



Implementation Status of Tanzania's National School Feeding Guideline: A Case Study of Morogoro Municipality

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Authors' contributions

This work was carried out in collaboration among all authors. All authors contributed to the study design, data interpretation, and manuscript preparation. All authors read and approved the final manuscript.

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Abstract

Aims: In the context of Tanzania's National School Feeding and Nutrition Services Guideline (2020), this study aimed to assess its implementation in primary schools, focusing on meal provision and parental contributions as key operational components.

Methodology: A cross-sectional study design combining quantitative and qualitative methods was conducted in primary schools in Morogoro Municipality between June and August 2025. Data were collected from 10 primary schools (six public and four private). Quantitative data were obtained through structured surveys administered to 381 pupils in grades 5–7. Qualitative data were collected through key informant interviews with 10 head teachers and focus group discussions with 25 school food committee members. Quantitative data were analysed using descriptive statistics and independent-samples t-tests, while qualitative data were analysed thematically to explore school-level practices related to meal provision and parental contributions.

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Results: School meals comprised 3.55 food groups, with private schools providing significantly more diverse meals than public schools ($p < .001$). Most public schools relied on simple and repetitive meals, primarily cereals and legumes, reflecting limited and irregular parental contributions and constrained storage facilities. Qualitative findings indicated that head teachers and teachers played a central role in menu planning and programme management, with decisions largely shaped by resource availability rather than full adherence to guideline standards. Parental contributions were the primary source of financing across all schools, though contributions were often insufficient to support diversified meal provision.

Conclusion: The findings suggest a gap between national school feeding policy expectations and school-level implementation capacity. Differences in meal diversity and financing arrangements appeared to reflect variation in household economic capacity and school-level resources. Strengthening school-level technical support for menu planning, together with improved communication and reporting mechanisms, may improve adherence to guideline standards. In addition, clearer operational guidance, standardized reporting mechanisms, and stronger mechanisms for parent involvement may support more consistent and equitable implementation of school feeding programmes.

Keywords: School feeding programmes; implementation of school feeding guidelines; school food committee; dietary diversity; Tanzania.

1. Introduction

School feeding programmes reach millions of children worldwide and contribute to improved health, learning, and overall wellbeing. In 2021, more than 330 million children across 139 countries received meals through school feeding programmes, demonstrating the global scale and importance of this intervention (Global Child Nutrition Foundation, 2022). Schools are recognized as central settings for shaping healthy behaviours because pupils spend a substantial amount of time in the school environment. This period of life also represents a second window of opportunity for physical growth and cognitive development, allowing for catch up following early childhood stunting. Adequate nutrition during school age years is therefore essential for current and future nutritional status and for preventing nutrition-related conditions later in life (WHO, 2006). Ensuring the success of school meal programmes require strong political commitment, a clear policy and regulatory framework, and supportive infrastructure. A national school feeding policy plays a particularly important role by formalizing programme goals and establishing standards for implementation (Fernandes et al., 2019). In Africa, approximately 74% of countries with school feeding programmes have adopted a national policy, law or standard to guide programme delivery (Wineman et al., 2022). These policy efforts reflect growing recognition of the role of school feeding in supporting children's health and learning outcomes.

Tanzania has made several policy commitments toward improving school feeding. In 2020, the Ministry of Education, Science and Technology introduced the National School Feeding and Nutrition Services Guideline (NSFNS-Guideline), which outlines recommended meal composition, hygiene and food safety practices, and stakeholder roles that are relevant to understanding school-level implementation. The National School Feeding and Nutrition Services Guideline (2020) outlines the core requirements for effective implementation of school feeding in Tanzania. The guideline recommends that schools provide balanced meals based on the five major food groups, encouraging dietary diversity by incorporating at least four groups whenever possible. While the National School Feeding and Nutrition Services Guideline adopts a five food group framework, the more recent Tanzania Mainland Food Based Dietary Guidelines classify foods into six groups, which was applied in this study for analytical purposes. It further emphasizes that parents and community members are required to contribute to school feeding through cash payments, food items or other forms of in kind support, which together form the primary source of financing for daily meal provision. The guideline also assigns responsibilities to school administration, including school leadership such as heads of schools, and to school food committees, who are expected to coordinate procurement, maintain records and mobilize parental contributions. These provisions informed the focus and participant selection of the present study, which examined meal composition and parental contributions at school level.

