

Assessing the Impact of School Feeding Programs on the School Enrolment of Children in Primary Schools: A Case Study of T/A Chimwala Mangochi Malawi

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Abstract

This study investigates the impact of School Feeding Programs (SFPs) on pupil school enrollment rates in primary schools within TA. Chimwala, Mangochi, Malawi. The objectives include evaluating enrollment rates before and after SFP implementation, identifying factors influencing enrolment, analysing enrolment trends in schools with and without SFPs, and assessing SFP effects on school completion rates. The research addresses questions on enrollment levels, SFP's influence on enrollment, attendance, retention, academic performance, and hunger alleviation. The study's significance lies in informing policy decisions and engaging Parent Teachers Associations to support SFPs for increased enrollment and performance. Employing mixed-methods, the study uses qualitative and quantitative approaches. It focuses on two schools, utilizing surveys and case studies involving teachers and students. Results reveal that SFPs positively impact enrollment, attendance, and class participation, thereby enhancing academic performance. Challenges like unhealthy dietary practices and lack of nutrition knowledge were identified. The study suggests that SFPs, when properly funded and supported, can address food insecurity and bolster primary education in Malawi. Recommendations include sustained funding, community involvement, and infrastructure improvements to accommodate increased enrolment.

Keywords: School feeding programs, Enrolment rates, Primary education

1. Background

In developing countries, hunger, poverty, and malnutrition hinder learning, especially among vulnerable primary school students (Adeyeye et al., 2023). To address this, School Feeding Programs (SFPs) have been implemented to encourage children to stay in school and prevent them from experiencing hunger (Zenebe et al., 2018). SFPs have improved the welfare of school children and local poor households that cannot afford to provide meals for their children. Social protection initiatives, like SFPs, reach around 368 million children daily, with a global investment of USD 70 billion per year (Lukindo, 2018). The World Food Programme (WFP) is the largest provider of school meals in Malawi, offering fortified maize and soya porridge known as Likuni phala, which has benefited millions of school children, enabling them to concentrate and learn better (World Food Program, 2007-2010). Studies estimate that every USD \$1 spent on school feeding in Malawi yields at least USD \$6 in better health and productivity when these children reach adulthood (WFP & Mary Meals, cited in Lambers, 2009). School meals have shown significant positive effects on school attendance, completion, and learning outcomes, contributing to the achievement of Sustainable Development Goal number two - zero hunger (Tageo, 2018). Additionally, school meal programs create opportunities for national governments to invest in the long-term development of children and communities, particularly disadvantaged and marginalized groups (Masset & Gelli, 2013).

Despite the successes of SFPs, challenges persist, including fragmented implementation by NGOs and development partners, potentially reducing their efficiency and effectiveness (Bundy & Burban, 2009). However, studies in countries like Zambia and Tanzania have demonstrated increased enrolment rates and reduced dropout rates after the introduction of SFPs (Provini, 2015). School Feeding Programs have proven to be effective in combating hunger, improving educational outcomes, and supporting the well-being of school children in developing countries like Malawi. However, addressing food insecurity in vulnerable areas remains a critical challenge to achieving universal primary education (Agarwal, 2014). The purpose of this study is to assess the impact of the School Feeding Program (SFP) on pupil school enrolment rates in primary schools in TA. Chimwala, Mangochi, Malawi. The specific objectives include examining enrolment rates before and after the introduction of the SFP, investigating factors affecting school enrolment, analysing enrolment rates in schools with and without the SFP, and assessing how the SFP affects school completion rates. The research questions aim to understand the levels of enrolment before and after the SFP, its effects on primary school enrolment, attendance, retention, and academic performance, as well as its role in alleviating short-term hunger. The study's significance lies in its potential to inform government policies and encourage the involvement of Parent Teachers Associations in planning and supporting School Feeding Programs to boost enrolment and improve performance in Mangochi district and beyond. The research scope is descriptive and focuses on two schools, incorporating both survey and case study designs involving teachers and students. Additionally, the findings aim to contribute to the general knowledge on the impacts of

School Feeding Programs on primary education in Malawi. The integration of Human Capital Theory emphasizes how SFPs contribute to enhancing students' health, participation, and academic performance, while Maslow's Hierarchy of Needs illuminates how these programs address basic physiological needs, enabling students to focus on education and personal growth. Together, these theories provide a comprehensive framework to comprehend the multifaceted impacts of SFPs on primary education in developing nations like Malawi.

