



Contribution of School Feeding Programmes on Pupils' School Retention: A Study of Public Primary Schools in Arusha District Council, Tanzania

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Abstract: *The study assessed the contribution of school feeding programmes on pupils' retention in public primary schools in Arusha District. Specifically, the study investigated how feeding programmes influence pupils' retention, identified the challenges affecting their provision and proposed strategies to improve the programme. The study was guided by Maslow theory of human needs. The study adopted a mixed methods approach using a convergent design to collect quantitative and qualitative data. The target population included 102 head teachers, 27 ward education officers, 102 school committee chairpersons, 1456 teachers and 30,475 pupils. By using Yamane formula, a sample of 395 was obtained from the total population of 32,162 and respondents were selected through simple random, purposive and systematic sampling. Data were collected through questionnaires, interviews, focus group discussions. Validity was ensured through expert review and credibility through communicative validation. Reliability was tested using split half method and a coefficient of 0.87 was obtained. Pilot testing was done in three schools to check clarity and usefulness of instruments. Quantitative data were analyzed using SPSS while qualitative data were analyzed thematically using ATLAS.ti software. Ethical measures included informed consent, confidentiality and voluntary participation. The findings showed that feeding programmes are present in most schools and help improve attendance retention concentration and academic performance. Challenges included low funding, poor infrastructure, political interference and weak community support. The study concluded that school feeding programmes contribute to pupil retention and recommends stronger government support, active parental contribution, community sensitization and improved programme management.*

Keywords: *Feeding, School, Programmes, Pupils, Retention, Tanzania*

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1. Introduction

Retention of primary school pupils has remained a global challenge. According to Mugume and Bulime (2024), almost 30% of pupils registered in primary schools fail to complete the level as they drop out before graduation. Research has shown hunger as one of the factors contributing to this problem since pupils with empty

stomach fail to focus on their studies (Ghimire, 2024). Due to short-term hunger, pupils, especially the ones from low-income families are forced to skip schools and stay at home or help the family members in searching for food (Watkins et al., 2024). As the pupils fail to complete primary education, their chances to proceed with further education are reduced and hence the goal of achieving universal primary education is not fulfilled.

To improving retention in primary schools, school feeding programmes have been introduced in many countries. These initiatives began in the United Kingdom and the United States of America in the early 1930s with one of the key goals being to improve school retention (Ibrahim et al., 2023). For instance, in England, pupils from low-income families are provided with free school lunches, which comply with mandatory food-based guidelines (Parnham et al., 2022). Similarly, Sweden started implementing school lunches in 1959 with the aim of fighting short-term hunger. The school feeding programme ensures that pupils receive at least one nutritious meal per day to support their learning and well-being (Lundborg et al., 2022). By addressing hunger, these programmes have played a crucial role in keeping pupils in schools.

School feeding programmes are also practiced in the African countries. For instance, in Nigeria, hunger has been reported to cause almost 50% drop out among students and thus the introduction of school feeding programmes has been mandated (Barnabas et al., 2024). Similarly, in Ghana, the introduction of a school feeding programme in 2005 aimed to increase access to basic education and improve retention rates (Saviour et al. 2023). Additionally, schools with feeding programmes in Ethiopia have been reported to excel in the indicators of quality education including reduction in dropout rates, improving completion rates and enhancing academic outcomes (Mideksa et al., 2024). The efforts by the governments in the African countries show how school feeding programmes are considered to be essential for improving school retention among primary school pupils.

In Tanzania, the government has taken steps to address pupil retention through the approval of the National School Feeding Guidelines (NSFG) in March 2021, which come from the Ministry of education policy of 2018 that was updated in 2020. The ministry of education, science and technology (MoEST) developed these guidelines to provide uniform guidance for schools, communities and local governments in managing and coordinating school feeding programmes (URT, 2021). The NSFG emphasizes the importance of school meals in improving pupils' attendance and learning outcomes. It outlines the roles and responsibilities of various stakeholders including government officials, school administrators, teachers and community members in implementing the programmes. The guidelines also focus on mobilizing community ownership and local contributions to ensure sustainability (MoEST, 2021). The introduction of such guidelines shows the commitment of the government to improve pupil retention in primary schools.

