

Management of Lunch Programme and Its Influence on Educational Outcomes in Public Day Secondary Schools in Mombasa and Kilifi Counties, Kenya

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Abstract: School feeding programmes are primarily for enhancing educational outcomes in order to realize Kenya educational goals of free and compulsory basic education. School feeding programmes have the potential to increase access to primary education, reduce dropout rates, especially in the lower primary school levels, and improve academic achievement of pupils. The purpose of the study was to assess management of lunch programme and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya. Most of the studies on effects of school feeding programmes have been conducted in primary schools but not in secondary schools. The objectives of the study were, to assess financial management of lunch programme and its influence on educational outcomes, to determine procurement procedures of lunch programme and its influence on educational outcomes. The study population will be all the 49 day secondary schools in the Counties, 940 teachers, 49 principals, 49 lunch coordinators and 18,847 students. The study used simple random sampling and stratified random sampling. Stratified random sampling will be used along the following lines The sample size will comprise 17 secondary schools, 17 principals, 17 lunch coordinators, 289 teachers and 377 students. This gave a total of seven hundred respondents from the two Counties. The study employed mixed research design, questionnaires and interview schedules were used for collecting data. Reliability of the research instruments was ascertained through Cronbach technique. Results were presented using counts, percentages, distribution frequency tables, bar graphs and pie- charts. The quantitative analysis of data was performed using version 24 of the Social Package for Sciences (SPSS). The major findings of the study were that management of school lunch programme had a significant influence on realization of educational outcomes; there were malpractices in foodstuffs procurement. The study recommends Ministry of Education and Board of Management to put strategies that will enhance efficient management of lunch programmes in public day secondary schools.

Key Terms: lunch programme, educational outcomes, school feeding programs, financial management, procurement procedures

I. INTRODUCTION

School feeding programs allows millions of poor children around the world to efficiently attend school (Muvhango, 2016). School feeding programs have the ability to increase to primary education accessibility, reduce rates of dropout, especially in the lower primary school levels, and improve academic achievement of pupils Weru (2014). The UNESCO

(1999) states that the objectives of the school feeding programme are to improve children's concentration span by alleviating periodic hunger, increase enrolment and attendance and reduce absenteeism in the afternoon (Aila, 2012).

It is useful to provide food to allow school children to get nutritional supplements and to improve attendance in different areas (UNESCO, 1999). Malnourished students are emaciated, stunted growth and declined cognitive functions (Aila, 2012). Study of the World Food Programme (2006) recognizes it is important to address the hunger crisis in order to promote learning and the growth of human resources, it necessary to tackle the hunger problem. One of the major benefits of SFPs is short-term hunger alleviation in children. This increases the students attention and concentration span (Aila, 2012). Parents are motivated to enroll children in school and encourage regular attendance (Kearney, 2008). With well managed programs, there is a reduction in the cases of absenteeism, while academic achievement increases (Ahmed, 2004).

Education Outcomes are the prerequisite knowledge, skills, attitudes, and values that enable students to play a meaningful role on the society. They are what students should know, understand, so as to meets the demand of the future that society places on them. It is among the priorities for most countries to achieve educational outcomes, particularly the lagging behind developing world (Adelman, Gilligan and Lehrer, 2008). The educational outcomes are measured using indicators such as completion rates, gender ratio, attendance and enrollment WFP (2014). School lunch programme, are used primarily to enhance educational outcomes in realizing the country's goal of free basic education (Mutua, 2014).

Studies have reported link among lunch feeding programmes and improved educational outcomes. School feeding meal programme have been designed to lessen brief-time period starvation in pupils and boost schooling ability (Jomaa, et al., 2011). Researches have confirmed that better nutrition is related to an increased gaining knowledge of ability (Omwami, Neumann, & Bwibo, 2011). Despite the fact that vitamins plays a crucial role in improving educational results, different elements have an impact on the learning potential of a student. Developing nations' studies have demonstrated

variables such as workforce history, body of workers know-how or talent stage, and cultural ideals as boundaries to educational attainment for school children. School meals programmes are essential in developing countries because the basic needs of the population have no longer been met. It is apparent that starvation foster unacceptable behaviours in classroom consisting of inattention which would lead to non-achievement of educational outcomes (Kristjansson B, 2007).