2. Literature Review

School feeding programs have emerged as a crucial intervention in addressing malnutrition, poverty, and educational attainment issues. These programs aim to improve children's nutritional status, thereby enhancing their capacity to learn and encouraging higher school enrolment and attendance rates. This literature review explores existing research on the impact of school feeding programs on the enrolment of children in primary schools. **School Feeding Programs and Enrolment:** Globally, school feeding programs have been implemented in various forms, including breakfast, lunch, and snack provisions. Wineman et al. (2022) explored regional results from the 2019 global survey of school meal programs in Africa. Cupertino et al. (2022) discuss global developments in school feeding programs, reporting that these initiatives are present in more than 100 countries, impacting over 368 million children daily (World Food Programme, 2020). Research indicates that these programs can significantly increase school enrolment rates, particularly in low-income regions where food insecurity is prevalent. **Impact on Enrolment and Attendance:** Several studies have documented the positive correlation between school feeding programs and increased school enrolment and attendance. For instance, a study conducted in Ghana showed that the introduction of a school feeding program led to a 21% increase in enrolment rates in participating schools (Welch, 2019). Similarly, research in India revealed that the Mid-Day Meal Scheme resulted in a significant rise in enrolment, especially among girls and children from marginalized communities. **Nutritional and Cognitive Benefits:** The provision of meals at school not only addresses immediate hunger but also contributes to long-term educational benefits. Improved nutrition enhances cognitive function, which in turn positively affects academic performance and retention rates. A study by Adelman et al. (2008) demonstrated that children receiving school meals showed better performance in literacy and numeracy tests, indirectly boosting enrolment by reducing dropout rates.

Socio-Economic Factors: School feeding programs also alleviate the financial burden on families, making it more feasible for them to send their children to school. For many low-income families, the provision of free meals serves as an incentive for enrollment. According to Aurino et al. (2018), households participating in school feeding programs reported significant reductions in food expenditure, allowing them to allocate resources to other educational needs. **Challenges and Limitations:** Despite the positive outcomes, school feeding programs face several challenges (Kenney et al., 2021). Inadequate funding, logistical issues, and inconsistent food supply can hinder their effectiveness. Additionally, comprehensive monitoring and evaluation are necessary to ensure that these programs reach the intended beneficiaries and achieve the desired outcomes. **Case Studies and Regional**

Variations: Different regions have shown varying levels of success with school feeding programs. In Latin America, countries like Brazil have integrated these programs into their broader social protection schemes, resulting in sustained enrollment increases (Verguet et al., 2020). Conversely, in sub-Saharan Africa, program effectiveness often fluctuates due to economic instability and infrastructural challenges. **Research Gaps and Future Directions:** Despite the extensive body of literature on school feeding programs and their impact on school enrollment, several research gaps warrant further investigation. **Longitudinal Impact Studies:** Most existing studies focus on the short-term effects of school feeding programs on enrollment and attendance (Wang, 2020). There is a need for longitudinal studies that track the long-term impact of these programs on educational outcomes, including graduation rates and higher education enrollment (Welch, 2019). Understanding the sustained effects of school feeding on students' academic and life trajectories can provide deeper insights into the programs' overall effectiveness. **Holistic Evaluation of Nutritional and Educational Outcomes:** While many studies highlight the nutritional benefits and improved enrollment rates associated with school feeding programs, there is a lack of comprehensive evaluations that simultaneously measure cognitive, emotional, and social development outcomes (Kristjansson et al., 2023). Research that integrates multiple dimensions of child development can offer a more holistic assessment of the programs' impacts.

3. Methodology

The study employed a mixed-method research design, incorporating both qualitative and quantitative approaches to gather and analyse data. Qualitative design was used to allow respondents to describe their experiences, feelings, and opinions related to the School Feeding Program (SFP). This flexibility in data collection facilitated a deeper understanding of the topic. Quantitative design, on the other hand, enabled the measurement and numerical analysis of variables to determine the relationship between pupil enrolment rates before and after the introduction of the SFP. The study was conducted in Mangochi district, specifically in TA. Chimwala, where two schools were selected based on the presence or absence of the SFP for easy comparison. The target population included standard 7 and 8 students and their headteachers. Purposive sampling was used to select participants, and data collection techniques included questionnaires with open and closed questions and in-depth individual interviews to allow respondents to freely express their opinions. Context analysis was applied to the qualitative data, while quantitative data was analysed using Excel and SPSS. The study faced some limitations, such as unhealthy dietary practices among pupils, lack of nutrition knowledge, and challenges in accessing data, but the researcher attempted to mitigate these limitations during data collection.