Despite these developments, national implementation of school feeding programme remains limited. According to the 2021 School Malaria and Nutrition Survey (SMNS), only 46.6% of primary schools had active school feeding programmes (Ministry of Health, Community Development, Gender, Elderly and Children, 2022), indicating a substantial gap between policy intentions and school-level practice. These implementation gaps

exist within a broader nutrition landscape in which many children continue to face multiple forms of malnutrition. National data show that acute malnutrition affects 20.2% of school-aged children, anaemia affects 31.9%, and overweight and obesity are emerging concerns (3.8%) (Ministry of Health, Community Development, Gender, Elderly and Children, 2022). Morogoro Region reflects this double burden: stunting among children under five is 39.8%, while overweight and obesity among school-aged children reach 9.2% (Ministry of Health [Tanzania Mainland] et al., 2022; Ministry of Health, Community Development, Gender, Elderly and Children, 2022). Although these indicators are not caused by school feeding itself, they underscore the importance of effective school feeding as one of the platforms that can contribute to improved nutrition and learning outcomes. This context provides a rationale for examining how the national guideline is being implemented in Morogoro Municipality. Roothaert et al. (2021) report that although national policies and guidelines include nutrition aspects, few refer explicitly to school feeding, and none outline practical procedures such as food procurement strategies or how schools should respond when households cannot contribute. These limitations suggest that schools may lack the structured support necessary to implement feeding programmes effectively, underscoring the need to examine how the national guideline is applied at school level.

Given the limited implementation of school feeding programmes nationally and the practical gaps identified in existing policy guidance, it is important to understand how the National School Feeding and Nutrition Services Guideline is applied in day-to-day school practice. In this study, particular attention was given to meal provision and parental contributions because these are central to the routine operation of school feeding at school level. Examining these two aspects helps to clarify how selected guideline expectations are reflected in practice and where implementation challenges remain.

2. Material and Methods

2.1 Study Design and Study Area

A cross-sectional study was conducted using surveys and interviews to collect data at a single point in time. This design provides a snapshot of the study population and is commonly applied for descriptive and analytical purposes in public health research (Levin, 2006).

The study was conducted in Morogoro Municipality, located in eastern Tanzania. Data were collected from ten primary schools situated in different areas within the municipality, namely Kilakala, Mkundi, Sultan Area, Kingo, Mazimbu, Chamwino, Mji Mkuu, Kihonda, Kihonda Magorofani, and Lukobe.

2.2 Study Population, Inclusion and Exclusion Criteria

The study population included head teachers who are responsible for school feeding programme, food committee members and pupils in grades 5 to 7 who participated in the school feeding programme. Inclusion criteria for head teachers required at least one year of experience in school feeding activities and active involvement at the school during the study period. School food committee members were required to be currently serving in their roles at the selected schools. Pupils were eligible if they were enrolled in grades 5 to 7 and actively participated in the school feeding programme. Exclusion criteria included teachers, or committee members who were not active in their roles during the study period, individuals who did not consent to participate, and pupils who were not in grades 5 to 7 or did not participate in the school feeding programme.

2.3 Sampling and Sample Size Determination

Stratified random sampling was used to ensure proportional representation of school types. In Morogoro Municipality, all 119 primary schools (72 public and 47 private) were actively implementing the school feeding programme, reflecting an approximate 3:2 distribution between public and private schools. Based on this proportion, ten schools were selected through simple random sampling, resulting in six public and four private schools in the study sample.

Although school selection was random, the sampled schools displayed natural variation in feeding arrangements; notably, one public school implemented a government subsidized model (School I), in which meals were financed through government grants without parental financial or in-kind contributions. Food

procurement in this school was conducted through the National Electronic Procurement System (NEST) using an open tender process.

While one private school used an external catering provider funded through monthly parental contributions (School H). These contextual differences represented natural variation within the sample and were considered during interpretation of the findings.

