

Stakeholder Perceptions of School Feeding Programme Partnerships and Implementation Challenges in Early Childhood Education and Primary schools: A case of Two Selected schools in Lusaka Province

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Abstract: School feeding programmes are widely recognised as essential interventions for improving child nutrition, school attendance, and learning outcomes, particularly in low- and middle-income countries. However, their sustainability depends largely on effective school–community partnerships and the ability to address implementation challenges. This study examined stakeholders’ perceptions of school–community partnerships and explored the challenges affecting the implementation of Early Childhood Education (ECE) feeding programmes in two selected schools in Lusaka Province.

A convergent mixed-methods design was employed, combining quantitative data from structured questionnaires with qualitative data from interviews and focus group discussions involving 22 teachers and 116 parents, as well as selected pupils. Quantitative data were analysed using descriptive statistics, cross-tabulations, Pearson correlation, and multiple regression analysis, while qualitative data were analysed thematically.

The findings revealed significant differences between the two schools. In Molenje, a high proportion of parents (92%) expressed willingness to collaborate with the school in implementing income-generating activities (IGAs), compared to only 45% in Bauleni. Similarly, teacher willingness was higher in Molenje (80%) than in Bauleni (30%). Regression analysis indicated that both parent willingness ($\beta = 0.33, p < 0.001$) and teacher willingness ($\beta = 0.29, p < 0.001$) significantly predicted IGA effectiveness, with the model explaining 62% of the variance ($R^2 = 0.62$). Pearson correlation results showed a strong positive relationship between parent willingness and IGA effectiveness ($r = 0.75, p < 0.01$), followed by teacher willingness ($r = 0.72, p < 0.01$) and external donor support ($r = 0.60, p < 0.01$).

The study further identified key challenges affecting programme implementation. A majority of teachers (19 out of 22) and parents (92 out of 116) agreed that inadequate infrastructure such as lack of kitchens, storage facilities, and water supply was a major constraint. Financial constraints were also prominent, with 18 out of 22 teachers and 90 out of 116 parents indicating that limited funding affects programme sustainability. In addition, 17 out of 22 teachers and 86 out of 116 parents reported limited community participation, while logistical challenges such as inconsistent food supply were acknowledged by most respondents.

Qualitative findings reinforced these results, revealing strong collaboration and shared ownership in Molenje, contrasted with limited parental involvement and reliance on external donors in Bauleni. Participants also highlighted challenges related to infrastructure, funding, stakeholder engagement, and supply chain inefficiencies.

The study concludes that strong school–community partnerships significantly enhance the effectiveness and sustainability of school feeding programmes, while inadequate infrastructure, financial constraints, and weak stakeholder collaboration remain major barriers. It recommends strengthening community engagement, investing in infrastructure, developing sustainable financing mechanisms, and improving programme management systems to ensure long-term success.

Keywords: Early Childhood Education (ECE), School Feeding Programmes, World Food Programme (WFP) and School–Community Partnerships.

I. Introduction

School feeding programmes have become an integral component of educational and social protection strategies aimed at improving child welfare and educational outcomes. Globally, these programmes are implemented to address hunger, enhance school participation, and support cognitive development among young learners (Bundy et al., 2018; Aurino et al., 2019). In sub-Saharan Africa, including Zambia, school feeding initiatives play a particularly important role in mitigating food insecurity and promoting equitable access to education.

Despite their importance, the sustainability and effectiveness of school feeding programmes remain a major concern. Increasingly, attention has shifted toward the role of school–community partnerships in supporting these programmes. Such partnerships facilitate local ownership, resource mobilisation, and shared responsibility, which are essential for long-term success (Epstein, 2011; Colenso, 2011). At the same time, schools face numerous challenges in implementing feeding programmes, ranging from infrastructural deficits to financial and logistical constraints. This study focused on understanding how stakeholders perceive school–community partnerships and how these perceptions influence the implementation of feeding programmes. It also explores the key challenges faced by schools in delivering these programmes effectively, with a particular focus on Early Childhood Education.

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1.1 Background to the study

School feeding programmes have evolved from emergency food aid interventions into structured, policy-driven initiatives integrated within national education systems. Evidence suggests that these programmes contribute to improved enrolment, attendance, and academic performance, particularly among vulnerable children (Drake et al., 2016; Gelli et al., 2019). In Zambia, school feeding programmes are implemented with support from government and development partners such as the World Food Programme (WFP), targeting schools in food-insecure communities.

A key feature of sustainable school feeding programmes is the integration of income-generating activities (IGAs), such as school gardens and small-scale agricultural projects. These initiatives aim to supplement external support and enhance programme resilience. However, the success of IGAs largely depends on active participation from parents, teachers, and the wider community.

Theoretical perspectives such as social capital theory (Putnam, 2000) and participatory development theory emphasise the importance of collaboration, trust, and community engagement in achieving sustainable development outcomes. In the context of school feeding programmes, strong school–community partnerships can enhance resource mobilisation, accountability, and programme ownership. Nevertheless, many schools continue to face significant challenges, including inadequate infrastructure, inconsistent funding, and weak stakeholder coordination (FAO, 2019; WFP, 2020). These challenges are often more pronounced in early childhood settings, where resources are limited and programme demands are high. This study therefore seeks to examine these issues within the local context of Lusaka Province.

1.2 Statement of the problem

Despite the recognised benefits of school feeding programmes, their implementation in many schools remains inconsistent and unsustainable. In Zambia, while efforts have been made to expand feeding programmes, challenges related to funding, infrastructure, and stakeholder engagement continue to hinder their effectiveness.

One critical gap is the limited understanding of how stakeholders perceive school–community partnerships and how these perceptions influence programme implementation. In some schools, strong collaboration between parents and teachers has led to successful income-generating activities that support feeding programmes. In others, weak community involvement has resulted in overdependence on external donors, raising concerns about long-term

sustainability. Additionally, schools face multiple operational challenges, including inadequate facilities for food preparation and storage, irregular food supply, and weak monitoring systems. These challenges not only affect programme continuity but also compromise the quality and safety of meals provided to learners.

Although previous studies have examined school feeding programmes in general, there is limited empirical evidence focusing specifically on stakeholder perceptions and implementation challenges within Early Childhood Education settings in Lusaka Province. This gap limits the ability of policymakers and practitioners to design context-specific interventions that enhance programme effectiveness. This study therefore sought to address this gap by examining stakeholders' perceptions of school–community partnerships and identifying the key challenges affecting the implementation of ECE feeding programmes.

1.3 Research objectives

- RO1: To assess perceptions of stakeholders on school-community partnership in the implementation of school feeding programmes
- RO2: To explore the challenges faced in implementing Early Childhood Education feeding programmes

1.4 Research questions

- RQ1: What are Stakeholders' Perceptions on school- Community Partnership in implementing school feeding programme Income-Generating Activities (IGAs)
- RQ2: What challenges do schools face in implementing school feeding programmes?