Pupil retention rate in primary schools in Tanzania has not reached excellent level. According to Evans et al (2023),

the average completion rate in primary schools is Tanzania is 68%. This means that about 32% of pupils enrolled in primary schools do not complete standard seven. The report by the World Bank also shows that there has been an increase in the completion rate among pupils in primary schools in Tanzania. The report shows that in 2019 the rate was 64% while in 2020 it was 76% and in 2021 it rose up to 76% (World Bank, 2022). Though there is an increase in the rates, still there is a group of more than 20% of pupils who do not make it into standard seven. Additionally, there is limited literature on whether the increase in the completion rates is attributed to the introduction and implementation of school feeding programmes. In Arusha district, pupil retention is also a problem as almost 30% of the pupils do not complete their primary education (Ems and Mnjokava, 2022). It is from this background that the current study was conducted to assess the contribution of school feeding programmes on retention among primary school pupils in Tanzania whereby Arusha district was the study area.

1.1 Research Questions

The study investigated the following research questions:

- i. How does feeding programmes influence pupils' retention in public primary schools in Arusha district council?
- ii. What challenges are facing the provision of school feeding programmes in Arusha district council?
- iii. What strategies can be proposed to improve the provision of school feeding programmes for enhancing pupils' retention in public primary schools in Arusha district?

2. Literature Review

2.1 Theoretical Review

The study was guided by the hierarchy of needs theory developed by Abraham Maslow in 1943.

2.1.1 Hierarchy of Needs Theory

The theory states that human needs are organized in five hierarchical levels, starting with physiological needs, followed by safety, love and belonging, esteem and self-actualization. According to Maslow (Lindeman, 2021), lower-level needs must be met before individuals can focus on higher-level aspirations. In the context of this study, the provision of school feeding programmes addresses the basic physiological need for food that enables pupils to

remain in school and focus on learning. Pupils who attend school on an empty stomach are less likely to engage actively in academic activities. By satisfying hunger, feeding programmes create a foundation for better learning outcomes and sustained school attendance. The theory assumes that meeting the basic need for food motivates pupils to continue attending school.

2.1.2 Strength of Hierarchy of Needs Theory

The strength of Maslow's theory is its ability to explain human motivation by recognizing the influence of different levels of needs. The theory helps to illustrate how basic needs such as food directly impact behaviour and cognitive functions. In the context of this study, the theory offers a logical explanation for how meeting pupils' physiological needs through school feeding programmes contributes to better attendance and retention. Thus, the theory supports the argument that hunger undermines the ability of pupils to remain in school and concentrate on their studies. By acknowledging the role of physiological needs, the theory offers a framework assessing how the availability of school feeding programmes contributes to school retention among pupils in public primary schools within Arusha district council.

2.1.3 Application of Hierarchy of Needs Theory

The theory provides a clear and practical framework for understanding the link between satisfying pupils' basic needs and their motivation to remain in school. It offers a valuable lens for examining the role of feeding programmes in meeting pupils' physiological needs and creating a foundation for their academic engagement and retention. The theory was applied by exploring how the provision of school meals affects pupils' ability to concentrate, attend school regularly and complete their education. Additionally, the theory guided the identification of strategies for enhancing school feeding initiatives to support better retention rates among primary school pupils. Its application helped in providing meaningful recommendations for improving school retention among public primary school pupils in Arusha district council through better nutritional interventions.

2.2 Empirical Review

This section focuses on a review of empirical studies that relate to the current study. The review has been organized according to themes generated from the research questions.

