Competencies of Public Primary School Head Teachers in the Management of School Nutrition and Meals Programme at the ECDE Centres in Bungoma South Sub-County

Claartje Nekoye Wakhungu¹*, Onex David Opati²

¹Kibabii University, Faculty of Science, P.O. Box 1699-50200, Bungoma, Kenya

²Kibabii University, Faculty Education and Social Science, P.O. Box 1699-50200, Bungoma, Kenya

*Corresponding author

Abstract: Provision of essential nutrition, shelter, and health care for children is enshrined in the Kenvan constitution. Notwithstanding the efforts by the government to improve the livelihoods of its citizens, under-nutrition remains prevalent among children under the age of 5years which has made the children prone to early childhood diseases that impede academic achievement and sometimes lead to premature death. As the pivots around which all school activities revolve, head teachers are responsible for the management of school nutrition and meals programme of children at school. The main purpose of the study was to analyse the core competencies of public primary school head teachers regarding the management of school nutrition and meals programme at the ECDE Centres. The respondents in the study included one head teacher and one ECDE teacher from a randomly selected sample size of 73 schools. Key informants were selected purposively. The data collection strategy involved the use of structured questionnaires and interview schedules. The results indicated that 32.9% of the ECDE teachers claimed that head teachers supervised the school nutrition and meals programme at the ECDE centres, while 67.1% alleged that head teachers rarely managed the programme. Notably, 9.6% of the head teachers agreed that they had basic knowledge of the existing government policies concerning school nutrition and meals programme, while 90.4% of them did not have basic knowledge on the same. Furthermore, the study revealed that lack of effective evaluation and monitoring mechanism and inadequate funding was the primary challenge to the implementation and sustenance of the programme. The study recommends adequate support from the government through the provision of funds sufficient to support the school nutrition and meals programme. The government should empower the school head teachers through training programmes regarding existing policy documents that will enable them to manage the health and nutrition in schools effectively.

Keywords: competencies, management, nutrition, meals, ECDE Centres.

I. INTRODUCTION

The first eight years represent the most critical development phase of human life. It is a phase where the brain undergoes rapid growth and development. At this stage,

children acquire the ability to think, reason, speak, and learn; therefore, they need to have adequate nutrition. Akoth (2017) confirmed that the human body depends on the provision of sufficient proportions of the right food for proper physiological functions. According to Olivier (2012), early malnutrition affects the mental, physical, and social wellbeing of the child's health and has the potential to cause stunted growth and underweight. Nutrition has both direct and indirect impacts on a child's growth and development. The type of diet a child has affects their activity level such that active children usually symbolize adequate supply of food in the right proportions. Children with proper nutrition are ready to explore their environment with considerable freedom, contrary to their malnourished counterparts, who are usually irritable and sickly.

To underscore the importance of proper nutrition, the Kenyan Government and the World Food Programme initiated the school meals programme in 1980, leading to noticeable performance improvement in the education sector that included an exponential increase in enrolment rate and retention of pupils in schools. Later in 2009, the government of Kenya launched a nationally owned and sustainable programme known as Home-Grown School Meals Programme (HGSMP) which depends mostly on locally grown food supply to schools from the local community. According to the School Nutrition and Meals Strategy for Kenya 2016, the programme is under the schools' meals, and Health unit of the Ministry of Education and the onus is on the head teachers to manage its implementation. According to Mawela & Van den Berg (2018), the head teachers are in charge of the school nutrition programme but they can appoint coordinators to assume some management roles in the programme. The head teachers' roles in the school meals programme management include budgeting, controlling the allocated funds, procuring, transporting, and storing of foodstuffs. Iddrusi (2018) emphasized that teachers, being at the tail-end of the implementation process, are a vital part of the programme because they help in its efficient and effective execution. Nonetheless, teachers as administrators and managers of the school system were not involved actively in the school meals programme therefore making the children not to get the best out of it. He further stated that the teachers' full-time involvement in the programme could earn trust from the opinion leaders and pupils in schools and therefore contributing to the programme's success.

II. LITERATURE REVIEW

School nutrition and meals programme plays a crucial role not only in Kenya but also in the world at large. A 2013 report from the World Food Programme regarding the state of school feeding programme worldwide affirms that around 368 million school-going children in pre-primary and secondary schools are given food while at school. Gorski et al. (2016) indicate that schools in the USA serve their children more than 12 million breakfasts, 32 million lunches every day, in addition to snacks and supper in some cases. A report published by the World Food Programme in 2018 indicated that, the Kenyan government in conjunction with the WFP provides meals to 1.5 million children every school day with more than 1 million children benefiting from the programme. Typically, school meals usually comprise of pulses, cereals, and in some cases vegetable. Recently, WFP has tried to diversify the diet by including vegetables and fruits. Notably, Akoth (2017) pointed out that the Kenyan school meals included porridge, which is served during mid-morning, and mid-day food, which comprises of rice, beans, maize, and vegetables.