II. Literature Review

This section reviews the literature relevant to the study objectives, with particular focus on stakeholders' perceptions of school-community partnership in the implementation of school feeding programmes and the challenges associated with implementing Early Childhood Education feeding programmes. The reviewed literature suggests that the effectiveness and sustainability of school feeding interventions are shaped not only by the availability of food and financial resources, but also by the strength of collaboration among stakeholders and the extent to which schools are able to address operational and institutional constraints.

Stakeholders' Perceptions of School-Community Partnership in the Implementation of School Feeding Programmes

The literature consistently identifies school-community partnership as a central determinant of the successful implementation and sustainability of school feeding programmes. Community participation is widely regarded as an important mechanism for enhancing local ownership, accountability, and support for programme continuity. FAO (2021) argues that school feeding initiatives are more sustainable when parents, local leaders, farmers, and other community stakeholders are actively involved in their implementation. Such involvement may take the form of labour provision, food contributions, oversight, or support for complementary initiatives such as income-generating activities.

Similarly, Taylor et al. (2018) observe that community participation improves the cultural relevance, cost-effectiveness, and responsiveness of school feeding interventions. When communities perceive themselves as partners rather than passive beneficiaries, they are more likely to contribute resources and maintain commitment to programme goals. This form of participation strengthens collective responsibility and reinforces the institutional base upon which school feeding programmes depend.

In the Zambian context, Mulenga and Kaluba (2021) note that the level and nature of school-community partnership varies across communities. In some settings, Parent-Teacher Associations and community members play an active role in supporting feeding activities through the provision of labour, ingredients, and local coordination. These forms of engagement reflect positive stakeholder perceptions regarding shared responsibility in the implementation of school feeding programmes. However, the literature also indicates that in peri-urban and economically constrained communities, participation may be limited by poverty, weak organisational structures, and lack of clearly defined stakeholder roles. Under such conditions, community involvement may be minimal or symbolic, thereby weakening its contribution to programme sustainability.

Overall, the literature suggests that stakeholders generally view school-community partnership as an essential component of school feeding implementation, particularly where such collaboration supports local resource mobilisation and school feeding income-generating activities. However, the effectiveness of these partnerships depends on the degree of stakeholder empowerment, institutional support, and clarity in roles and responsibilities (FAO, 2021; Taylor et al., 2018; Mulenga & Kaluba, 2021).

Challenges Faced in Implementing Early Childhood Education Feeding Programmes

The literature also reveals that the implementation of school feeding programmes, particularly in Early Childhood Education settings, is constrained by multiple challenges. One of the most significant barriers identified

is inadequate and irregular funding. According to WFP (2023), many school feeding programmes in low-income settings face difficulties in sustaining meal provision due to rising food prices, weak budgetary support, and dependence on unreliable funding sources. Drake et al. (2017) further contend that the long-term viability of such programmes depends on stable domestic financing and clearly defined budgetary commitments.

In Zambia, infrastructural inadequacies constitute another major implementation challenge. MoGE (2020) and Phiri and Zulu (2020) report that many schools lack the essential facilities required for effective feeding programme delivery, including kitchens, storage rooms, clean water sources, and appropriate food preparation equipment. These limitations compromise the regularity, safety, and nutritional quality of meals provided to learners. In Early Childhood Education settings, where younger children require closer supervision and more careful nutritional support, such infrastructural deficits can have particularly serious implications.

The literature also points to weak coordination among relevant actors as a persistent challenge. Effective implementation of feeding programmes requires collaboration among schools, communities, government institutions, and food suppliers. However, where roles are fragmented or coordination mechanisms are weak, implementation becomes inconsistent and accountability is undermined (WFP, 2023; MoGE, 2020). This may lead to delays in food procurement, interruptions in meal provision, and ineffective monitoring of programme performance.

In addition, limited staff capacity and insufficient training are identified as important constraints. Schools often rely on teachers or community volunteers to support implementation, yet these individuals may not possess the necessary skills in food management, record keeping, hygiene, or programme coordination. As Phiri and Zulu (2020) observe, this places additional pressure on already constrained school systems and may reduce the efficiency and reliability of programme delivery. Economic pressures such as inflation and fluctuations in food prices further compound these challenges by reducing schools' ability to procure sufficient food on a consistent basis (WFP, 2023).

Taken together, the literature demonstrates that the implementation of Early Childhood Education feeding programmes is affected by financial, infrastructural, administrative, and institutional barriers. These challenges not only reduce the quality and consistency of feeding services, but also threaten their long-term sustainability. Addressing these constraints requires stronger policy commitment, improved infrastructure, better stakeholder coordination, and more predictable financing mechanisms (Drake et al., 2017; WFP, 2023; MoGE, 2020; Phiri & Zulu, 2020).

Summary

In summary, the literature underscores the importance of school-community partnership in enhancing the implementation and sustainability of school feeding programmes. Positive stakeholder perceptions, active community involvement, and shared responsibility contribute significantly to programme ownership and continuity. At the same time, the literature highlights that the implementation of Early Childhood Education feeding programmes is often undermined by inadequate funding, weak infrastructure, limited coordination, and insufficient implementation capacity. These findings suggest that for school feeding programmes to be effective and sustainable, both collaborative stakeholder engagement and systematic efforts to address implementation challenges are essential.

Theoretical framework

The theoretical framework is based on two complementary theories: Maslow's Hierarchy of Needs Theory and the Diffusion of Innovations Theory. Together, these theories explain both why school feeding matters for learners and how feeding programmes can be adopted and sustained within schools and communities.

First, the report uses Maslow's Hierarchy of Needs Theory to argue that children's physiological needs, especially food, must be met before higher-level outcomes such as concentration, participation, and learning can be achieved. In this sense, school feeding is not treated simply as a welfare intervention, but as a foundational educational support mechanism. The report therefore links feeding programmes to improved learner motivation, classroom engagement, and academic readiness, because hungry or malnourished children are less able to benefit from instruction (Maslow, 1943; Bundy et al., 2018).

Second, the report applies the Diffusion of Innovations Theory to explain the institutional and social sustainability of school feeding programmes. This theory suggests that programmes are more likely to be adopted, accepted, and sustained when stakeholders perceive them as beneficial, compatible with local practices, practical to implement, and capable of producing visible results. In the school feeding context, this means that long-term success depends on factors such as stakeholder engagement, community participation, and institutional support. The report uses this theory to explain why some schools are better able to maintain feeding programmes than others (Rogers, 2003; Greenhalgh et al., 2004).

In summary, the theoretical framework combines an individual-level perspective and a system-level perspective. Maslow's theory explains the importance of meeting learners' basic nutritional needs as a condition for learning, while Diffusion of Innovations explains how school feeding programmes spread, take root, and endure within a social and institutional environment. The report therefore uses these theories together to examine both the educational value and the sustainability conditions of school feeding programmes.