Ten head teachers (one per school) were purposively selected for KIIs as the key school representatives. Likewise, 25 school food committee members (2–5 per school) who manage daily feeding operations were included in the FGDs.

To determine the sample size for pupils, Cochran's formula (1977) was applied using a 95% confidence level, a 5% margin of error, and a prevalence of feeding programme implementation ($p = 0.466$) derived from the 2021 School Malaria and Nutrition Survey. The resulting sample size was 381 pupils from 10 primary schools. The survey targeted pupils in grades 5–7 who were participating in school feeding in the 10 selected schools. Although a total sample of 381 pupils was planned, the number obtained from each school varied according to the availability of eligible pupils at the time of data collection. In each school, pupils who were receiving school meals were identified from the list of eligible pupils, and participants were then randomly selected with the assistance of head teachers.

2.4 Data Collection Tools (Survey, KII, and FGD)

Three research instruments were developed for the study: structured questionnaires for the survey, key informant interview (KII) guides, and focus group discussion (FGD) guides.

The questionnaire was administered to pupils and collected information on meal types, meal frequency, food groups included in school meals, and satisfaction with the school feeding programme. Key Informant Interviews were conducted with head teachers, while Focus Group Discussions were conducted with school food committee members to explore meal provision practices and parental contribution mechanisms.

Five enumerators were trained on the study objectives and questionnaire content. They administered the survey through face-to-face interviews with pupils, head teachers, school food committee members during school visits. All instruments were developed using the Tanzania National School Feeding and Nutrition Services Guideline and by previous studies (Graham et al., 2015).

2.5 Pre-Testing Procedure of the Tools

Before the main survey, a pre-test was conducted in public and private primary schools located in wards with characteristics similar to the urban study setting. The pre-test assessed clarity, language, logical flow and completion time, and was conducted in Swahili to ensure comprehension among pupils. Because the instrument comprised single item categorical or factual variables, internal consistency reliability was not applicable.

A pilot test with 50 pupils (23 public, 27 private) was conducted to check clarity and suitability of the questionnaire. Pre-tests do not require proportional sampling, and literature recommends about 30 participants as a reasonable minimum number to detect common item problems. The use of 50 participants therefore exceeded recommended thresholds and allowed the tool to be tested in both school contexts (Perneger et al., 2015).

2.6 Data Analysis

Quantitative data were analyzed using the Statistical Product and Service Solution (SPSS) version 25.0. Descriptive statistics such as means and standard deviations for continuous variables and frequencies with percentages for categorical variables were used to summarize socio-demographic characteristics of pupils. Cross-tabulations were used to describe variations in meal types across school categories. To compare the mean number of food groups reported in school meals between public and private schools, an independent-samples t-test was applied. Prior to analysis, the assumptions of independence of observations, approximate normality of the dietary diversity score within each group, and homogeneity of variances were assessed using the study

design, inspection of score distribution, and Levene’s test, respectively. The dietary diversity score was treated as a continuous summary variable ranging from 0 to 6 food groups, using the six food-group classification from the Tanzania Mainland Food-Based Dietary Guidelines (Ministry of Health of the United Republic of Tanzania, 2023), rather than the five-group framework outlined in the school feeding guideline.

Qualitative data from KIIs and FGDs were audio recorded, transcribed verbatim, and manually analyzed using a thematic approach, which supported systematic coding and categorization of transcripts based on the study objectives. This analysis identified themes related to school menu composition, parental and community contribution.

3. Results

3.1 Characteristics of the Study Participants

3.1.1 Socio-Demographic Characteristics of Pupils Survey Participants

A total of 381 pupils participated in the survey, of whom 244 (64.0%) were from public schools and 137 (36.0%) from private schools. Nearly half of the respondents were in Grade 7 (49.3%), followed by Grade 6 (31.2%) and Grade 5 (19.4%). The mean age of pupils was 11.9 ± 1.22 years, ranging from 9 to 16 years. Girls constituted 61.2% of the sample (Table 1).