4. Results and Discussion

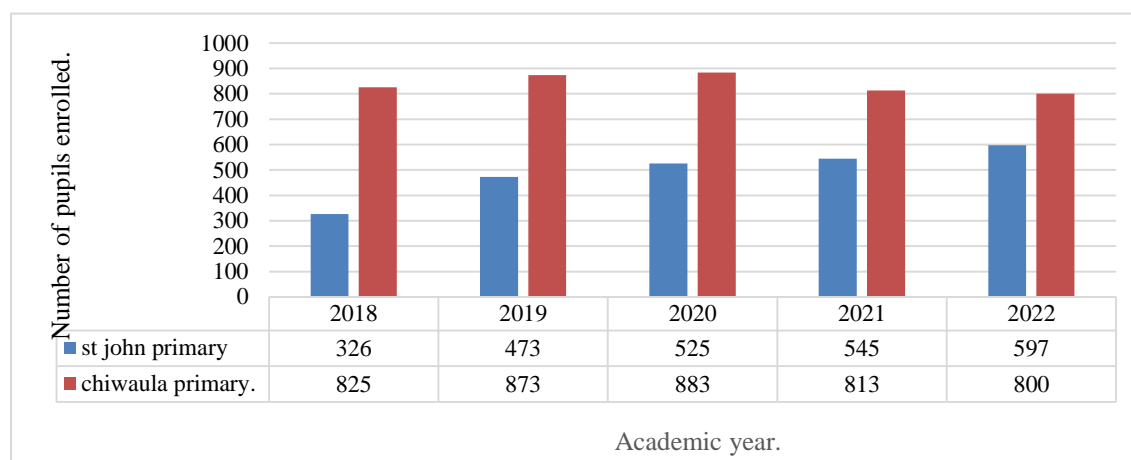


Figure 1. Enrolment rate trend from 2018 to 2022 for St John primary and Chiwaula primary school

Above shows the enrolment rate trend from 2018 to 2022 for the two schools. School feeding program was introduced in 2014 by Mary’s meal at St John primary school. Mary’s meal supplies porridge flour which is prepared and given to the pupils daily. According to the figure 1 enrolment of St. John primary is constantly increasing every year despite having few students. Furthermore, enrolment of the pupils at Chiwaula primary school has kept on decreasing despite an increase in 2020 but also stated to decrease in 2021. The head teacher at Chiwaula believes that the increase in enrolment was due the increased teaching methodologies and the secondary school selection pass rate at the school. But due to some teacher transfers and lack of involvement of the parents to send their children to school and motivating them affected the enrolment trend in 2022 and 2023. Same Study from Ministry of Education, Science and Technology (2014) also found out that there was a steady increase in enrolment and school attendance is regular. Even if pupils are sick, they like to come back to school to collect their meals’ It could be inferred that the programme has activated people’s confidence in the public primary school system again. This is because in 2011, very low pupils’ enrolment was recorded partly due to poor implementation under the preceding administration. The enrolment increased steadily thereafter as a result of the programme’s repackaging and re-invigoration by the administration of the school. The Head teachers and teachers interviewed affirmed that the operation of the programme has resulted in an increase in pupils’ enrolment as well as regular and punctual school attendance.

4.1 School Feeding Program and Attendance

The research findings highlighted remarkable improvements in attendance and reductions in absenteeism at St. John Primary School, attributed to the implementation of the SFP. According to the head teacher at St. John primary school:

“The provision of porridge to pupils before classes has motivated them to arrive early and participate in classes, driven by the desire not to miss out on the offered nourishment”.

The SFP has been credited with enhancing the health and nutrition of the students. This improved nutritional status has been linked to a decreased likelihood of illnesses and an enhancement in students' ability to concentrate and actively engage in their learning activities. Equally, at Chiwaula Primary School, lower attendance levels were noted, particularly among standard one and two students.

The head teacher attributed this phenomenon to parents' preference for overseeing their children's meals at home, while senior students often arrived late for classes due to a perceived lack of motivation. Similarly.

A study conducted by Tabitha (2017), focusing on the Mzimba District, unveiled a comparable trend, with students showing early attendance and extended presence at school due to the distribution of food during these hours. The headteacher further highlighted that:

“This strategy was instrumental in retaining children within the school environment”.

4.2 School Feeding Program and Reduced Absenteeism

The report provided by the head teacher of St. John Primary School emphasises a significant reduction in absenteeism rates within the school. This positive change is attributed to the SFP, which has motivated students to choose attending school over remaining at home due to the availability of meals. The head teacher emphasized that:

The SFP has created an enabling environment that fosters regular attendance and, consequently, has contributed to improved academic performance. This positive impact stands in contrast to the period before the implementation of the feeding program.

The SFP's influence extends to addressing the issue of students in standard one and two running away from school, a behaviour often driven by hunger. In comparison, the head teacher of Chiwaula Primary School observed irregular attendance patterns,

“With pupils attending based on their preferences, leading to high dropout rates. Although absenteeism persists, some pupils are observed leaving class during the first break, typically those who come primarily for the food”.

Supporting this trend, the Ministry of Education, Science and Technology (2014) found that the introduction of the school feeding program led to a substantial decrease in absenteeism rates across Malawian primary schools, with rates declining from 40% to 10%.

