority 42.5% of the BOM Chairpersons attained post graduate level, 27.5% had attained Bachelor's Degree level, 22.5% had Diploma and 7.5% had P1 Certificate. On the other hand, majority 41.0% of the head teachers had attained post graduate level, 30.8% had Diploma and 20.5% had Bachelor's Degree and only 7.7% had P1 Certificate. This

shows that majority of the respondents had attained a post graduate level of education and would therefore contribute adequately to the study.

Table 1: Community participation

Statement	A	U	D	M	SD
	%	%	%		
Community is consulted in the design of the programme	31.6	2.5	65.8	2.4	0.234
There is community level structures to establish communication (e.g. provincial administration, county rep and the like)	58.2	3.8	37.9	3.8	0.152
There is a committee comprising representation of parents, teachers and students	50.6	3.8	45.6	2.5	0.224
Community contributes to pay the cooks or firewood used in cooking	21.5	6.3	72.2	1.8	0.368

Key:A – Agree; U – Undecided; D – Disagree; M – Mean; SD – Standard Deviation.

In this section of the first research objective sought to examine the extent to which community participation affects implementation of School Feeding Programme. According to research finding in (Table I) majority 58.2% of the respondents agreed that there is community level structures to establish communication e.g. provincial administration, county representatives with a mean of 3.8 and also (50.6%) agreed that there is a committee comprising representation of parents, teachers and students with a mean of 3.8. These findings are consistent with those of Cole (2007) who argued that community participation is considered necessary to get community support for planning and development. The findings also concur with the Young (2005) who observed that with local involvement, communities become a valuable resource for schools and contribute significantly to the sustainability of health promotion interventions. On whether community contributes to pay the cooks or firewood used in cooking majority 72.2% of the respondents disagreed with a mean of 1.8 and a deviation of 0.368. Also 65.8% of the respondents disagreed with a mean of 2.4 and a deviation of 0.234 on the statement that community is consulted in the design of the programmes. According to Talbot and Verrinder (2005) community participation is a concept that attempts to bring different stakeholders together for problem solving and decision making. School feeding programmes that incorporate some form of parental or community contribution, whether it be a cash payment or in kind through donated food or labour, tend to be the strongest programmes. According to the WFP School Feeding Programme (2001), parents associations have proven to be key to community participation.

Table 2: Needs Assessment within the Community

Statement	A	U	D	M	SD
	%	%	%		
Need assessment is thoroughly done before the project commence	65.8	6.3	27.8	3.2	0.321
All stakeholders are involved in need assessment	44.3	0.0	55.7	2.7	0.214
All issues, problems and opportunities are considered	20.3	10.1	69.6	1.9	0.623
The community included school feeding as one of the priorities in	51.9	10.1	37.9	2.3	0.135

local development plans					
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Key:A – Agree; U – Undecided; D – Disagree; M – Mean; SD – Standard Deviation.

The study sought to establish the extent to which the needs assessment within the community affects the implementation of School Feeding Programme. majority 65.8% of the respondents agreed that Needs assessment is thoroughly done before the project commence with a mean of 3.2 and majority 51.9% agreed that the community is included school feeding as one of the priorities in local development plans with a mean of 2.3. On the other hand, Majority 69.6% of the respondents disagreed on the statement that all issues, problems and opportunities are considered with a mean of 1.9. 55.7% disagreed on the statement that; All stakeholders are involved in needs assessment with a mean of 2.7. These findings are in line with O’Brochta (2002) who argued that the sponsoring group may be organized for the needs assessment project only, or it may be an existing group or groups which assume responsibility for the needs assessment. Either way, the sponsoring group must contribute time, leadership, management and its good name and reputation to the project. Njuguna et al (2004) observed that community groups and interested citizens should be invited and encouraged to participate.

Table 3: Policy and Regulatory Frameworks

Statement	A	U	D	M	SD
	%	%	%		
There are procedures for consultation with participants.	62.0	6.3	31.6	3.2	0.321
The consultation process is open, transparent	55.6	17.2	26.6	2.7	0.214
Staff are trained on knowledge of School feeding Programme	25.3	3.8	74.7	1.9	0.623
There are resources to manage the School feeding Programme	24.1	8.8	65.8	2.3	0.135
There is an implementing unit and implementing arrangements for the school feeding programme in the school	34.2	17.7	48.1	2.3	0.135
There is a monitoring and evaluation plan for measuring whether goals of the programme are meet	41.8	6.3	51.9	2.3	0.135
Report are frequently produced	37.9	0.0	62.0	2.3	0.135

Key:A – Agree; U – Undecided; D – Disagree; M – Mean; SD – Standard Deviation.