Table 1. Socio-Demographic characteristics of respondents

Variables	Frequency	Percent (%)
School Type		
Public	244	64
Private	137	36
Grade Level		
Grade 5	74	19.4
Grade 6	119	31.2
Grade 7	188	49.3
Gender		
Male	148	38.8
Female	233	61.2
Age Groups		
9-10	49	12.9
11-12	214	56.2
13-16	118	31.0
Total	381	100.0

3.1.2 Characteristics of Qualitative Study Participants

Key informant interviews (KIIs) were conducted with 10 head teachers and 10 cooks. Eight of the ten head teachers reported a duration of involvement in managing the school feeding programme ranging from 3 to 17 years, while two did not provide this information. Seven respondents were male and three were female. With the exception of one substitute cook, all cooks had between 1 and 8 years of experience in school feeding activities, and the majority were male.

Focus group discussions (FGDs) were conducted in nine schools, resulting in a total of nine focus groups. Each focus group comprised between two and five members of the school food committee, depending on committee size at the school level. In total, 25 participants took part in the FGDs, of whom seven were male and eighteen were female. In one school, the committee included pupils, whereas committees in the remaining schools were composed exclusively of teachers. The duration of involvement in school feeding activities among committee members ranged from six months to nine years.

3.2 Type of Meals, Dietary Diversity and Selected Meal Characteristics in School Feeding Programs

Most pupils reported consuming one to two meals per day at school, with meal frequency differing significantly by school type ($P < .001$). The majority of public school pupils consumed one meal per day, whereas most private school pupils consumed two meals per day.

Across schools, cereals and legumes were commonly included in school meals. Differences were observed in the provision of animal-source foods, which were provided far more frequently in private schools than in public schools (75.9% vs. 9.4%, $P < .001$). Fruits and sugar or honey were also more commonly included in meals offered by private schools, while vegetable provision did not differ significantly between school types ($P = .529$). (Table 2).

Based on pupils' reports of foods included in school meals, the mean dietary diversity score of school meals was 3.55 food groups out of a possible six. This score represents the average number of food groups reported per pupil, rather than a school-level average. An independent-samples t-test showed that private schools had a significantly higher mean dietary diversity score than public schools ($M = 4.88$, $SD = 1.11$ vs. $M = 2.81$, $SD = 0.47$; $p < .001$).

Table 2. Types of meals and dietary diversity offered at schools

Variables	Total n (%)	Public n (%)	Private n (%)	p-value
Number of meals eaten/day				< .001
1 meal	218 (57.2)	203 (83.2)	15 (10.9)	
2 meals	151(39.6)	41 (16.8)	110 (80.3)	
≥3 meals	12 (3.1)	0 (0.0)	12 (100.0)	
Food groups included				
Cereal/staple	381 (100.0.0)	244 (100.0.0)	137 (100.0)	—
Pulses/legumes	379 (99.5)	244 (100.0)	135 (98.5)	0.058
Animal-source foods	127 (33.3)	23 (9.4)	104 (75.9)	< .001
Vegetables	265 (69.6)	167 (68.4)	98 (71.5)	0.529
Fruits	88 (23.1)	7 (2.9)	81 (59.1)	< .001
Sugar/honey	114 (29.9)	0 (0.0)	114 (83.2)	< .001
Fruit consumption	98 (25.8)	2 (0.8)	96 (70.1)	< .001
Vegetable consumption	326 (86.0)	192 (79.3)	134 (97.8)	< .001

Pupils' satisfaction with school meals varied by school type ($P < .001$). Overall, 52% of pupils reported being satisfied with school meals, dissatisfaction was mainly related to insufficient main dishes, fruits, or vegetables. Pupils also reported positive aspects of the school feeding programme, including timely meal service, adequate portions, and meal taste (Table 3).