According to Olivier (2012), school meals are essential to school-going children because it increases school enrolment, improves cognitive skills, and alleviates short term hunger. This is in addition to reducing school dropout rates, absenteeism, and improvement of academic performance. School meals programme protect the children who come from disadvantaged backgrounds since it reduces the burden of providing food for children from parents and guardians. The school feeding programme also creates job opportunities in the community and boosts the local economy since the programme allows the small scale farmers to supply their farm produce to schools. Furthermore, the School meals are central to the achievement of zero hunger goal through the provision of varied and nutritious meals to school going-children.

The World Food Programme has been at the forefront in providing fortified food to school-going children, which is rich in minerals and vitamins necessary for the growth and development of children. This is a stark contrast with what is provided to children in some ECDE Centres in Bungoma County. A study carried out by Wakhu et al. (2018) on the impact of School Feeding Programme in Mateka Early Childhood Development Centre in Bungoma revealed that children were fed on porridge made out of maize flour, starchy roots and tubers since they were cheaper compared to other foods. Much as the food in this centre did not seem to be well balanced in terms of its nutritive value, it served the purpose of alleviating hunger and improving attendance of

children in the centre. In a similar study conducted by Rono et al. (2017) it was noted that in western Kenya cereals such as maize, rice, wheat and sorghum were commonly consumed in addition to sweet potatoes and cassava. The study further revealed that children at the ECDE centres were rarely fed on animal proteins.

In Kenya, school meals have immensely contributed to investment in the development of human capital. A study from WFP-Mater card shows that for every dollar that is spent in the national school meals programme it returns US\$9. Every child that benefits from the school meals has better health, proper nutrition, and better foundation in education during the early years of life and later becomes a productive adult living for long enjoying a healthier life.

It is worth noting that the provision of school meals in Kenya is backed by several policy documents with the sole purpose of helping school heads to understand the importance of school meals. Some of the policy documents relevant to school nutrition and meals programme include Food and Nutrition Action plan (2012-2017), which is about improving nutrition and feeding in schools; National Food Security policy 2011 which highlights the components touching on school meals, health and nutrition education in schools, and National School Health policy (2009, under revision) that advocates for balanced school meals in Kenya. Despite the existence of the policies, there lacks a clear plan primarily on the management of the programme at the school level.

Taking cognizance of the importance of proper nutrition for pupils and its nexus with academic achievement, head teachers show willingness to support the programme. However, most head teachers feel overwhelmed by other duties that are mainly administrative in nature and therefore fail to adequately perform their role as required by the policy. On the other hand, the teachers feel that the nutrition programme is another big responsibility for them given their already overcrowded schedule and getting actively involved in its implementation has the potential to interfere with their teaching programme the result of which may be a compromise on the quality of their teaching and yet the latter is their primary role (Mawela & Van den Berg 2018). The policy also mandates the head teachers to, amongst other things, play an oversight role in the supervision of the handling of the food, ensuring that the food is of good quality, ensuring that the purchased foodstuffs are stored properly and securely and perhaps most importantly ensuring that the provision of the food is consistent and timely. In summary, implementation and supervision of the meals programme fall directly within the purview of school heads.

A study by Chakraborty and Jayaraman (2019) investigated the effect the world's most extensive school feeding programme in India has on the achievement and progress in school. This study was particular on the exposure of the children to the programme on a long term basis. The programme was successful in its objective of improving the nutrition of the child, particularly those from disadvantaged backgrounds. As a result, if all other factors were constant, then there was a marked improvement in the learning outcomes of the children. The study confirms the nexus between proper nutrition and academic achievement. In essence, if the implementation of the nutrition and meals programme is successful, then the expectation is the improvement in both the nutritional status of the children and their learning outcomes.

For a school nutrition and meals programme to be successful it needs stable and sufficient funding, an adequate and effective management structure, fulltime government involvement at different levels and, community involvement which entails among other things procuring food stuffs from local small scale farmers. Funds for Home-grown school meals programme are usually transferred directly to the school accounts to enable the direct purchase of food from the local farmers and suppliers. School Nutrition and Meals Strategy 2016 indicates that the government of Kenya has been gradually increasing the budget for school meals because of its perceived importance in increasing access to primary education, especially in arid and semi-arid regions. For instance, there was an initial allocation of a budget of Ksh. 400 million in 2009 for Home-grown school meals, which more than doubled to Ksh. 850 million by 2015. A report from the World Food Programme 2018 states that the government has set aside 2.4 billion Kenyan Shillings (almost US\$ 24 million) in the current financial year 2018/2019 to support the programme. This is a clear attestation to the unwavering confidence the government has in the ability of proper nutrition to support learning and development of children.