According to (Sanya, 2015), providing food to school children improve educational outcomes in three ways. First school feeding programs increases pupils' attendance and enrolment by lowering opportunity costs of attending schools. As a results students take more time in schools, thus enhancing learning. The second way is by reducing short-term hunger in the short time. Thirdly is by improving nutritional levels, which leads to better health and prevent illness that would keep pupils away from schools. Better nutritional status indirectly improves educational outcomes by increasing school attendance. The SFP minimizes hunger and improves nutrition and education outcomes (Tomlinson, 2007). Kilifi and Mombasa counties are amongst the counties with lowest net enrollment rates in secondary schools in the country. Kilifi County has an enrolment rate of 26.0% while Mombasa has 34.7% against the national average of 67.64% (MOEST, 2014).

Successful implementation of School Lunch programmes requires budgetary allocations to purchase food and also enhance institutional capacities at school level. Local communities play an important part in supplying food to the schools. Most of the funds to run the school feeding programme are contributed by the parents. While studying how subsidies are effective in increasing enrolment in public school, Cheruiyot (2011), found that though tuition waiver greatly reduces financial burden, parents still meet the hidden costs of school meals charges among others items. Once funding is provided, every School's Meal Programme Committees (SMPC) offers the food required based on organized planning. In doing so, they are supposed to comply with the national guidelines on public procurement procedures WFP (2014). In most public schools procurement laws on food have been ignored (Mungai S, & Muturi, W. 2014).

Free Day Secondary Education in Kenya was introduced in 2008 to enable all students to attend secondary education. However, there are hidden costs of education that the government does not cater for in FDSE. These costs are borne by households. They include cost of school meals, Parent Teachers Association (PTA) levies, for example infrastructure development, cost of school uniform and opportunity cost which is not reflected in monetary term but foregone opportunities by the student when in school. These costs have continued to hinder students' participation since households are required to meet them Weru (2014).

Procurement of foodstuffs is very important in public secondary schools in order to ensure enough food supplies to

avert strikes and also keeps the cost of education lowest. This will makes education available to majority of students especially from poor backgrounds (PPOA, 2007). School managers should follow procurement procedure and regulations which ensure prudent management of budgets (PPOA, 2007). The public procurement and disposal Act allows teachers and subordinate staff power to control tendering and procurement process in public schools. This is done by setting of tendering committee to oversee whole process of procurement (PPOA, 2007). However schools do not follow procurement laws strictly since there are cases of inefficiency, corruption and undercutting still being reported (Onsongo, 2012).

The principal role was ensuring that foodstuffs supplied to school was of good quality and met students' nutritional needs. He or she should also ensure that there is right infrastructure for food storage and food preparation, mobilize parents to volunteer to cook food for the children (WFP, 2009). The 2005 Sessional Paper on the Education Policy process outlined the criteria for extending the school feeding system and urged the local communities to provide lunches to the poorest students.

The purpose of this study was, to assess lunch programme management and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya. The specific objectives of this study were: To assess financial management of lunch programme and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya, to determine procurement procedures of lunch programme and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya.

II. RESEARCH DESIGN AND METHODOLOGY

The researcher used the mixed research methodology (qualitative-quantitative). This approach was useful because it had the ability to test relevant theories and obtain in depth information from the participants (Tashakkori & Teddlie, 2003). Within a single research study, this approach allowed the researcher to gather two types of data and also to obtain perspectives on data extracted from various paradigms (Creswell, 2009; Tashakkori, 2003). The study's target group consisted of school principals, educators, lunch program coordinators and learners in both the Mombasa and Kilifi Counties public day secondary schools.

According to Wiersma (1996), in order to determine the validity and reliability, research instruments need to be piloted. The research tools were piloted at two county schools, one in each county (which was not involved in the final study). Respondents were chosen at random to pre-test the testing instruments. The aim of the piloting was to find and amend any unclear or improperly operated objects while increasing the reliability of the instruments.

The filled in questionnaires were scored manually following the data collection. The researcher coded the data by giving respondents the same code, which gave similar answers to questions and counted later. That was done by counting directly from the questionnaires. Both qualitative analysis involving thematic analysis using categorization of related themes and descriptive statistics involving tabulations, graphs and percentages was used to present the data. Content analysis was used to analyse qualitative data. Analysis of content is a systematic qualitative description of the composition of study objects or materials (Mugenda and Mugenda, 2003). Through content analysis, data was analysed to understand the consistency of the information from different respondents. Then the results were explained using tables, graphs and histograms. Quantitative data were analyzed using different statistics such as means, standard deviations, percentages and frequencies.

III. RESULTS AND DISCUSSION

Summarized Response Rate- Mombasa and Kilifi County

The combined summary response rate for Mombasa and Kilifi County is given in table 4.3 below.