Table 3. Pupil meal satisfaction and preferences by school type

Variables	Total n (%)	Public n (%)	Private n (%)	p-value
Overall satisfaction with school meals				< .001
Satisfied	198 (52.0)	111 (45.5)	87 (63.5)	
Not satisfied	60 (15.7)	50 (20.5)	10 (7.3)	
Sometimes satisfied	123 (32.3)	83 (34.0)	40 (29.2)	
Reasons for not being satisfied				< .001
Main dish insufficient	120 (31.5)	41 (16.8)	79 (57.7)	
Side dish insufficient	18 (4.7)	13 (5.3)	5 (3.6)	
Fruits insufficient	3 (0.8)	0 (0.0)	3 (2.2)	
Vegetables insufficient	27 (7.1)	23 (9.4)	4 (2.9)	
Breakfast insufficient	8 (2.1)	8 (3.3)	0 (0.0)	
Not answered	7 (1.8)	3 (1.2)	4 (2.9)	
Satisfied (not applicable)	198 (52.0)	156 (63.9)	42 (30.7)	
What pupils like about the SFP				< .001
Meals served at the right time	171 (44.9)	120 (49.2)	51 (37.2)	
Enough food is provided	107 (28.1)	57 (23.4)	50 (36.5)	
Meals are very delicious	78 (20.5)	50 (20.5)	28 (20.4)	
Other (breakfast/vegetable)	7 (1.8)	1 (0.4)	6 (4.4)	
Not answered	18 (4.7)	16 (6.6)	2 (1.5)	

The qualitative findings helped to explain and expand the quantitative results presented in Tables 2 and 3. While the survey showed lower dietary diversity, less frequent meal provision, and lower pupil satisfaction in public schools than in private schools, findings from FGDs and KIIs pointed to several contextual factors that may help explain these differences, including financing arrangements, food procurement practices, storage capacity, and the ability of schools to provide meals in adequate variety and quantity.

Findings from the focus group discussions (FGDs) highlighted clear differences in meal provision practices between public and private schools. Across the participating schools, the overall pattern of meal provision was similar; however, the quality, diversity, and consistency of meals varied notably by school type. Public schools commonly relied on simple and repetitive meals, typically rice and beans, due to minimal and irregular parental contributions collected on a daily or weekly basis. Limited food storage facilities, such as dry stores or refrigerators, further constrained their ability to diversify meals or purchase food in bulk.

In contrast, private schools and one government-supported school operated more structured feeding systems. FGDs revealed that these schools followed weekly or monthly procurement schedules, maintained storage facilities, and, in some cases, contracted external suppliers. As a result, they were able to provide a wider range of foods, including vegetables, fruits, and occasionally meat. Breakfast provision also differed by school type, with public schools mainly providing porridge to lower-grade pupils, while private schools consistently offered breakfast to all pupils.

Insights from key informant interviews (KIIs) with head teachers further explained how decisions regarding school meals were made. Four head teachers reported being directly involved in menu planning, either by preparing menus themselves or coordinating with teachers serving on the school food committee. However, menu decisions were largely influenced by the availability of funds rather than adherence to the nutritional recommendations outlined in the national guideline.

Although five head teachers did not explicitly identify specific food groups included in school meals, many expressed a general awareness of the importance of providing balanced meals, including vegetables, milk, or meat when resources allowed. Several head teachers emphasized that the primary objective of school meals was to prevent hunger rather than meet specific nutritional requirements, largely due to financial constraints and limited technical support for nutrition-sensitive menu planning at school level.

These qualitative accounts also provide useful context for understanding pupils' reported satisfaction patterns, particularly in relation to meal adequacy and variety. In schools where meals were described as repetitive and resources were limited, pupils more often reported dissatisfaction related to insufficient main dishes, vegetables, fruits, or breakfast. In contrast, the more structured meal systems described in private schools may help to explain the higher levels of satisfaction reported by pupils.

“We cook rice and beans every day; we cannot change because of money.”
(Head Teacher, School E, KII)

While private schools were able to operate through weekly purchasing due to having appropriate storage facilities and it was described by teacher from school D

“Food is regularly supplied by a contracted supplier, and we follow a weekly menu.”
(School Food Committee Member, School D, FGD)

3.3 Contribution of Parents/ Guardians

3.3.1 Qualitative Findings from KIIs and FGD

These findings also provide additional context for the quantitative differences observed between school types, suggesting that variation in the predictability and adequacy of parental contributions may have shaped the types, frequency, and perceived adequacy of meals provided at school.