2.2.1 Contribution of School Feeding Programme on Pupils' School Retention

Ibrahim et al. (2023) conducted a study to examine the effects of primary school feeding programmes on pupils' enrolment, retention, and performance in Katsina State. The study employed a survey design approach, using a multistage sampling technique to select 542 respondents. Data were collected through structured questionnaires and descriptive and inferential statistics were used for analysis. The results indicated that school feeding programmes positively influenced enrolment and retention, as shown by increased school attendance and reduced dropout rates. Rout and Das (2022) assessed the extent to which the mid-day meal Scheme contributed to enrolment and retention of primary school students in Nayapalli, Bhubaneswar, Odisha. The study utilized primary data from five schools and applied descriptive analysis. The results demonstrated that the scheme positively influenced enrolment and retention, as evidenced by consistent attendance and a stable or increasing number of students in each grade. Mketto et al. (2022) examined the influence of school feeding programmes on students' academic performance in drought-prone areas of Tanzania. The study used a mixed-methods approach, employing simple random and purposive sampling techniques. Data were collected through questionnaires and interviews, and regression analysis was applied to assess the impact of school feeding programmes. The results showed that student attendance and classroom participation improved, leading to higher examination scores. However, the study focused on secondary schools, leaving a gap in understanding the effect of school feeding programs at the primary school level.

2.2.2 The Challenges Facing the Implementation of School Feeding Programme

Mafugu conducted a study in KwaZulu-Natal Province South Africa in 2017 to determine the challenges encountered in implementing school nutritional programmes. The study adopted a cross-sectional research design underpinned by a concurrent triangulation approach. Interviews were used to collect qualitative data from stakeholders while questionnaires collected quantitative data from students. The study found that both the quality and quantity of food were affected by delays in payment of food suppliers, lack of training of stakeholders and poor kitchen facilities. Jean de Dieu et al. (2023) conducted a study in basic education schools to examine the implementation level of the school feeding programme and identify challenges limiting its effectiveness in Rwanda. The study adopted a descriptive research design and used stratified and simple random sampling to select 227 participants. Quantitative data was collected through questionnaires and analysed descriptively using SPSS while qualitative data was analysed thematically. The study

found that insufficient food in terms of quality and quantity, inadequate materials and infrastructure and unaffordable prices of groceries hindered the effectiveness of the school feeding programme.

2.2.3 Strategies for Improving the Implementation of School Feeding Programme

Wang and Cheng (2022) conducted a study in rural China to examine the relationship between children's participation in the nutrition improvement programme and household education expenditure. The study found that participation in school feeding programmes increased household investment in children's education. Parnham et al. (2022) conducted a study in the United Kingdom to determine the ultra-processed food content of school meals. The study used a pooled cross-sectional analysis of data from the UK's National Diet and Nutrition Survey collected between 2008 and 2017. The study recommended the need for better guidance and policies that consider levels of industrial processing in school food to encourage school meal uptake and improve children's diets. Mugume and Bulime (2024) conducted a study in Uganda to examine school institutional drivers of pupil retention using longitudinal data from 7824 primary schools collected between 2008 and 2014. The study employed a fixed effects regression model to estimate associations between institutional factors and retention. The study recommended strengthening school inspection functions, promoting surveillance to address pupil dropouts and recruiting more trained teachers while regulating high school fees. The study focused on institutional factors which may have overlooked household and community-level influences on pupil retention.

3. Methodology

The study adopted a convergent design under the mixed methods approach. This design involves collecting both quantitative and qualitative data simultaneously to allow a comprehensive understanding of the research problem (Creswell and Creswell, 2023). The study targeted 32,162 population which include all the 102 head teachers, all 1456 teachers, all 30,475 pupils of class five to seven, all the 27 ward education officers and 102 school committee chairpersons (BEMIS 2025). The rationale for selection of each category is based on their roles and the information they can provide. Head teachers are responsible for managing the school and overseeing the implementation of educational programmes, including the school feeding programme. Therefore, their views were crucial for understanding the challenges and successes of the

programme. Teachers play a central role in the daily operations of the school, therefore, their views on the impact of the feeding programme on the pupils' school retention were necessary. Ward education officers, on the other hand, have an oversight role at the ward level and can offer valuable information on the broader impact of the programme and its coordination across schools. The school committee chairpersons are responsible for making decisions at the school level.