The third research objective sought to investigate how policy and regulatory frameworks affects implementation of School Feeding Programme. Majority 62.0% of the respondents agreed on the statement that there are procedures for consultation with participants with a mean 3.2 and also majority 55.6% of the respondents agreed on the statement that the consultation process is open, transparent with a mean of 2.7. On the other hand, majority 74.7% of the respondents disagreed on the statement staff are trained on knowledge of school feeding programme with a mean of 2.7. 65.8% also disagreed that there are resources to manage the School feeding Programme with a mean of 2.3. These findings concur with the WFP (2008b) report

which indicated that establishing clear policies on school feeding for school health is a critical first step to ensuring the sound implementation of school feeding. School feeding programme policy should be based on a correct assessment of the situation in a particular country. Briggs (2008) argues that policies regarding the health-related practices of teachers and students can reinforce health education. Teachers can act as positive role models for their students, for example, by not smoking in school and eating healthy foods. The process of developing and agreeing upon policies draws attention to these issues. The policies are best developed by involving many levels, including the national level, and teachers, children, and parents at the school level.

The fourth research objective sought to investigate the extent to which financial management affects implementation of the School Feeding Programme. The study established that majority 65.5% had training on financial management and 34.5% did not.

Table 4: Financial Management

Statement	A	U	D	M	SD
	%	%	%		
There is capacity to plan and budget needs	34.2	6.3	59.5	4.1	0.541
There is a budget plan in place	55.7	6.3	37.9	3.9	0.414
There are plans to finance the programme in future	54.4	0.0	45.6	3.5	0.554
A good percentage of the finances can be sourced from small scale farmers	68.4	3.8	27.8	3.1	0.457

Key: A – Agree; U – Undecided; D – Disagree; M – Mean; SD – Standard Deviation.

Majority 68.4% agreed that a good percentage of the finances can be sourced from small scale farmers with a mean of 3.1. Also majority 55.7% agreed that there is a budget plan in place with a mean of 3.9. On the other hand, majority 59.5% of the respondents disagreed on the statement that there is capacity to plan and budget needs. These findings are in line with the findings of Koontz and Weihrich (2001) who indicated that as the programme becomes national, it needs a stable and independent funding source. This may be through government core resources or through development funding. In the long-term, a national budget line for school feeding is needed. According to Masset and Gelli (2011) stable funding is a prerequisite for implementation and sustainability for any projects. Typically, governments plan and budget for their priorities on an annual basis based on a national planning process. The degree to which school feeding is included in this planning and budgeting process will determine whether the program gets resources from the national budget and whether it benefits from general budget support allocations (Ayieke, 2005).

Regression Analysis

Regression analysis was used to generate an equation applied to the independent variables in order to best predict the dependent variable in the model. Each independent variable is associated with a regression coefficient describing the strength and the sign of that variable's relationship to the dependent variable.

A model summary was generated providing the values of R, R Squared, Adjusted R Square and Standard error of the estimates for dependent and independent variables. The results are shown in table

Results of Multiple Regressions

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
1	0.709	0.712	0.633	0.8121

The value of R in the model was 0.709 showing a very strong correlation between SFP implementation in public primary schools in Emuhaya Sub-County, Kenya and the independent variables which included needs assessment, community participation, financial management, policy and regulatory framework. The study further showed, R-square (0.712) which measured the proportion of the variation in the SFP implementation in public primary schools in Emuhaya Sub-County, Kenya that was explained by variations in the independent variables.

The four independent variables that were studied, explain 63.3% of SFP implementation in public primary schools as represented by the adjusted R². This therefore means that other factors not studied in this research contribute 36.7% of the SFP implantation in public primary schools. Therefore, further research should be conducted to investigate the other factors (36.7%) that affect the implementation of in public primary schools in Emuhaya Sub-County, Kenya.