III. Methods

This study adopted a pragmatic mixed-methods approach using a convergent parallel design, which allowed quantitative and qualitative data to be collected concurrently, analysed separately, and integrated during interpretation. This design was considered appropriate because the study sought both measurable patterns and deeper contextual explanations regarding stakeholder perceptions of school–community partnerships and the challenges affecting the implementation of Early Childhood Education feeding programmes. Mixed-methods designs are particularly valuable where a single method is insufficient to explain complex social and institutional problems (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Johnson & Onwuegbuzie, 2004; Bryman, 2016). The pragmatic orientation was also suitable because it emphasises practical inquiry and context-sensitive solutions to real-world problems (Morgan, 2014).

The study was conducted in two selected schools in Lusaka Province, namely Bauleni Special Needs School and Mulenje Primary School, in order to capture perspectives from both inclusive and peri-urban school settings. The broader study drew participants from key stakeholder groups involved in the school feeding programme, but this article specifically focuses on parents and teachers, whose views were central to the analysis of community partnership and implementation barriers. For the quantitative component, respondents were selected using a stratified approach to ensure representation across schools and stakeholder categories, while the qualitative component employed purposive sampling to identify participants with direct experience of the feeding programme and school-based income-generating activities (Etikan et al., 2016).

Data were collected concurrently through structured questionnaires, semi-structured interviews, focus group discussions, and observation checklists. The questionnaire used 5-point Likert-scale items to measure perceptions of stakeholder collaboration, parental and teacher willingness, donor support, and implementation challenges. Interviews and focus groups were used to obtain richer explanations of the quantitative patterns, while observation supported contextual understanding of programme delivery and feeding conditions. The use of multiple tools strengthened triangulation and enabled the study to capture both statistical trends and lived experiences of participants (Braun & Clarke, 2013; Creswell & Creswell, 2018).

Quantitative data were analysed using SPSS, with descriptive statistics, cross-tabulations, Pearson correlation, and multiple regression analysis used to examine patterns and relationships among variables. In particular, the regression model assessed the contribution of parent willingness, teacher willingness, and external donor support to the effectiveness of income-generating activities supporting school feeding. The regression model;

$$IGAE = \beta_0 + \beta_1TW + \beta_2PW + \beta_3EDS + \varepsilon$$

Where:

- $IGAE$ = Income-Generating Activity Effectiveness
- TW = Teacher Willingness
- PW = Parent Willingness
- EDS = External Donor Support
- β_0 = Constant
- $\beta_1, \beta_2, \beta_3$ = Regression coefficients
- ε = Error term

Qualitative data were analysed thematically to identify recurring themes related to partnership dynamics, inadequate infrastructure, financial constraints, weak stakeholder collaboration, and logistical difficulties (Braun & Clarke, 2013). To strengthen methodological rigour, validity was enhanced through alignment of instruments to the study objectives, pilot testing, and triangulation of findings, while reliability was assessed using Cronbach's alpha, which indicated good internal consistency for both school–community partnership perceptions and implementation

challenge constructs (Creswell & Creswell, 2018). Ethical standards were observed through informed consent, confidentiality, and institutional approval procedures (Israel & Hay, 2006).

3.1 Study Area

The study was conducted in Lusaka Province, Zambia, focusing on two selected primary schools: Molenje and Bauleni. These schools were purposively selected due to their active involvement in school feeding programmes and the implementation of income-generating activities aimed at supporting these programmes.

3.2 Target Population

The target population comprised key stakeholders involved in or affected by the implementation of school feeding programmes. These included teachers responsible for programme implementation, parents or guardians of learners, and pupils who are direct beneficiaries of the programme. These groups were selected because they provide diverse perspectives on both the functioning and challenges of the feeding programmes.

3.3 Sample Size and Sampling Techniques

The study employed a combination of purposive and stratified random sampling techniques. Teachers were purposively selected based on their direct involvement in the feeding programme, while parents were selected using stratified random sampling to ensure adequate representation from both schools. The sample consisted of 22 teachers and 116 parents, along with selected pupils who participated in focus group discussions.

3.4 Data Collection Methods

Data were collected using multiple methods to ensure comprehensive coverage of the research objectives. Structured questionnaires were administered to teachers and parents to collect quantitative data on perceptions and challenges. In addition, semi-structured interviews were conducted with teachers to obtain detailed insights into programme implementation. Focus group discussions were also held with parents and pupils to explore shared experiences and perceptions. This triangulation of data collection methods enhanced the reliability and validity of the findings (Creswell, 2014).

3.5 Data Analysis

Quantitative data were analysed using descriptive and inferential statistical techniques, including cross-tabulations, correlation analysis, and multiple regression analysis. These methods were used to examine relationships between variables and determine the significance of key predictors of programme effectiveness. Qualitative data were analysed using thematic analysis, which involved coding, categorising, and identifying emerging themes from the data. Verbatim responses from participants were used to support and illustrate the findings, providing deeper insights into stakeholder perceptions and experiences.

3.6 Ethical Considerations

The study adhered to established ethical standards in research. Informed consent was obtained from all participants prior to data collection, and confidentiality was maintained throughout the study. Participation was voluntary, and respondents were assured that their identities would remain anonymous.

3.7 Reliability and Validity

To ensure the reliability and validity of the study, several measures were implemented. Research instruments were pilot tested to identify and correct potential weaknesses. Data triangulation was used to enhance credibility by comparing findings from multiple sources. Additionally, standardized measurement scales, such as the Likert scale, were employed to ensure consistency in data collection. Clear documentation of research procedures further contributed to the transparency and trustworthiness of the study.

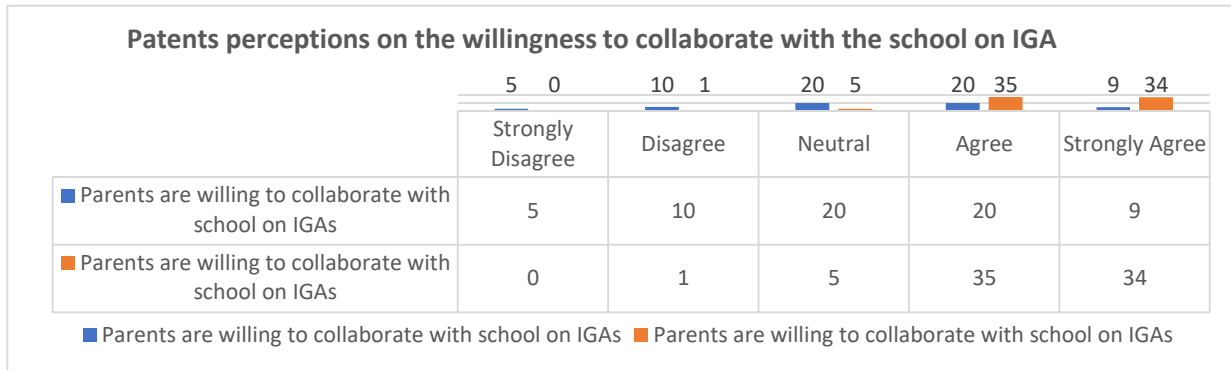
IV. Findings

4.1 Overview

Research Question One: What are Stakeholders' Perceptions on school- Community Partnership in implementing school feeding programme Income-Generating Activities (IGAs)