The sample size was calculated using the Yamane formula for sample size determination, with a margin of error of 0.05. The use of this formula is recommended for social science studies because it provides a statistically valid sample size for the given population (Yamane, 1967). The calculation of the sample size is demonstrated as follows:

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{32162}{1 + 32162 \times 0.05^2}$$

$$n = \frac{32162}{1 + 32162 \times 0.0025}$$

$$n = \frac{32162}{81.4025}$$

$$n = 395 \text{ respondents}$$

Consequently, the sample size for the study was 395 respondents, consisting of 15 head teachers, 15 ward education officers, 15 school committee chairpersons, 275 pupils and 75 teachers. The study used simple random sampling to select 15 primary schools from the population. Criterion purposive sampling was used to select the 15 head teachers. Simple random sampling was used to select the 75 teachers for the study. In primary schools, there is no subject specialization and thus a teacher may be allocated to teach any subject. Since the population of teachers to be considered as being homogeneous in the current study, simple random sampling technique was appropriate. Criterion purposive sampling was also used to select 15 ward education officers.

Systematic sampling procedure was used to select 275 pupils of standard five, six and seven who participated in the study. The number of pupils to be selected from each school ranged from 18 to 19. In the 10 schools with 900 pupils and less, 18 pupils were sampled while in the remaining 5 schools with more than 900 pupils, 19 pupils were selected. To get the sample from each class, the researcher used the attendance register whereby the sampling interval was determined depending on the number of registered pupils. Thus, the researcher then

picked the pupils according to the interval obtained. The starting point was determined by selecting a number between one and the sampling interval for each class. This was done to ensure equal chance for each pupil to be selected. The study used a combination of questionnaires, interview guides, focus group discussion guide as tools for data collection. The questionnaires were used to collect data from teachers, while interview guides were used for head teachers, school committee chairpersons and ward education officers. The focus group discussion guide was used to collect data from pupils during group discussion sessions.

Validity was ensured through expert authentication. Reliability was ensured using the split-half method. The scaled items in the questionnaire were divided into two sets, and the correlation coefficient was computed using the Spearman-Brown formula. The reliability coefficient was 0.87 which is within the acceptable range as recommended by Okendo et al (2020), who put forward that the reliability coefficient of 0.7 and above is acceptable. For qualitative data, conformability was ensured through triangulation whereby data from the interviews were compared with data from teachers and to verify whether they conform to each other. The instruments were pilot tested in three public primary schools within Arusha district. The pilot study sample included 15 teachers, 3 head teachers, 3 ward education officers, and 54 pupils. The purpose of pilot testing is to assess whether the instruments are clear and understandable and whether they provide the necessary information to answer the research questions. The results of pilot testing were also used to estimate the reliability of the instruments.

Quantitative data were analyzed using descriptive statistics. Descriptive statistics generated frequencies and percentages to summarize the data. The analysis of quantitative data was aided by computer software; statistical package for social sciences (SPSS) version 22. Qualitative data were analyzed using thematic analysis

whereby themes were generated based on the research questions. The analysis of qualitative data was aided by ATLAS.ti software. Data were presented using tables for quantitative data and descriptive narratives for qualitative data with direct quotations included to support the findings. The qualitative findings were interpreted to complement and enrich the quantitative results, providing a comprehensive understanding of the study phenomena. Ethical considerations observed also included the responsible handling and reporting of data to ensure the integrity of the research process. All sources and references were cited in accordance with APA style 7th edition (APA Manual, 2019).

4. Results and Discussion

The findings are discussed in accordance with the themes generated from the research questions that the study sought to answer.