4.3 School Feeding Program and Class Participation and Performance

In interviews conducted with standard 7 pupils at St. John Primary School, the research findings highlighted the positive impact of the porridge provided through the School Feeding Program on students' participation in class. Three pupils attested that:

“Having porridge available makes a significant difference in how engaged students are during our lessons. It's quite clear that on days when there's porridge, our class participation

becomes much more active compared to days when there isn't any. It's interesting to note that many of us are more inclined to be punctual for our class sessions when we know that the morning distribution of food is happening”.

This positive relationship between porridge consumption and academic performance was underlined. Similarly, interviews with two pupils from Chiwaula Primary School shed light on the challenges of participating in class on empty stomachs, “*Many of us find ourselves simply waiting for the class to end or, in some cases, even deciding to skip classes altogether”*”, another pupil from Chiwaula argued that.

“I thought that not having the School Feeding Program might actually have its advantages. My belief was that when students are full from eating, they tend to get a bit drowsy in class, which could potentially impact their active participation and overall academic performance”.

Supporting these observations, a study conducted by the World Food Program (2006) revealed that school feeding programs have a beneficial impact on class participation and academic performance.

Respondents strongly agreed that: *I have observed a remarkable enhancement in the performance of our pupils both in curricular and extra-curricular activities. Moreover, there has been a notable improvement in the results of end-of-term and end-of-session examinations. What's more, a substantial portion of the feedback we received indicates that the school feeding program has played a pivotal role in the betterment of pupils' performance in class tests.*

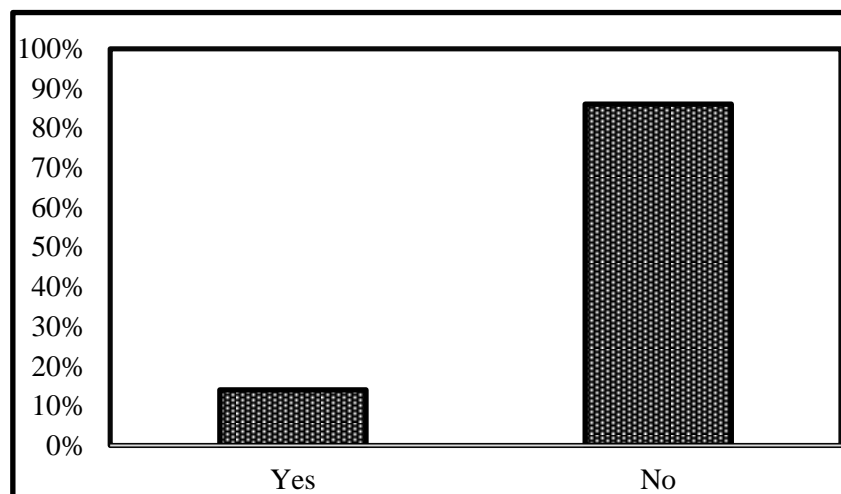


Figure 2. Pupils' views on whether should continue, or no?

The figure above shows the findings at which the pupils are interested in the SFP to continue or not. The majority of the pupils like the initiative of the feeding program is such a way that most of the parents of pupils from St. John primary school are poor their main source of income is fishing and they don't have time to prepare breakfast for their child before going to school and they can't afford to provide three meals a day. The head teacher from the school

also explains with SFP children attend school every day more especially from the lower classes and it has helped nutritional wise. Despite some pupils want the program to continue 14% of the pupils are against the SFP. As explained by two standard 7 student: *we dose in class after taking the porridge and no porridge is kept for us who are late it is not our fault to come late we walk long distances to reach at school.* A study conducted by UNICEF (2007) claims that majority of the respondents who were women gave out that the SFP should not continue. Some respondents *say that we are forced to knock off from school late just to get water for preparing the meals the next morning this is like a punishment to us.*

5. Conclusion and Recommendation

The research findings highlight a significant contrast in enrolment between primary schools with and without the School Feeding Program (SFP). The absence of SFP at Chiwaula Primary School has precipitated a decline in enrolment and retention rates, coupled with elevated levels of absenteeism and dropouts. Equally, the presence of SFP at St. John Primary School has proven instrumental in elevating enrolment rates by drawing children to school. In light of these outcomes, it is imperative for the government to ensure the consistent provision of a well-structured and timely feeding program across all public schools in food-insecure regions like Mangochi. Collaborative efforts with donors must be streamlined to secure ample funding aligned with student populations. Strengthening community involvement in SFP planning and implementation is pivotal, as community-assisted schools foster parental engagement and support through financial contributions and resources. School committees should explore alternative financing avenues, such as income-generating initiatives or agricultural ventures, to supplement donor funds and ensure program sustainability. As pupil numbers increase due to SFP implementation, strategic measures by the Malawian government are warranted to accommodate this growth through enhanced school facilities and appropriate staff recruitment, all in pursuit of upholding quality education standards.

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