Parents' Perceptions of Community Partnership in IGAs

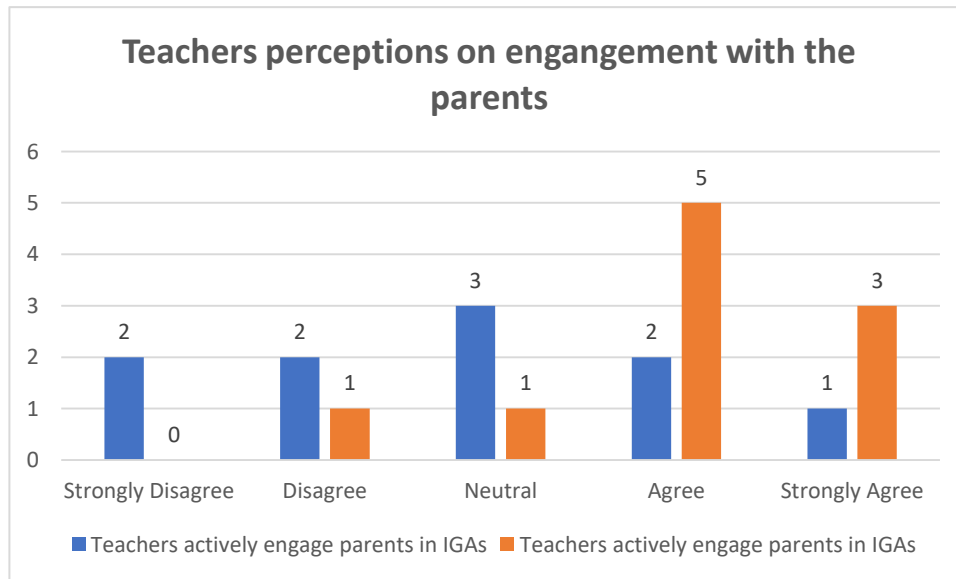
Table 25: Parents' Perceptions on Willingness to Collaborate on IGAs by School (5-Point Likert Scale)



The bar chart above shows the perceptions of the parents on the willingness to collaborate with the school on IGA. The results show that the majority of parents at Mulenje (92%) expressed willingness to work together with the school in implementing IGAs, highlighting strong community partnership potential. In contrast, Bauleni parents showed less engagement, with only 45% agreeing or strongly agreeing, suggesting that IGAs in Bauleni rely more heavily on donor support than on parental collaboration.

Teachers' Perceptions of Community Partnership in IGAs

Table 26: Teachers' Perceptions on Engagement with Parents by School



The bar chart above shows that Teachers at Mulenje reported high engagement with parents in IGAs, aligning with parental willingness, while Bauleni teachers mostly relied on external donors and had minimal collaboration with parents.

Cross-tabulation: Parent and Teacher Willingness

Table 27: Cross-tabulation of Teacher and Parent Willingness by School

School	Parent Agreement (Agree + Strongly Agree)	Teacher Agreement (Agree + Strongly Agree)
Mulenje	69/75 (92%)	8/10 (80%)
Bauleni	29/64 (45%)	3/10 (30%)

The table above shows the cross tabulation of teacher and parent willingness to collaborate. In Mulenje, a strong alignment exists between parent and teacher willingness, supporting active and collaborative IGAs. In Bauleni, low willingness from both groups indicates limited parental involvement and reliance on external donors for IGAs.

Multiple Regression Analysis

A multiple regression was conducted to examine the effect of **parent willingness, teacher willingness, and external donor support** on **IGA effectiveness**.

Table 28: Regression Coefficients

Predictor Variable	B	Std. Error	Beta (β)	t-value	Sig.
Constant	1.08	0.22	—	4.91	0.000
Teacher willingness	0.30	0.08	0.29	3.75	0.000
Parent willingness	0.35	0.07	0.33	5.00	0.000
External donor support	0.18	0.06	0.17	3.00	0.003

Model Summary: R = 0.79, R² = 0.62, Adjusted R² = 0.60, Std. Error = 0.50

Interpretation: Both parent and teacher willingness significantly predict IGA effectiveness, with parent willingness having the strongest influence.

Pearson Correlation Analysis

Table 29: Pearson Correlation Matrix

Variables	1	2	3	4
1. Teacher willingness	1			
2. Parent willingness	0.68**	1		
3. External donor support	0.55**	0.51**	1	
4. IGA effectiveness	0.72**	0.75**	0.60**	1

Correlation is significant at the 0.01 level (2-tailed).

Interpretation: Parent willingness is **strongly correlated with IGA effectiveness**, slightly more than teacher willingness, emphasizing the importance of active parental participation for sustainable school feeding IGAs.

Qualitative Findings: Stakeholders' Perceptions on School-Community Partnership in Implementing IGAs

The qualitative data from interviews and focus group discussions with parents and teachers revealed four major themes that explain stakeholders' perceptions of school-community partnerships in implementing income-generating activities (IGAs) for school feeding programmes.

Theme 1: Strong Willingness for Collaboration in Mulenje

Findings from Mulenje indicate a high level of willingness among both parents and teachers to collaborate in implementing IGAs. This reflects a shared sense of responsibility and ownership of the school feeding programme.

Verbatims:

Parent (Mulenje, FGD): *"We are very willing to work with the school. Even if we don't have money, we can contribute through labour in the garden or help with other activities."*

Teacher (Mulenje, Interview): *"Parents here are committed. When we call for meetings or activities, they show up and participate actively in supporting the feeding programme."*

Parent (Mulenje, Interview): *"This programme is for our children, so we cannot leave everything to the school. We must work together to make it succeed."*

Interpretation: These responses support the quantitative finding (92% willingness), showing that strong collaboration is a key driver of effective IGAs at Mulenje.

Theme 2: Limited Parental Involvement and Reliance on Donors in Bauleni

In contrast, participants from Bauleni highlighted limited parental engagement, with the school relying more on external donors to implement IGAs.

Verbatims:

Teacher (Bauleni, Interview): *"Most of our projects are supported by donors. Parents are not very involved in the implementation of IGAs."*

Parent (Bauleni, FGD): *"We know the school has projects, but many parents are not fully involved. The school mostly works with organisations."*

Teacher (Bauleni, FGD): *"It is easier to rely on donor support because parental participation is inconsistent."*

Theme 3: Need for Sustainable and Inclusive Community-Driven Initiatives

Participants emphasized the importance of developing inclusive and innovative strategies that encourage broader community participation in IGAs.