4.1 Contribution of School Feeding Programme to Pupils' School Retention

The first research question focused on determining how school feeding programmes contribute to pupil retention in public primary schools in Arusha District. To address this objective, teachers were presented with ten statements on a Likert scale. These statements focused on different ways in which feeding may influence pupils' continued attendance and school engagement. Teachers were asked to show the degree to which they agreed or disagreed with each statement. Their responses were analyzed to generate frequencies and percentages. Table 1 presents the quantitative data obtained from teachers. The discussion of the findings follows the table.

Table 1: Teachers' Responses on How Feeding Programme Contributes to Students' School Retention (n = 74)

Statements	SA		A		N		D		SD	
	f	%	f	%	f	%	f	%	f	%
Pupils who participate in the school feeding programme tend to perform better academically.	25	33.8	48	64.9	0	0.0	1	1.4	0	0.0
The availability of food in school has reduced the incidence of absenteeism due to hunger.	33	44.6	37	50.0	2	2.7	2	2.7	0	0.0
The availability of meals has contributed to a decrease in the number of school dropouts.	32	43.2	38	51.4	0	0.0	1	1.4	3	4.1
The feeding program has encouraged pupils to stay in school for longer hours.	39	52.7	32	43.2	2	2.7	1	1.4	0	0.0
The feeding program has fostered a positive learning environment, encouraging pupils to stay in school.	36	48.6	32	43.2	6	8.1	0	0.0	0	0.0
The regularity of meals has made students feel more motivated to attend school consistently.	45	60.8	26	35.1	2	2.7	1	1.4	0	0.0
The school feeding program has contributed to the overall improvement in student retention in this school.	28	37.8	39	52.7	7	9.5	0	0.0	0	0.0
The school feeding program has made it easier for pupils to complete their education without interruption.	22	29.7	29	39.2	7	9.5	16	21.6	0	0.0
The school feeding programme has positively impacted student attendance in the school.	18	24.3	19	25.7	16	21.6	13	17.6	8	10.8
The school feeding programme helps improve pupils' concentration during lessons.	34	45.9	28	37.8	6	8.1	5	6.8	1	1.4

Source; Field data (2025)

The data in Table 1 show that 33.8% of teachers strongly agreed that pupils who participate in the school feeding programme tend to perform better academically. About 64.9% of them agreed, 1.4% disagreed, and none strongly disagreed or remained neutral. These results suggest that a large number of teachers agreed with the statement. These findings imply that teachers believe that feeding programmes support pupils' academic performance, which contributes to their continued presence in school. These findings are in agreement with Ngutunyi et al. (2024) who also found that school feeding programmes are essential for effective teaching and learning, resulting in improved academic performance. The agreement between findings of the current study and literature review implies that consistent access to meals can enhance pupils' concentration and achievement, reinforcing their interest in attending school. The presence of teachers who disagreed with the statement implies that some may have observed minimal academic improvement despite feeding initiatives, possibly due to other underlying challenges.

During interviews with ward education officers and head teachers, most of them confirmed that feeding has contributed to better academic performance among pupils. They mentioned that pupils stay focused and complete their work more efficiently. This was made evident as one of the head teachers had the following to say:

In our school, the feeding programme has played a role in academic improvement. Pupils stay attentive during lessons and perform better in class tests. We have noticed a steady rise in pass rates since meals were introduced. Pupils now focus more and miss fewer classes (Personal statement 13.05.2025).

Also ward education officer added that:

The academic progress of our pupils has improved, especially in lower classes. Before the feeding programme, many were too hungry to concentrate. Since its

introduction, more pupils stay active and complete their classwork properly. Teachers now spend less time managing distracted or tired learners (Personal interview 12.05.2025).

Responses from the ward education officers and head teachers imply that they see a strong connection between meal availability and improved academic performance. These findings agree with those of teachers, where most of them acknowledged the role of feeding in boosting achievement. The agreement between findings confirms that food provision enhances classroom engagement, supporting both attendance and academic growth. The findings corroborate with Maslow’s theory (Lindeman, 2021), that provides a clear and practical framework for understanding the link between satisfying pupils’ basic needs and their motivation to remain in school. Consequently, the theory offers a valuable lens for examining the role of feeding programmes in meeting pupils’ physiological needs and creating a foundation for their academic engagement and retention.