Table 1: Summarized Response Rate- Mombasa and Kilifi County

Sample	Total	Kilifi Target	Mombasa Target	Total Target	%
Principals	17	7	10	17	100
Teachers	289	102	137	239	82.70
Students	391	140	200	340	86.96
Lunch Coordinators	17	7	10	17	100
Total	714	256	357	613	85.85

Source: Survey data, 2020

Table 1 indicates the combined response rate of principals and lunch coordinators was each 17 (100%) in Mombasa and Kilifi Counties. Teachers' response rate in both the Counties was 239 (82.70%) while for students it was 340 (86.96%). The response rate for the two Counties is above 80% which is very high. The total number of the respondents was six hundred and thirteen subjects. According to Mugenda and Mugenda (2003) a response rate of 50 percentages is adequate hence; the percentage for this research was adequate for drawing conclusions on the study objectives.

Demographic Information

The study gathered demographics from study participants by use of questionnaires to collect data from students. Interview schedule was used to collect data from lunch programme coordinators.

Number of secondary schools and student respondents per type of School Type

The sample was composed of 10 (58.82%) day public secondary schools from Mombasa County and 7 (41.18%)

from Kilifi County. This ensured that there was proportionate distribution of all types of secondary schools. Table 4.4 indicates the number of each type of secondary selected from the two Counties and students' participants in this study.

Table 2: Number of Secondary Schools and Student Respondents School Type

Type of school	Kilifi	Mombasa	No. of Schools	%	No. of Students	%
	n	n	Total	%	N	%
Girls' Schools	2	3	5	29.41	180	29.36
Mixed Schools	3	4	7	49.18	240	39.15
Boys' Schools	2	3	5	29.41	193	31.48
Total	7	10	17	100	613	100

From the table 2 almost half of the secondary schools 7(49.18%) were of the mixed type. It was noted that the number of secondary schools for girls and secondary schools for boys in the counties was equal in numbers, five each. It was also noted that most of the students respondents were from mixed secondary schools 240 (49.18%). Only a small proportion of the students 180 (29.36%) were from girls' secondary schools.

Distribution of Student respondents per Stream

The students' participants in this study were drawn from ones to form fours. Participant distribution is summarized in table 3

Table 3: Distribution of Student respondents per Stream

FORM	Frequency	%
1	64	10.44
2	122	19.90
3	183	29.85
4	244	39.80
Total	613	100

From the table 3, majority of the respondents were in form 4, 244 (39.80%) while the lowest came from form 1, 64 (10.44%).

The Financial Management of Lunch Programme and its influence on Educational Outcomes

The first objective was to assess the financial management of the lunch program in Mombasa and Kilifi Counties, Kenya, and its influence on educational outcomes at public day secondary schools. The research sought to find out financial management of the school feeding system, in order to achieve this goal.

Financial Management of Lunch Programme - Principals

The data were sought from principals findings are shown in Table 4.

Table 4: The Financial Management of Lunch Programme - principals n=17

Financial Areas	Strongly Agree		Agree		Disagree		Strongly Agree		Mean	Standard Deviation
	N	%	N	%	N	%	n	%		
Parents Funding	17	47.6	5	29.4	3	17.7	1	5.88	3.18	0.951
Budgeting by bursar	17	35.3	4	23.5	5	29.4	2	11.77	2.82	1.074
Cost of Schooling	17	35.3	5	29.4	3	17.7	3	17.65	2.82	1.106
Inability to pay (Poverty)	17	29.4	4	23.5	5	29.4	3	17.65	2.65	1.115
Programme Money	17	11.8	3	17.7	6	35.3	6	35.3	2.06	1.029
School Supplementing Programme	17	17.7	6	35.3	3	17.7	5	29.41	2.41	1.121
OVERALL									2.66	1.066

Key: 4= Strongly Agree 3= Agree 2.=Disagree 1.=Strongly Disagree

From Table 4, majority of the principals 8 (47.06%) indicated that parents are the main funder of the lunch programme. Slightly above third of the principals 6 (35.29%) indicated that bursar makes the budget for the lunch programme. Most of the principals 6 (35.29%) were of the view that payment for the lunch programme increased the cost of schooling. Equal number of the principals 5(29.41%) strongly agreed that poverty made parents not to pay for the lunch programme while 5(29.41%) disagreed. On whether lunch programme money is always there 6 (35.29%) strongly disagreed. A similar number of principals 6 (35.29%) disagreed also that lunch money is always available. Majority of the principals 6 (35.29%) agreed that the school supplements the lunch programme with funds. Equal number of principals 3(17.7%) strongly agreed and disagreed that the school supplements the lunch programme with funds. These findings agree with studies done by Muthoni (2010) in Kikuyu district, Kiambu County who found out that some of the challenges facing school feeding programme were due to poverty, payment of such food levies was difficult to some parents. This was because school feeding programmes, by implementing parent payments, increased the schooling costs.