Across all participating schools, parents were the primary source of financial support for sustaining daily meal provision. Although the contribution mechanism varied between school types, the overall pattern remained consistent: schools depended on parental payments to run the feeding programme.

As parents were not members of the school food committees in the participating schools, information on parental contributions reflects the perspectives of head teachers, teachers, and committee members rather than direct parental voices.

In public schools, parents typically contributed small amounts of cash on a daily or weekly basis ranging from 500 to 700 Tanzanian shillings depending on each family's capability. These payments were frequently irregular, reflecting broader household economic challenges. Most head teachers acknowledged that the contributions were not enough to implement school feeding programme, yet they were required to "make it work" within the limits of what parents could realistically afford. In private schools, feeding costs were integrated into school fees, except for one school that used catering, providing a more predictable financial base for meal procurement.

Teachers serving on school food committees carried out a wide range of operational and supervisory duties essential for keeping the programme functional. They monitored contributions, and in several public schools, teachers reported personally purchasing food items, while in other settings, cooks were given money for daily food purchases.

Information regarding contributions was shared with parents during school meetings held several times per year. Among private schools, except for one, the school feeding costs were included in the school fees. Thus, parents simply expected that meals were provided daily and only expressed concern when a child returned home without having eaten. Other private schools, however, held parent meetings and used school WhatsApp groups to communicate.

This challenge was captured by one head teacher, who remarked: "It is not enough, but given parents' financial situation, it must be enough."
(Head Teacher, School G, KII)

4. Discussion

This study examined selected aspects of implementation of the National School Feeding and Nutrition Services Guideline (2020), focusing on meal provision and parental contributions at school level. The findings showed differences across schools in meal diversity, financing arrangements, and operational capacity. The following discussion considers these findings in relation to school-level implementation of the guideline.

4.1 Role of School-Level Actors in Translating Policy into Practice

The present study found that head teachers played a central role in menu planning and daily operational oversight. In addition, teachers serving on school food committees carried out key operational tasks, including collecting parental contributions and purchasing food items. This underscores the importance of school-level personnel in sustaining the functionality of school feeding programmes. Prior research similarly highlights that teacher involvement is essential for effective school feeding programme implementation (Iddrisu, 2018).

4.2 Meal Composition, Dietary Diversity, and Implementation Capacity

Differences in dietary diversity and meal frequency across schools appeared to be closely linked to financing structures and food procurement arrangements. Schools with more stable and predictable funding mechanisms were better positioned to provide a wider range of food groups and multiple meals per day. In contrast, schools operating under constrained financial and infrastructural conditions tended to rely on simpler and more repetitive meals. Consistent with the present findings, a study conducted in the Kilimanjaro Region reported similar challenges, including irregular parental contributions that disrupted meal provision and infrastructural constraints that limited menu planning and procurement capacity (Mmari et al., 2025). Similar findings have been reported in other northern Tanzanian settings, where financial constraints and inadequate infrastructure were shown to limit dietary diversity and the continuity of school feeding programmes (Roothaert et al., 2021).

Head teachers were involved in menu planning either through direct preparation of menus or by coordinating with teachers serving on the school food committee, and menu choices were guided more by available resources than by the standards outlined in the national guideline. While the guideline emphasizes providing at least four

food groups and regular menu rotation to avoid monotonous diets, menu planning in the study schools was largely shaped by financial and logistical feasibility rather than adherence to prescribed standards.

A systematic synthesis of evidence from multiple school nutrition studies has similarly highlighted that insufficient staff, limited time for nutrition-related activities, and lack of training among teachers and food handlers constrain schools' capacity to plan menus and monitor food provision, particularly in settings with limited financial resources (Meshkovska et al., 2023).

Similar implementation challenges have been reported in other low-income settings, where school feeding implementation has been characterized by competing administrative demands, limited familiarity with school nutrition policy documents, and constrained financial resources (Wakhungu & Opati, 2020). In contrast to these settings, the present study suggests that head teachers and school food committees were generally able to share supervisory responsibilities and maintain routine oversight of school feeding activities. This difference may be partly explained by contextual variations across study settings, including differences in school-level management structures.