The data in Table 1 also show that 44.6% of teachers strongly agreed that the availability of food in school has reduced the incidence of absenteeism due to hunger. About 50.0% agreed, 2.7% were neutral, and another 2.7% disagreed. None strongly disagreed. These results suggest that most teachers agreed with the statement. These findings imply that teachers see the feeding programme as a significant measure in reducing hunger-related absenteeism and supporting regular school attendance. These findings are in agreement with Ibrahim et al. (2023) who indicated that school feeding programmes positively

influenced attendance by reducing dropout rates and increasing regular school presence. The agreement between the current findings and previous literature implies that feeding initiatives address one of the key barriers to consistent attendance, that is lack of food. The presence of teachers who disagreed suggests that in some cases, absenteeism may persist due to other reasons such as illness, family issues, or inadequate food supply.

4.2 Challenges Facing the Implementation of School Feeding Programme

The second research question aimed to investigate the challenges that face the implementation of school feeding programmes in public secondary schools in Arusha District. The teachers were provided with an open-ended question in the questionnaire asking them to write about the challenges they considered. A number of responses were recorded and carefully reviewed by the researcher. After thorough analysis the challenges were grouped into four major issues, namely inadequate funding, lack of government support, limited community participation and political interference. These groupings enabled a clear organization of the challenges as reported across different schools. Each major issue was linked to several specific challenges mentioned repeatedly by teachers. The major issues alongside their corresponding challenges have been presented in Table 2. This classification helped to provide a structured view of the different obstacles affecting the effectiveness of school feeding programme in the district.

Table 2: Challenges affecting the effectiveness of school feeding programmes (n = 74)

Major Aspect	Corresponding Issues
Inadequate Funding (78%)	<ul style="list-style-type: none"> • Some parents fail to pay for their children meals • Parents do not contribute for food on time • Low income among some parents
Lack of Government Support (62%)	<ul style="list-style-type: none"> • Not all parents pay for feeding programme • No percent of the capitation is allocated for school meals • The responsibility has been left to the parents • The cooks are not paid by the government • The government does not provide the food material
Limited Community Participation (59%)	<ul style="list-style-type: none"> • Lack of cooperation from parents • Negative attitudes from the parents • Parents do not see the need of making contributions • Parents delay to bring food to the schools
Political interference (43%)	<ul style="list-style-type: none"> • Delayed implementation due to political disagreements • Conflicting instructions from political leaders • Feeding decisions driven by political campaigns • Politicians making promises without follow-up

Source: Research field data 2025

Focusing on the first major issue of inadequate funding, 78% of the teachers reported challenges linked to poor financial capacity among families and the surrounding community. They explained that some parents fail to pay for their children's meals while others delay or completely avoid contributing either food or money. A number of teachers indicated that not all parents support the feeding programme as some do often struggle due to low income. This irregularity creates gaps in meal provision and affects the reliability of the program. Many schools reported that inconsistent contributions make it hard to plan meals effectively for the pupils. These results are supported by Mafugu (2022) who found that delays in payment and poor infrastructure reduced both food quality and quantity. The current study confirms that inadequate funding weakens the overall structure of the programme. This implies that if parents are unable to meet financial demands the continuity of school meals becomes uncertain. As a result, pupils may begin to miss school due to hunger which increases the likelihood of dropouts. Therefore, the problem of inadequate funding directly undermines the contribution of the school feeding programme to pupils' school retention in Arusha District.

During interviews with head teachers and ward education officers, most of them reported the difficulties faced by parents in paying for meals. They explained that poverty in surrounding communities prevents consistent food contributions. One of them explained:

At my school, some parents are unable to contribute even small amounts for food. Most depend on seasonal income and delay payment or do not pay at all. This affects our ability to serve meals daily and reduces pupil attendance especially during the mid and end terms (Personal interview 20.05.2025).