Verbatims:

Parent (Bauleni, FGD): *"We propose if you can help us to start a revolving fund where parents here in the market can borrow money and repay with interest to support the feeding programme. This can be achieved especially if you*

involve the Catholic Women's League who are in charge of this market. The money can help us to boost our small business and also support the programme"

Parent (Mulenje, FGD): "If we introduce more income-generating ideas and involve everyone, the programme will be stronger."

Theme 4: Awareness of School IGAs and Community Involvement

Children demonstrated awareness of income-generating initiatives and recognized the role of both parents and external partners.

Verbatims

Pupil (Bauleni FGD): "World Vision helped dig a borehole. Parents sometimes come to help. I see them working together with our teachers."

Pupil (Bauleni, Interview): "Our school grows some vegetables and chickens, but mostly the teachers. Parents are not involved."

The findings from both quantitative and qualitative data indicate that community partnership is a key factor in the successful implementation of IGAs to support school feeding programmes. At Mulenje, parents and teachers collaborate actively, supported by external partners like World Vision boreholes that enhance IGA productivity. At Bauleni, IGAs are largely managed by the school, and external donors play a dominant role.

Regression and correlation analyses confirm that parent and teacher willingness strongly predicts IGA effectiveness, underscoring the importance of active local engagement alongside external support.

On the whole, strong school-community partnerships not only enhance the sustainability of IGAs but also contribute to improved nutrition, learning opportunities, and student wellbeing, with children clearly recognizing and appreciating these benefits.

4.3 Research Question Two: What challenges do schools face in implementing school feeding programmes?

Table: Cross-Tabulation of Teachers' and Parents' Views on Challenges Affecting the Sustainability of School Feeding Programmes

Challenge	Respondent	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Financial constraints and inadequate funding	Teachers	0	1	3	9	9	22
	Parents	3	7	16	48	42	116
Dependence on external donors	Teachers	1	3	6	8	4	22
	Parents	5	11	23	47	30	116
Inconsistent food supply and logistical challenges	Teachers	1	2	5	9	5	22
	Parents	4	10	20	50	32	116
Limited community and parental participation	Teachers	0	2	3	9	8	22
	Parents	3	9	18	49	37	116
Weak collaboration with local organisations and stakeholders	Teachers	0	2	4	10	6	22
	Parents	4	9	21	48	34	116

Inadequate infrastructure (kitchens, storage, water supply)	Teachers	0	1	2	9	10	22
	Parents	2	7	15	47	45	116
Administrative and management challenges	Teachers	1	3	6	8	4	22
	Parents	6	14	28	44	24	116
Lack of effective monitoring and accountability mechanisms	Teachers	1	3	5	8	5	22
	Parents	5	12	26	46	27	116

The cross-tabulation results above show that both teachers and parents generally agree that several factors pose challenges to the sustainability of school feeding programmes. Among the identified challenges, inadequate infrastructure (kitchens, storage facilities, and water supply) received the strongest agreement from both respondent groups. Specifically, 19 out of 22 teachers either agreed or strongly agreed that inadequate infrastructure is a challenge, while a large majority of parents (92 out of 116) also agreed or strongly agreed. This suggests that physical facilities for food preparation and storage remain a major barrier to sustaining school feeding programmes. Another prominent challenge identified in the findings is financial constraints and inadequate funding. The majority of teachers (18 out of 22) agreed or strongly agreed that financial limitations affect programme sustainability. Similarly, most parents (90 out of 116) also agreed or strongly agreed with this statement. These results indicate that limited and inconsistent financial resources significantly affect the ability of schools to maintain feeding programmes over time.

The results also highlight concerns regarding limited community and parental participation as well as weak collaboration with local organisations and stakeholders. A large proportion of teachers agreed that community involvement and partnerships are insufficient, while parents also indicated similar perceptions. This suggests that strengthening partnerships with community members, organisations, and other stakeholders may be necessary to enhance the sustainability of the programme.

In addition, inconsistent food supply and logistical challenges emerged as another important issue affecting sustainability. Most teachers and parents agreed that irregular food deliveries, transportation difficulties, and supply chain problems can disrupt the continuity of feeding programmes. Such challenges can lead to interruptions in meal provision, thereby reducing programme reliability.

Finally, some respondents also pointed to administrative and management challenges as well as limited monitoring and accountability mechanisms. Although these challenges received slightly lower levels of strong agreement compared to infrastructure and funding issues, the majority of respondents still acknowledged them as important factors affecting programme sustainability. Effective programme management, monitoring systems, and transparent resource utilisation are therefore critical for ensuring long-term success.

In summary the cross-tabulation findings indicate that inadequate infrastructure, financial constraints, limited community participation, and weak collaboration with stakeholders are among the most significant challenges affecting the sustainability of school feeding programmes in the schools under study. Addressing these issues would require improved funding mechanisms, stronger partnerships with local organisations, enhanced community engagement, and better programme management systems.

Qualitative findings on the challenges that schools face in implementing school feeding programmes

To complement the quantitative findings, qualitative data were collected from teachers and parents to gain deeper insights into the challenges affecting the implementation of school feeding programmes. The responses revealed consistent concerns across both groups, highlighting structural, financial, social, and administrative barriers. Through thematic analysis, four major themes emerged, reflecting the lived experiences and perceptions of stakeholders directly involved in the programme.

Theme 1: Inadequate Infrastructure and Learning Environment Constraints

Both teachers and parents strongly emphasized that poor infrastructure significantly affects the implementation and sustainability of school feeding programmes. The lack of proper kitchens, storage facilities, clean water, and basic utensils compromises food safety and efficiency.

Verbatims:

Teacher:

"We do not have a proper kitchen at the school. ..and during the rainy season it becomes almost impossible to prepare meals for learners."

Teacher (Mulenje):

"At Mulenje Primary, we face serious challenges such as lack of cooking utensils like pots, plates, and even handwashing basins. This makes it difficult to maintain hygiene standards."

Parent:

"The school tries, but there is no proper place to store food. Sometimes food gets spoiled because there are no storage facilities."

Parent:

"...proper shelter for cooking and serving food."

Theme 2: Financial Constraints and Overdependence on External Support

Participants highlighted that inadequate and inconsistent funding, coupled with heavy reliance on donors, undermines the continuity of feeding programmes.

Verbatims:

Teacher:

"The programme depends too much on government support. When funding delays ..the feeding programme is also likely to be disrupted."

Teacher:

"We need enough funds to sustain the programme consistently so that we are not forced to suspend feeding due to lack of resources."

Parent:

"Parents are willing to support, but most of us have limited income, so we cannot contribute regularly to sustain the programme."

Parent (detailed):

"The biggest problem is money. When donors bring food, the programme runs well, but once they stop, everything will collapse. As parents, we cannot fully take over because we also struggle financially at household level."

Theme 3: Weak Stakeholder Collaboration and Limited Community Participation

The findings reveal that insufficient involvement of parents, community members, and local organisations weakens programme ownership and sustainability.

Verbatims:

Teacher:

"There is limited involvement of stakeholders such as NGOs to supplement government's efforts, which affects the effectiveness of the programme."