Notwithstanding the aforementioned government support in the provision of meals in schools, Munuhe (2016) revealed that school feeding programmes in Kenya heavily rely on donors for financial support as well. When this support becomes intermittent, therefore, some schools are compelled by financial constraints to abandon the programme. The problem is also further exacerbated by reliance on parents to provide support for the programme. It was also noted that 20% of the funding comes from the local community mainly from parents. Given the poverty levels in most communities it becomes difficult to sustain the programme. Another noteworthy impediment to the success of the programme is the lack of income-generating activities by most schools. Empirical studies also show that schools that were supported by religious institutions and faith-based organisations managed to sustain the meals programme effectively since they had alternative sources of funding.

Despite the effort by the government to implement the school meals and nutrition programme in schools, it still faces a myriad of challenges. Jomaa et al. (2011) posit, in their study, some of the difficulties encountered in managing the school feeding programmes in developing countries which included fluctuation of food prices in the market, drastic change in the weather and inability to sustain the programme. A similar

study conducted by Oliver & Marc (2012) concluded that there was a lack of sufficient knowledge and inadequate training which hamper proper implementation of the programme in developing countries. The study also revealed that reduced involvement of the society in the implementation of feeding programmes in schools was a major obstacle to the programme's success. Gavarapu (2014), in his research on challenges of nutrition programme also indicated that the nutritional stakeholders lacked knowledge and skills. Henricks (2014) outlined some of the problems as being lack of support from opinion leaders, low morale by staff, lack of in-service training, and human resource. Tylor & Ogbogu (2016) found two major obstacles to the implementation of the school feeding programme and these were inadequate monitoring and evaluation systems, and exponential increase in enrolment of children in schools not backed by a commensurate increase in financial resources.

III. METHODOLOGY

A descriptive survey design was used in the study. The method involves the collection of data through the administration of questionnaires and structured interviews to participants that make the study sample. The method was appropriate since it ensured a total description of situations without manipulation of the research variables.

The Setting of the Study and Sample Selection

The setting of the study was Bungoma South Sub-County, a constituent of the larger Bungoma County. A sample size of 73 schools was randomly selected to mitigate possible bias in the study findings. One Head teacher and one ECDE teacher were chosen from each school, forming 146 respondents. The selection of the sample for the study followed probabilistic methods for the reasons of reducing bias in the results. Accordingly, the selection of the seventy three study schools involved the use of 200 pieces of folded paper containing the names of potential study schools. 73 three pieces of paper containing the study schools' names were randomly picked to ensure that no school was chosen with favour. Importantly, the selection of the 146 respondents followed probabilistic means through random selection, by assigning two respondents from each school. Accordingly, seventy three schools yielded a sample size of 146 participants.

Data Collection

The choice of a data collection tool is an important stage in research because it influences the quality of the information gathered by the researcher. Notably, researchers choose a data collection instrument that has the highest validity in order to collect quality data for easy analysis. In this study, the main tools for data collection were interview schedules and structured questionnaires. The researcher sought informed consent from the respondents before the latter took part in the study. The target was to get over 90% response levels from the questionnaires issued to the participants, and the target was met because 92% of the 73 participating schools

responded with filled questionnaires. As a practical consideration, data collection through interviews involved arrangement with participants to meet within the precincts of the school. The collected data was sorted and organized for ease of analysis and interpretation. Consequently, findings were presented in Frequency tables, percentages and descriptive statistics for analysis and interpretation.

IV. FINDINGS AND DISCUSSION

The tables below show the results of the data collected through questionnaires and structured interviews.

Table 1: Supervision of school nutrition and meals programme at the ECDE Centres

Supervision of nutrition and meals	Frequency	Percent (%)
Yes	24	32.9
No	49	67.1
Total	73	100.0

The results indicated that out of 73 ECDE teachers who participated in study, 24 of them (32.9%) acknowledged that their head teachers supervised the school nutrition and meals programme at the ECDE Centres while 49 participants (67.1%) contradicted that their head teachers rarely managed the school meals programme. Thus, the results unveil the lack of programme supervision by the head teachers in the schools in Bungoma South sub-county.

When some of the head teachers were asked to give reasons for not supervising the programme, they claimed that they were busy with administrative work and management of the upper primary hence had inadequate time to oversee the programme. A significant number of head teachers were of the view that since the ECDE was devolved to the County Government, it was outside their mandate to oversee the nutrition and meals programme. Instead, they opined that the educational officers from the County Government were solely responsible for the running of the programme.

Respondents were asked to state the sources for funding for the school nutrition and meals programme. The table below highlights the sources of funding posited by the respondents.