The Procurement Procedures of Lunch Programme - Principals

The data were sought from principals and the results are revealed in table 5.

Table 5: The Procurement Procedures of Lunch Programme - Principals

Procurement procedures	Strongly agree		Agree		Disagree		Strongly disagree	
	n	%	n	%	n	%	N	%
Efficient procurement committee	5	29.41	5	29.41	4	23.53	3	17.65
Suppliers of foodstuffs	2	11.65	3	17.65	5	29.41	7	41.18
Procurement is corruption free	3	17.65	4	23.52	5	29.41	5	29.41
Regular & Timely supplies of foodstuffs	6	35.29	5	29.41	3	17.65	3	17.65

Transparent Tendering	3	17.65	3	17.65	5	29.41	6	35.29
No direct procurement from market	2	11.65	3	17.65	6	35.29	6	35.29
Smooth Teaching and Learning	5	29.41	5	29.41	4	23.53	3	17.65

According to table 5 most of the principals 5 (29.41%) strongly agreed that the school had an efficient procurement while 3 (17.65%) strongly disagreed. Majority 7 (41.18%) strongly disagreed that suppliers of foodstuffs have equal chance of supplying foodstuffs. Most of the principals 5 (29.41%) strongly disagreed that procurement of foodstuffs is corruption free. On whether procurement has ensured regular and timely supplies of foodstuffs, majority 6 (35.29%) strongly indicated it had. Most of the principals 6 (35.29%) strongly disagreed that tendering of foodstuffs is transparent. Slightly above a third 6 (35.29%) disagreed there is no directly procurements of foodstuffs from the market. Majority of the principals 5 (29.41%) strongly agreed that teaching and learning activities are smooth because of procurement procedures.

IV. FINDINGS

The study findings found out that majority of the respondents reported that the bursar is the one responsible for budgeting for the lunch programme. On the cost of schooling majority of the respondents strongly agreed that lunch programme increased the cost of schooling. They reported that poverty was the main reason why majority of the parents who are the sponsor of the programme find it difficult in financing the programme. The relationship between Parents funding and the educational outcome was statistically significant at $r = .952$, $p > 0.05$. The relation between schooling costs and incapacity to pay was statistically significant at $r = 0.676$, $p > 0.05$. Thus the study found that in Mombasa and Kilifi Counties, Kenya, there was a significant relationship between lunch program financial management techniques and educational outcomes at public day secondary schools.

The study findings on influence of financial management found out that majority of the principals 9 (53%) indicated that lunch programme when well managed lead to improved performance. The study found out that when there was sound financial management of school lunch programme it resulted in the following; improved health status of students, active participation in class, improved time management. This enhanced retention and transition from one class to the next resulting in educational achievement.

The study's second objective was to examine lunch program procurement procedures and its influence on educational outcomes in Mombasa and Kilifi Counties, Kenya's public day secondary schools. The study established that there was efficient procurement committee in most of the schools thus influencing educational outcomes positively. It was revealed that suppliers of foodstuffs had no equal chance of supplying foodstuffs. The study found there were malpractices in food procurement thus leading to corruption. Majority of the respondents indicated procurement had ensured regular and timely supplies of foodstuffs. This enhanced attainment of educational outcomes. Most of the participants were of the view that tendering of foodstuffs was not transparent, which influenced achievement of educational outcomes negatively. The study found that teaching and learning activities were smooth because of procurement procedures since there were no delays in supplying of foodstuffs.

V. SUMMARY AND CONCLUSION

Based on the objectives and the findings this study, the following conclusions were made;

1. Financial Management techniques of lunch programme and educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya are highly correlated.
2. Sound financial management of school lunch programme resulted in the following; improved health status of students, active participation in class, improved time management.

From objective one the study found challenges on financial management of lunch programme and recommended the following:

1. Principals should be making the school lunch programme budget rather than leaving it to school bursars.
2. School Management Boards should advertise tenders for food stuffs rather than sourcing it directly from the local markets.
3. Due to poverty by parents the MOEST should consider providing money for the lunch programme as they having doing it for other vote heads.

Objective two: To determine procurement procedures of lunch programme and its influence on educational outcomes in public day secondary schools in Mombasa and Kilifi Counties, Kenya. From objective two the study found

challenges on financial management of lunch programme and recommended the following:

1. MOEST to ensure that all secondary schools have an efficient procurement committee
2. Board of Management and MOEST to ensure there is transparent tendering by ensuring that lunch programme money is audited.

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