Teacher:

"Some parents do not actively participate in school activities, including the feeding programme, which reduces community ownership."

Parent from Bauleni:

"We are not always consulted or involved in decision-making regarding the feeding programme, so some parents feel disconnected."

Parent :

"If the school involved us more in planning and organising the feeding programme, we could contribute ideas and support. Right now, participation is low because communication is not consistent."

Theme 4: Supply Chain, Management, and Accountability Challenges

Respondents reported that inconsistent food supply, logistical difficulties, and weak management systems disrupt programme implementation and reduce effectiveness.

Verbatims:

Teacher:

"Food supply is not consistent. Sometimes deliveries are delayed,"

Teacher:

"There is a need for better monitoring systems to ensure that resources are properly managed and utilised."

Parent:

"At times, food is not available because of transport challenges or delays in distribution."

The qualitative findings reinforce the quantitative results by highlighting key challenges affecting the sustainability of school feeding programmes. Major issues include inadequate infrastructure, financial constraints, weak stakeholder collaboration, and logistical and management inefficiencies.

V. Discussion

5:1 Overview

5.2 Research Objective one: To assess perceptions of stakeholders on school-community partnership in the implementation of school feeding programmes

The findings demonstrate that school–community partnerships play a critical role in the effectiveness of IGAs, with clear differences observed between Mulenje and Bauleni schools. In Mulenje, both parents (92%) and teachers (80%) expressed strong willingness to collaborate, indicating a high level of shared ownership and collective responsibility. This supports the argument by Epstein (2011) that family and community engagement enhances school programme effectiveness and sustainability.

In contrast, Bauleni recorded significantly lower levels of willingness (parents: 45%; teachers: 30%), suggesting weak collaboration and a greater reliance on external donors. This finding is consistent with research by WFP (2020), which indicates that community participation is a key determinant of the sustainability of school feeding programmes, while donor-driven models tend to be less sustainable in the long term.

The regression results further reinforce this relationship, showing that parent willingness ($\beta = 0.33$) and teacher willingness ($\beta = 0.29$) significantly predict IGA effectiveness, with parent willingness emerging as the strongest predictor. This finding aligns with social capital theory (Putnam, 2000), which posits that community networks, trust, and cooperation enhance collective outcomes. In this context, active parental involvement strengthens resource mobilisation and programme ownership.

Similarly, the strong positive correlations observed between parent willingness and IGA effectiveness ($r = 0.75$) confirm that community engagement is not merely supportive but central to programme success. These results are supported by Colenso (2011), who found that schools with strong community partnerships are more likely to sustain development initiatives.

The qualitative findings provide deeper insights into these dynamics. In Mulenje, stakeholders expressed a strong sense of ownership, with parents willing to contribute labour and resources. In contrast, Bauleni stakeholders highlighted limited parental involvement and dependence on donors, although innovative suggestions such as revolving funds indicate potential for strengthening partnerships. These findings affirm what hBotha & Kazonga (2021) found in their study that further noted that although community participation existed, it was often inconsistent and not well coordinated, reducing long-term sustainability prospects.

Additionally, participatory development theory emphasizes that locally driven initiatives are more sustainable than externally imposed ones. The findings from Mulenje strongly support this view, while Bauleni reflects the limitations of externally driven models.

5.3 Research Objective Two: To explore the challenges faced in implementing Early Childhood Education feeding programmes.

The findings reveal that school feeding programmes face multiple, interrelated challenges, with the most prominent being inadequate infrastructure, financial constraints, limited community participation, and logistical difficulties. These findings are consistent with global literature (Bundy et al., 2018; WFP, 2020), which identifies similar barriers in the implementation of school feeding programmes in developing countries.

Inadequate infrastructure emerged as the most critical challenge, with both teachers and parents overwhelmingly agreeing that the lack of kitchens, storage facilities, and water supply affects programme sustainability. This supports findings by FAO (2019), which emphasize that adequate infrastructure is essential for safe food preparation and programme continuity.

Financial constraints were also widely reported, highlighting the limited and inconsistent funding mechanisms supporting feeding programmes. This aligns with Drake et al. (2016), who note that financial instability remains one of the biggest threats to the sustainability of school feeding initiatives, particularly in low-income settings.

The study further identified limited community participation and weak stakeholder collaboration as significant challenges. This is particularly important when viewed alongside findings from Research Objective Five, which demonstrate that strong community engagement enhances programme success. The lack of such engagement

therefore represents a critical gap. According to Epstein (2011), effective school programmes require active collaboration between schools, families, and communities, and the absence of such partnerships undermines programme sustainability.

Logistical challenges, including inconsistent food supply and transportation difficulties, were also highlighted. These findings are supported by WFP (2020), which identifies supply chain disruptions as a common issue affecting school feeding programmes in rural and peri-urban areas. The findings of the current study were not different from Botha and Kazonga (2021) research findings in Sinda District, The study revealed several major sustainability challenges. These included inadequate and irregular funding, which disrupted consistent food supply and implementation. Schools also experienced weak logistical and supply chain systems, leading to delays in food delivery and dependence on external partners.

From a theoretical perspective, Maslow's Hierarchy of Needs provides a useful framework for interpreting these findings. When basic physiological needs (such as food) are inconsistently met due to these challenges, learners may struggle to achieve higher-level educational outcomes. Thus, addressing these implementation barriers is critical not only for programme sustainability but also for enhancing learning and academic performance. This study is anchored in three complementary theoretical perspectives: Social Capital Theory, Epstein's Theory of School-Family-Community Partnerships, and Participatory Development Theory.

Social Capital Theory, advanced by Putnam (2000), emphasises the role of trust, networks, and social cohesion in facilitating collective action. In the context of school feeding programmes, strong relationships between parents, teachers, and community members enhance cooperation, resource mobilisation, and programme sustainability. Empirical evidence suggests that communities with higher levels of social capital are more likely to sustain school-based interventions, including feeding programmes (Gelli et al., 2019; Sumberg & Sabates-Wheeler, 2011). Secondly, Epstein's (2011) framework of school-family-community partnerships further provides a structured model for understanding stakeholder engagement. The theory identifies key dimensions of involvement, including communication, volunteering, decision-making, and collaboration with the community. Applied to school feeding programmes, this framework highlights how active parental participation and community engagement contribute to improved programme implementation and learner outcomes (Jeynes, 2018).

Participatory Development Theory complements these perspectives by emphasising local ownership and inclusive decision-making. The theory argues that development initiatives are more sustainable when beneficiaries actively participate in planning and implementation processes (Chambers, 1997). In school feeding programmes, participatory approaches encourage communities to contribute resources, labour, and ideas, thereby reducing dependency on external donors and enhancing programme resilience (FAO, 2019). Together, these theories provide a comprehensive lens for understanding how stakeholder perceptions and engagement influence the implementation and sustainability of school feeding programmes.