Analysis of Variance for the Independent variables

Analysis of Variance (ANOVA) was used to determine the linear relationship among the variables under investigation. Using this method, the sum of squares, degrees of freedom (df), mean square, value of F(calculated) and its significance level was obtained. The results are shown in Table below.

ANOVA results of the Regression Analysis

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	11.211	4	2.802	9.874	0.0103
	Residual	6.382	146	0.0437		
	Total	17.593	150			

The significance value is 0.0103 which is less than 0.05 thus the model is statistically significance in predicting how various factors affect the implementation of SFP in public primary schools in primary schools in EmuhayaSub-County, Kenya. The F critical at 5% level of significance was 2.85. Since F calculated is greater than the F critical (value = 9.874), this shows that the overall model was significant. The relationship (p < 0.05) indicated a linear relationship among the variables under the study meaning there was 95% chance that the relationship among the variables was not due to chance.

Overall Coefficient Estimates for the Variables

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.398	0.645		2.143	0.001
Needs Assessment	0.769	0.091	0.145	8.451	0.003
Community Participation	0.724	0.199	0.082	3.638	0.000
Financial Management	0.824	0.311	0.004	2.649	0.001
Policy and Regulatory Framework	0.812	0.254	0.045	4.521	0.004

As shown on Table above, needs assessment, community participation, financial management, policy and regulatory framework had a positive and significant effect in SFP implementation in public primary schools in Emuhaya Sub-County, Kenya as indicated by beta values. The relationships ($p < 0.05$) are all significant with needs assessment ($t = 8.451$, $p < 0.05$), community participation ($t = 3.638$, $p < 0.05$), financial management ($t = 2.649$, $p < 0.05$) and policy and regulatory framework ($t = 4.521$, $p < 0.05$).

The results further shows the constant in this model is represented by a value of 0.398, which is the expected value of SFP implementation in public primary schools in Emuhaya Sub-County, Kenya when the values of the independent variables are equal to zero. Based on the analysis, the regression equation for the independent variable on the dependent variable resulted to the following: $Y = 0.398 + 0.769 X_1 + 0.724 X_2 + 0.824 X_3 + 0.812 X_4$

Where $Y =$ SFP Implementation $X_1 =$ Needs Assessment
 $X_2 =$ Community Participation $X_3 =$ Financial Management
 $X_4 =$ Policy and Regulatory Framework

6. Conclusion

Needs assessment, community participation, financial management, policy and regulatory framework has a positive and significant effect in SFP implementation in public primary schools in Emuhaya Sub-County, Kenya. Community participation enhances the implementation of school feeding programme to a greater extent. Public primary schools that depend on the community to organize and implement SFPs offer certain advantages like 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. Needs Assessment of SFP programme in public primary schools should be carried out to establish the needs for a particular programme by systematically examining stakeholder's interest and knowledge, agency mission, authorities and capability, and its significance of particular environmental conditions or issues. Clear policies and regulatory framework on school feeding programmes ensures sound implementation of school feeding programme in public primary schools. Establishing clear policies on school feeding for school health is a critical first step to ensuring the sound implementation of school feeding (WFP, 2008b). Financial management is an important component of project design. When designing a project, the schools must

make a realistic assessment of both the fiscal requirements and the probable availability of funding with an aim of adhering to the set project budget.

7. Recommendations

Schools are the destination of feeding centers. They are supposed to mobilize the community to contribute to school feeding programmes. Community ownership of the SFP by emphasis on parents' involvement in the SFP management should be encouraged to increase community involvement in schools, particularly where programs depend on the community to prepare and serve meals to children. Schools with their communities behind them are more effective than schools with less community involvement. Parent-teacher or other community associations can play a significant role in a SFP and ultimately assume some of the costs.

Schools should conduct needs assessment to establish how community leaders, teachers, local government entities or voluntary organizations can participate in identifying the most crucial needs in the community or area covered.

The government should instate SFP policies that work toward achievable goals. If the Kenyan government hopes to ensure the success of school feeding programmes there must be considerable and consistent investment in programs that increase educational access, participation, and quality especially among the most vulnerable and historically marginalized social groups. The school management committee should support the feeding programme in schools by starting income-generating activities to raise funds to supplement the funds issued by the government towards the school feeding programme.

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