4.3 Parental Contributions, Communication and Financial Sustainability

Across all schools, parents were the main source of financial support for school feeding programmes. Public schools relied largely on daily or weekly cash contributions, which were often irregular. Head teachers acknowledged that these amounts were insufficient to fully meet programme needs but continued operating within what families could realistically afford. This form of financial contribution aligns with one of the contribution modalities permitted under the National School Feeding and Nutrition Services Guideline, although other forms of parental support were rarely observed in practice. This pattern may reflect structural limitations in how parental involvement is organized at school level, rather than limited parental commitment, as suggested by previous studies emphasizing the importance of structured school-parent collaboration for effective programme implementation (Ndayishimye & de Dieu Dushimimana, 2024).

The use of school meetings and WhatsApp groups to disseminate information corresponds with the guideline's directive that schools collaborate with parents and routinely report on contributions and expenditures. These communication practices may support accountability and continuity in school feeding implementation. Similar evidence indicates that consistent communication with parents enhances programme participation and operational sustainability (Bwire & Bago, 2025).

5. Conclusion

This study found persistent disparities between public and private primary schools in meal diversity, meal frequency, and financial stability in the implementation of the National School Feeding and Nutrition Services Guideline in Morogoro Municipality. These differences appeared to reflect variation in household economic capacity and school-level resources.

Overall, the findings suggest an implementation gap between national policy expectations and school-level realities. Addressing this gap may require stronger technical support for schools, clearer operational guidance, and implementation approaches that are responsive to household economic constraints.

6. Recommendations

I. Strengthening School-Level Capacity through Council and Ward Support

In line with the roles assigned at council and ward levels in the National School Feeding and Nutrition Services Guideline, strengthened capacity-building support is recommended to enable effective implementation at the school level. Councils, in collaboration with ward authorities, should enhance sensitization activities, provide technical guidance, and facilitate capacity-building training for head teachers and school food committee members. Such support may include practical guidance on menu planning and food group diversity to assist schools in meeting minimum dietary standards within existing resource constraints.

II. Enhancing Parental Engagement through Ward and Village/Mtaa Structures

Consistent with the guideline's emphasis on community participation, ward authorities and village/mtaa leaders should strengthen mechanisms for mobilizing parents and communities to support school feeding programmes. This includes promoting parental awareness of contribution modalities, facilitating regular communication between schools and households, and supporting community engagement in food production, in-kind contributions, and other locally appropriate forms of support.

III. Improving Transparency, Accountability, and Record Keeping at Village/Mtaa and School-Levels

To enhance accountability in line with the guideline, village/mtaa leaders, in collaboration with school management, should ensure that records of food items, equipment, and other contributions from parents and communities are consistently maintained.

7. Limitations

This study has some limitations related to stakeholder representation. Although parents play a central role in sustaining school feeding programmes, no parents were included as members of school food committees in the sampled schools. As a result, the study was unable to capture parental perspectives on household financial capacity, contribution-related challenges, or views on school meal provision, which limited the depth of interpretation regarding how household-level realities influence programme implementation.

In addition, while the National School Feeding and Nutrition Services Guideline assigns implementation and oversight responsibilities at multiple administrative levels, including ward, municipal, and regional levels, the study deliberately focused on school-level implementation. Accordingly, officials from these administrative levels were not included in the study based on the selection criteria. As a result, the analysis was restricted to school-level perspectives, and insights into higher-level governance structures, monitoring mechanisms, and guideline enforcement could not be fully examined.

Ethical Approval and Consent

Ethical approval for this study was obtained from the National Institute for Medical Research (NIMR) (Ref: NIMR/HQ/R.8a/Vol.IX/4977). Research permits were granted by the Tanzania Commission for Science and Technology (COSTECH) (CST00001217-2025-2025-00562). Additional approval was provided by Sokoine University of Agriculture (SUA), and permission to conduct the study in schools was obtained from the Morogoro Municipal Council. Written informed consent was obtained from all participants, and parental consent with pupil assent was secured for minors.

Disclaimer (Artificial Intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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Competing Interests

Authors have declared that no competing interests exist.

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