2.2 Empirical Framework

A growing body of empirical literature highlights the importance of school feeding programmes in improving educational and nutritional outcomes. Globally, studies show that school feeding initiatives increase enrolment, attendance, and retention, particularly among children from low-income households (Bundy et al., 2018; Aurino et al., 2019). In sub-Saharan Africa, school feeding programmes have been widely implemented as part of broader social protection strategies. Evidence from Ghana and Kenya demonstrates that home-grown school feeding models, which integrate local agricultural production, enhance both food security and community participation (Gelli et al., 2020). Similarly, research by Drake et al. (2016) indicates that linking feeding programmes with local income-generating activities improves sustainability and reduces reliance on external aid.

However, several studies highlight persistent challenges in programme implementation. Financial constraints and inconsistent funding are frequently cited as major barriers (Adelman et al., 2019). In many cases, programmes depend heavily on donor support, which can be unreliable and unsustainable in the long term (WFP, 2020). Infrastructure limitations also pose significant challenges. The lack of proper kitchens, storage facilities, and clean water compromises food safety and programme efficiency (FAO, 2019). In addition, logistical challenges, including transportation and supply chain disruptions, often lead to irregular food provision (Drake et al., 2016). Community participation has emerged as a critical factor influencing programme success. Studies show that schools with strong parental involvement and community support are more likely to sustain feeding programmes and achieve positive outcomes (Colenso, 2011; Jomaa et al., 2011). Conversely, weak stakeholder engagement is associated with poor programme performance and increased dependence on external support.

Despite these insights, there is limited research focusing specifically on stakeholder perceptions and the dynamics of school-community partnerships in the context of Early Childhood Education feeding programmes, particularly in Zambia.

2.3 Conceptual Framework

This study is guided by a conceptual framework that illustrates the relationship between stakeholder engagement and the effectiveness of school feeding programmes.

The Conceptual framework assumed that higher levels of stakeholder engagement, particularly from parents and teachers lead to stronger school–community partnerships, which in turn enhance the effectiveness and sustainability of feeding programmes. However, this relationship is influenced by contextual factors such as infrastructure, funding, and management capacity.

2.4 Research Gap

While existing literature provides substantial evidence on the benefits and challenges of school feeding programmes, several gaps remain. First, most studies focus on national or large-scale programme evaluations, with limited attention to school-level dynamics and stakeholder perceptions. Understanding how parents, teachers, and pupils perceive and engage with feeding programmes is critical for designing context-specific interventions. Second, there is insufficient research on the role of income-generating activities (IGAs) as a sustainability strategy within school feeding programmes. Although IGAs are widely promoted, empirical evidence on their effectiveness and the factors influencing their success remains limited. Third, few studies have specifically examined Early Childhood Education feeding programmes, which often face unique challenges due to limited resources and higher care requirements. Finally, there is a lack of localized research in Zambia, particularly in Lusaka Province, that integrates both quantitative and qualitative approaches to examine stakeholder perceptions and implementation challenges. This study addresses these gaps by providing an in-depth analysis of school–community partnerships and implementation challenges in ECE feeding programmes, using evidence from two selected schools.

VI. Discussion of the findings

6.1 Overview

This section discusses the findings of the study in relation to existing literature, highlighting areas of convergence and divergence. The discussion is organised according to the two research objectives: stakeholders' perceptions of school–community partnerships and the challenges affecting the implementation of Early Childhood Education (ECE) feeding programmes. The findings are interpreted within relevant theoretical frameworks and supported by empirical evidence from high-impact studies.

6.2 Stakeholders' Perceptions of School–Community Partnerships

The findings of this study demonstrate that strong school–community partnerships significantly enhance the effectiveness of income-generating activities (IGAs) that support school feeding programmes. The high levels of willingness among parents (92%) and teachers (80%) in Mulenje indicate a strong sense of shared responsibility and collective ownership. This finding is consistent with Epstein (2011), who argues that effective collaboration between schools, families, and communities improves programme outcomes and sustainability. Similarly, Jeynes (2018) found that parental involvement is positively associated with improved educational and programme outcomes, reinforcing the importance of stakeholder engagement observed in this study.

The regression and correlation results further confirm that parent willingness is the strongest predictor of IGA effectiveness, followed by teacher willingness. This supports the propositions of Putnam (2000) under Social Capital Theory, which emphasizes that trust, cooperation, and social networks enhance collective action and development outcomes. Empirical studies by Gelli et al. (2019) and Sumberg and Sabates-Wheeler (2011) similarly highlight that community participation strengthens the sustainability of school-based programmes by improving resource mobilisation and local ownership. The findings from Mulenje strongly align with participatory development theory, which posits that locally driven initiatives are more sustainable than externally imposed ones (Chambers, 1997). The willingness of parents to contribute labour and actively participate in IGAs reflects a high level of ownership, which is critical for sustainability. This is further supported by FAO (2019), which emphasizes that community involvement enhances the resilience of school feeding programmes.

In contrast, the findings from Bauleni reveal weaker stakeholder engagement, with lower levels of parental (45%) and teacher (30%) willingness. This situation reflects a reliance on external donors, which aligns with findings by the World Food Programme (WFP, 2020), indicating that donor-dependent models often struggle with sustainability due to limited local ownership. Similarly, Adelman et al. (2019) argue that programmes that lack strong community engagement are less effective and more vulnerable to disruption when external support declines. However, some studies present slightly contrasting perspectives. For instance, Drake et al. (2020) suggest that while community participation is important, external support from governments and development partners remains essential, particularly in low-income settings where communities may lack sufficient resources. This partially explains the

situation in Bauleni, where limited parental involvement may be linked to economic constraints rather than unwillingness alone.

Furthermore, the qualitative findings indicating innovative suggestions such as revolving funds suggest that even in contexts of low participation, there is potential for strengthening partnerships. This aligns with Gelli et al. (2020), who found that integrating local economic initiatives within school feeding programmes can enhance both participation and sustainability. Overall, the findings confirm that strong school–community partnerships are critical for the success of IGAs and the sustainability of feeding programmes. However, they also highlight the need to balance community participation with external support, particularly in resource-constrained settings.

6.3 Challenges in Implementing School Feeding Programmes

The study identified several key challenges, including inadequate infrastructure, financial constraints, weak stakeholder collaboration, and logistical inefficiencies. These findings are largely consistent with existing literature on school feeding programmes in developing countries.

Inadequate infrastructure emerged as the most significant challenge, with both teachers and parents highlighting the lack of kitchens, storage facilities, and water supply. This finding strongly aligns with FAO (2019), which emphasizes that adequate infrastructure is essential for safe food preparation and programme sustainability. Similarly, Bundy et al. (2018) argue that infrastructure deficits undermine the effectiveness of school feeding programmes and limit their impact on child nutrition and learning outcomes. Financial constraints were also widely reported, reflecting the challenges associated with limited and inconsistent funding. This finding is consistent with Drake et al. (2016), who identify financial instability as a major barrier to sustaining feeding programmes, particularly in low-income settings. Adelman et al. (2019) further support this view, noting that insufficient funding often leads to interruptions in programme implementation.