Also ward education officer added:

"In our ward, many learners miss out on school meals because their parents cannot afford the contributions. Some households go for weeks without paying. This makes it hard to plan properly and weakens the feeding programme especially in schools with many pupils from low-income families" (Personal statement 09.05.2025).

These responses confirm that the problem of inadequate funding is deeply connected to the low-income levels among parents and local communities. The ward education officers and head teachers' responses align with the 78 percent of teachers who reported that financial challenges affect the smooth running of school meals. The quotations show that without regular contributions from parents schools cannot offer reliable feeding services. This creates gaps in food availability and pupils are affected both

physically and emotionally. The inconsistency leads to increased hunger and eventually causes irregular attendance or dropping out altogether. The inability to sustain food provision undermines pupils' commitment to remain in school. When meals are uncertain, pupils may choose to stay home or engage in activities that meet their basic needs.

Concerning lack of government support, 62 percent of the teachers reported that feeding programmes were left entirely in the hands of the parents and school management. Teachers pointed out that no part of the capitation grant is reserved for food provision and that schools receive no financial backing from the government for this purpose. They also noted that cooks are not paid for by the government, which makes the programme difficult to sustain. The absence of food supplies or materials further limits schools from running a consistent feeding programme. This situation has placed too much responsibility on parents, many of whom are unable to meet the demands. These findings are supported by Jean de Dieu et al. (2023) who indicated that the absence of adequate materials and unaffordable grocery prices reduced the effectiveness of school feeding efforts. In the current study, lack of government support is seen as a major setback in achieving feeding objectives. Without a reliable financial structure schools depend entirely on irregular community support. This dependence may result in reduced meal consistency and cause pupils to lose motivation to attend school. As a result, the aim of using feeding programmes to support pupils' retention becomes difficult to achieve.

In relation to the second major challenge, head teachers and ward education officers indicated that schools receive no direct assistance from the government. They said schools rely entirely on parents which limits consistency and reliability. One head teacher remarked.

At my school, we do not receive any government assistance for the feeding programme. We have to rely entirely on what parents provide. The government does not supply food or cooking items and the school has no budget for this. This leaves many gaps in meal planning (Personal interview 03.06.2025).

Also ward education officer noted;

In this zone, most primary schools run feeding programmes without any support from the government. Even the cooks are paid by parents. The capitation grant does not cover food expenses, which makes the programme unreliable and heavily dependent on inconsistent community contributions (Personal interview 12.05.2025).

These responses reflect the concern raised by 62 percent of surveyed teachers who pointed to lack of government support as a major challenge. The ward education officers and head teachers' responses reveal the burden that is placed on parents when the government fails to contribute to school feeding. When funding and food items are not provided centrally the entire programme becomes unstable. Schools cannot budget or plan long-term food supply without knowing if or when support arrived. This uncertainty affects the quality and consistency of meals which discourages pupils from staying in school. The dependence on parents alone leads to inequalities between schools located in wealthier and poorer communities. These interview responses confirm that government involvement is necessary to ensure feeding becomes a reliable part of the school day. When that support is missing the objective of pupil retention through feeding cannot be sustained.

4.3 Strategies for Improving the Provision of Feeding Programmes in Primary Schools

The third research question determined the strategies for improving the provision of feeding programmes in public primary schools in Arusha district. Teachers were asked to suggest ways to address the challenges facing feeding programmes. Their responses were grouped into four major themes namely community education and awareness, parental engagement and contribution, government support and policy, and programme management and logistics. These themes alongside their corresponding actions have been presented in Table 3. The strategies reflect a collective understanding among teachers that multiple levels of intervention are required to improve the effectiveness and sustainability of school feeding initiatives.