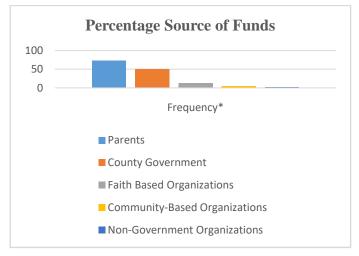
Table 2: Source of funds for the nutrition and meals programme

Source of funds	Frequency*	Percent (%)	
Parents	73	100	
County Government	50	68.4	
Faith Based Organizations	13	17.8	
Community-Based Organizations	5	6.8	
Non-Government Organizations	2	2.7	

^{*} Multiple responses

All the ECDE teachers (100%, n =73) revealed that parents were the primary source of funds for school nutrition and

meals programme. Nonetheless, a good number of the ECDE teachers (68.4 %, n=50) noted that funding came from the County Government of Bungoma, while 13 of the respondents (17.8 %) claimed that the school and nutrition programme was funded by Faith-Based Organizations (FBOs). 5 (6.8 %) of the ECDE educators reported that Community Based Organizations (CBOs) were the main source of funds for the programme and 2 of the respondents (2.7 %) indicated that Non-Governmental Organizations were providing funds for school feeding programmes. Some of the ECDE teachers were probed to give more information on the sources of funds and how the money was spent. Figure 2 below shows the proportion by contribution of each source of funds for the programme.



One of the teachers said:

Parents pay money to supplement the school meals programme in school, although money from the parents was insufficient and couldn't sustain the programme. On the other hand, the county government of Bungoma finances the meals programme the funds received was diverted to building classes and buying of learning materials for the school (Interviewee)

Head Teachers' Basic Knowledge on Existing Policy Documents Relevant To School Nutrition and Meals Programme

The head teachers were asked whether they had basic knowledge of relevant existing policy documents related to school nutrition and meals programme. Their responses were analysed and presented, as indicated in the Table below.

Table 3: Basic knowledge of existing government policy documents on school nutrition and meals programme

Knowledge of existing government policy documents on school nutrition and meals programme	Frequency	Percent (%)
Yes	7	9.6
No	66	90.4
Total	73	100.0

The findings revealed that out of 73 head teachers, 7 of them (9.6 %) reported that they had basic knowledge on existing government policy documents on school nutrition and meals programme while 66 of the head teachers (90.4%) stated that they did not have any basic knowledge on government policy 1. documents relevant to school nutrition and meals programme.

Challenges Encountered in Managing the School Nutrition and Meals Programme at ECDE Centres

Respondents were asked to state the challenges that hinder effective management of the school nutrition and meals 2. programme.

Table 4: Challenges facing the management of school nutrition and meals programme

Nature of challenge	Frequency	Percent
Lack of awareness on the importance of programme	57	78.0
Inadequate funds	32	43.8
Lack of in-service training	14	19.2

^{*} Multiple responses (Does not add to 100 %)

Most of the ECDE teachers (n= 57, 78.0%) agreed that a lack of awareness among some of the head teachers on the importance of school nutrition and meals programme was a big challenge. 32(43.8%) of the ECDE teachers revealed that inadequate funds also affected the management of school nutrition and meals programme while 14 (19.2%) of the respondents noted that lack of in-service training hindered effective management of the programme.

Limitations and Future Research

The research was limited by the time taken to collect the data, which was a direct result of inadequate funding. Accordingly, future research should embrace a longer period of time and adequate funding to unveil further insights regarding the running of the nutrition and meals programme in Kenyan schools. For instance, the research findings do not include information concerning head teachers that successfully ran the programme. Future research can fill such gaps through rigorous studies.

V. CONCLUSION

Based on the findings of the study the following were the key conclusions drawn on the competencies of public primary school head teachers in the management of school nutrition and meals programme at the ECDE centers in Bungoma South sub-county: Public primary school head teachers had inadequate time to supervise the school nutrition and meals programme due to their overwhelming administrative tasks and management of the upper primary. Most of the head teachers claimed to have no basic knowledge of the existing government policy documents on school nutrition and meals programme. Finally, insufficient funds and lack of information on the importance of school meals among the head teachers were some of the challenges encountered while managing the programme. The study also revealed that

parents were the chief financiers of the school meals programme at the ECDE centres.

VI. RECOMMENDATIONS

The government to organize for in-service training for primary school head teachers to inform them on the importance of school nutrition and meals programme and to also enlighten them on the existing government policy documents on school nutrition and meals programme.

Head teachers to empower staff so that they can delegate their supervisory role to them for the latter to step in and help whenever the former feel overwhelmed with other administrative duties.

. Head teachers to come up with effective strategies on how to mobilize funds to sustain the school meals programme rather than waiting for the government all through.

COMPETING INTERESTS

Authors have declared that there are no existing competing interests.

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