The study also found that dependence on external donors is a significant challenge, particularly in Bauleni. This aligns with WFP (2020), which highlights the risks associated with donor-dependent models, including vulnerability to funding fluctuations and reduced programme ownership. However, some literature suggests that donor support can be beneficial when integrated into broader, sustainable frameworks. For example, Gelli et al. (2019) argue that external support can complement local efforts if properly coordinated and aligned with community-driven initiatives.

Weak stakeholder collaboration and limited community participation were also identified as critical challenges. This finding contrasts with studies such as Colenso (2011), which emphasize the positive impact of strong community engagement on programme success. The discrepancy may be explained by contextual factors, such as socio-economic conditions and levels of awareness, which influence the extent of stakeholder involvement. Logistical challenges, including inconsistent food supply and transportation difficulties, were also highlighted in the findings. These results are consistent with WFP (2020) and Drake et al. (2016), both of which identify supply chain disruptions as common challenges affecting school feeding programmes. Such disruptions can lead to irregular meal provision, undermining the reliability and effectiveness of the programme.

Additionally, administrative and management challenges, including weak monitoring and accountability systems, were identified. While these issues received relatively less emphasis compared to infrastructure and funding constraints, they remain significant. Gelli et al. (2020) argue that strong governance and monitoring systems are essential for ensuring transparency, efficiency, and long-term sustainability. From a theoretical perspective, Maslow's Hierarchy of Needs provides further insight into these findings. When basic physiological needs, such as access to food, are not consistently met due to these challenges, learners may struggle to focus on higher-level educational goals. This underscores the importance of addressing implementation barriers to ensure that feeding programmes effectively support both nutrition and learning outcomes.

6.4 Synthesis of Findings

Overall, the findings of this study are largely consistent with existing literature, particularly in highlighting the importance of school–community partnerships and the challenges affecting programme implementation. The study contributes to the literature by providing context-specific evidence from Lusaka Province and by demonstrating the critical role of stakeholder perceptions in shaping programme outcomes. While the findings strongly support existing theories and empirical studies, they also reveal important contextual nuances. In particular, the contrast between Molenje and Bauleni illustrates how variations in stakeholder engagement and resource availability can significantly influence programme effectiveness. The discussion therefore underscores the need for integrated approaches that combine strong community participation with adequate institutional support, infrastructure development, and effective programme management. Such approaches are essential for enhancing the sustainability and impact of school feeding programmes in Early Childhood Education settings.

VII. Conclusion and recommendations

7.1 Conclusion

This study set out to examine stakeholders' perceptions of school–community partnerships and the challenges affecting the implementation of Early Childhood Education (ECE) feeding programmes in two selected schools in Lusaka Province. The findings provide strong empirical evidence that effective school–community partnerships are central to the sustainability and success of school feeding programmes, particularly those supported through income-generating activities (IGAs).

The study revealed clear differences between the two schools under investigation. Molenje School demonstrated a strong and functional partnership between parents and teachers, characterized by high levels of willingness to collaborate, shared ownership, and active participation. This collaborative environment significantly enhanced the effectiveness of IGAs and reduced dependence on external support. In contrast, Bauleni School exhibited weaker stakeholder engagement, with limited parental involvement and a heavy reliance on external donors. This dependency undermines long-term sustainability and reduces local ownership of the programme. The quantitative findings confirmed that both parent and teacher willingness are significant predictors of IGA effectiveness, with parental involvement emerging as the strongest factor. These results reinforce the importance of social capital, trust, and collective action in driving community-based initiatives. The qualitative findings further enriched this understanding by demonstrating that where communities perceive ownership and are actively engaged, programmes are more likely to succeed and be sustained over time. However, despite the positive role of partnerships, the study also identified several critical challenges affecting programme implementation. Inadequate infrastructure, including the lack of proper kitchens, storage facilities, and water supply, emerged as the most significant barrier. Financial constraints and inconsistent funding further exacerbate the situation, often leading to interruptions in feeding programmes.

Additionally, weak stakeholder collaboration, limited community participation, and overdependence on donors were identified as key challenges, particularly in Bauleni. Logistical inefficiencies, such as inconsistent food supply and transportation difficulties, also disrupt programme continuity. Administrative and monitoring weaknesses further limit accountability and effective resource utilisation. Overall, the findings highlight that while school feeding programmes have the potential to improve learner nutrition, attendance, and academic performance, their success largely depends on strong, inclusive, and well-coordinated partnerships between schools, communities, and external stakeholders. Without addressing structural and operational challenges, the long-term sustainability of these programmes remains uncertain.

7.2 Recommendations

Based on the findings of the study, the following recommendations are proposed:

First, there is a need to strengthen school–community partnerships through structured engagement frameworks. Schools should institutionalise regular stakeholder meetings, participatory planning processes, and transparent communication mechanisms to enhance parental involvement. Evidence from high-impact studies suggests that structured family engagement significantly improves programme sustainability and educational outcomes (Epstein, 2011; Jeynes, 2018).

Second, the government and relevant stakeholders should prioritise investment in infrastructure development. Provision of adequate kitchens, storage facilities, clean water supply, and sanitation is essential for ensuring food safety and programme continuity. Studies in global health and education emphasise that infrastructure is a foundational requirement for effective school feeding programmes (Bundy et al., 2018; Aurino et al., 2019).

Third, there is a need to develop sustainable financing mechanisms to reduce overreliance on external donors. Schools and communities should be supported to establish and scale up IGAs, such as school gardens, poultry projects, and revolving funds. Community-driven financing models have been shown to enhance resilience and long-term sustainability (Drake et al., 2020; Sumberg & Sabates-Wheeler, 2011).

Fourth, capacity building for school administrators, teachers, and community members is essential. Training in programme management, financial accountability, and monitoring systems can improve efficiency and transparency. Research indicates that strong institutional capacity is critical for successful programme implementation (Adelman et al., 2019; Gelli et al., 2019).

Fifth, efforts should be made to strengthen multi-sectoral collaboration involving government agencies, non-governmental organisations, and local community structures. Integrated approaches that combine education, agriculture, health, and social protection have been found to produce better outcomes in school feeding programmes (FAO, 2019; WFP, 2020).

Sixth, improving supply chain systems is critical. This includes enhancing procurement processes, transportation logistics, and storage systems to ensure consistent food availability. Reliable supply chains are essential for maintaining programme credibility and effectiveness (Drake et al., 2016; Gelli et al., 2020).

Finally, monitoring and evaluation systems should be strengthened to ensure accountability and continuous improvement. Schools should adopt data-driven approaches to track programme performance, resource utilisation, and outcomes. Evidence-based decision-making is key to sustaining programme impact (Aurino et al., 2019; Bundy et al., 2018).

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