Table 3: Strategies to improve the effectiveness and sustainability of school feeding initiatives (n = 74)

Key Aspect	Corresponding Actions
Community Education and Awareness	<ul style="list-style-type: none"> • Education should be provided to the community about the importance of food at school • Sufficient education about the importance of food at school • Organize seminars and meetings to provide education about food at school • Parents should be given education about school feeding
Parental Engagement and Contribution	<ul style="list-style-type: none"> • Motivate parents to contribute food • Encourage parents to contribute food • Parents should contribute food on time • meetings with parents
Government Support and Policy	<ul style="list-style-type: none"> • Government should contribute food • Government should take responsibility for school feeding • Government should provide food for students • Government should provide food subsidies
Programme Management and Logistics	<ul style="list-style-type: none"> • A committee should be formed to monitor the feeding programme • Increase food availability • Increase the number of cooks • Increase food supplies

Source: Research 2025

Concerning community education and awareness, many teachers emphasized the need to provide continuous education to the community about the importance of school feeding programmes. They suggested organizing seminars and meetings to sensitize parents and guardians about how feeding supports pupils' learning and retention. These findings align with Dos Santos et al. (2022) who recommended integrating nutrition education and raising awareness on sustainable food practices to improve programme outcomes. The implication is that educating the community can strengthen support for feeding initiatives and create a shared responsibility that fosters commitment

and timely contributions. Without sufficient knowledge and awareness, parents may not appreciate the significance of their participation, which can weaken programme delivery and reduce pupil retention.

The issue of community education and awareness during interviews with head teachers and school committee chairpersons was further supported by their reports that many parents lack sufficient knowledge about the importance of school feeding programmes. Generally, head teachers emphasized the need for continuous sensitization through seminars and meetings to build understanding and

support. This was made evident as one of the head teachers had the following to say:

In our area, we have noticed that many parents do not fully understand how important school feeding is. When we hold meetings and seminars to educate them about the benefits, participation improves, and more parents contribute on time. Continuous education is key to sustaining the programme (Personal interview 27.05.2025).

One of the school committee chairpersons added:

Educating the community about why feeding matters for pupils' learning helps build support. We organize regular gatherings to explain how meals improve concentration and attendance. This has made parents more willing to take part and provide food regularly (Personal interview 12.05.2025)

Responses from the head teachers and school committee chairpersons imply that they view community education as vital for building ownership and timely contributions. The findings suggest that without sufficient awareness, parents may remain disengaged, which affects the consistency of food provision. These findings are in agreement with what was indicated by teachers, where most of them emphasized the role of education in improving parental participation. The agreement between findings from teachers and head teachers implies that enhancing community education can strengthen feeding programmes and promote sustained pupil retention.

Regarding parental engagement and contribution, teachers highlighted the importance of motivating and encouraging parents to contribute food regularly and on time. Meetings with parents were seen as a vital platform to discuss the feeding programme and mobilize community support. This is consistent with Wang and Cheng (2022) who recommended policies to enhance parental engagement as a critical factor in improving educational outcomes. Effective parental involvement ensures consistent food provision, reducing meal interruptions that discourage pupils from attending school. This strategy suggests that empowering parents to actively participate can improve programme reliability and thereby support sustained school attendance and completion.

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that feeding programmes play a meaningful role in enhancing pupil retention in public primary schools in Arusha District. Most teachers reported

that regular meals improved academic performance, reduced absenteeism, and helped pupils to remain in school for longer hours. Feeding was also associated with better concentration during lessons and a more supportive learning environment. Many teachers observed that consistent food availability encouraged daily attendance and reduced dropout rates.

The study also concluded that the provision of school meals in public primary schools is affected by challenges such as inadequate funding, lack of government support, limited community participation, and political interference. These issues lead to unreliable meal schedules, irregular feeding services, weak programme implementation, and disruptions in food provision. Therefore, addressing these challenges is essential to ensure consistent and effective feeding programmes that support pupil retention.

5.2 Recommendations

Based on the conclusion of the study, the researcher recommended the following:

1. The government should support school feeding programmes to ensure consistent and reliable meal provision in public primary schools.
2. Parents should contribute regularly and on time so as to maintain stable feeding schedules and encourage pupils to attend school daily.
3. School management should improve the management of school feeding programmes so as to ensure efficient meal preparation and timely delivery.

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