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### Miles to Learn: The Influence of Long Distance to School on Attendance, Enrollment and Retention in Tharaka Nithi County, Kenya

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**Keywords:**  
*School Feeding Programme, Distance to school, Enrollment, Attendance, Retention, Dropout, Tharaka Nithi County, Kenya.*

This study examined the impact of long distances to school on pupil participation in public primary schools in Tharaka Nithi County, Kenya, with a particular focus on enrollment, attendance, retention, and dropout rates. The study also explored how the School Feeding Programme (SFP) serves as a mitigating factor for these challenges. Using a mixed-methods approach, the research combined qualitative data from interviews with head teachers and parents, as well as quantitative data from surveys and school attendance records. The findings indicated that long distances to school are a significant barrier to enrollment, with many children unable to attend due to the physical strain and fatigue caused by long walks. The study revealed that long distances also contributed to high absenteeism, as children are often too exhausted to attend school regularly, especially when food is not provided. Furthermore, the study highlighted that distance exacerbates dropout rates, as children from remote areas are more likely to leave school due to the demands of the long commute and lack of food at home. However, the research also demonstrated that the introduction of the SFP has had a profound positive impact on educational participation. The provision of meals at school not only increased enrollment but also improved attendance and retention, as children are motivated to attend school for the promise of food. The study concluded that while long distances remain a significant challenge, the SFP plays a crucial role in mitigating the negative effects of distance by improving student health, reducing absenteeism, and encouraging consistent attendance and retention. The research emphasises the importance of addressing logistical barriers to the successful implementation of school feeding programs in remote areas to further enhance educational outcomes.

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**INTRODUCTION**

Access to quality education remains one of the key drivers of socio-economic development, particularly in rural and underserved areas where children face geographical and logistical barriers to attending school. In Kenya, one such area is Tharaka Nithi County, located in the Eastern region, which is characterised by vast distances between communities and schools. For many children in Tharaka Nithi, these distances are often long—sometimes stretching up to five kilometres or more—posing significant challenges for enrollment, attendance, and retention (Republic of Kenya, 2018). The long commutes result in fatigue, absenteeism, and, in some cases, dropout, further exacerbating the already high education-related challenges faced by children in rural settings. These issues are compounded by other socio-economic hardships, including poverty, poor infrastructure, and a lack of access to essential services, such as adequate nutrition (GOK, 2019).

In Kenya, poverty levels are particularly high in the Arid and Semi-Arid Lands (ASALs), which include regions like Tharaka Nithi County, where a significant proportion of the population lives below the poverty line (Kenya National Bureau of Statistics [KNBS], 2020). For many families, daily survival is a struggle, and providing meals for children, especially during school hours, becomes a difficult task. Consequently, children often travel to school without breakfast and have no guaranteed access to food at school, which hinders their ability to fully participate in class activities and engage with their learning. The absence of proper nutrition directly affects

cognitive function, energy levels, and overall school performance (Bryce et al., 2005; Grantham-McGregor et al., 2007).

To mitigate the effects of these barriers, the Kenyan government, alongside local and international partners, has implemented a variety of interventions aimed at improving educational participation in rural areas, with the School Feeding Programme (SFP) being one of the most prominent. Launched as a response to food insecurity, the SFP aims to provide daily meals to children in public primary schools, particularly in ASAL regions, where hunger and malnutrition are most prevalent. The programme is designed to encourage school attendance by addressing food insecurity and offering students the promise of a nutritious meal during the school day (Mwaura et al., 2015). The SFP is seen as an essential tool for promoting not just the health of children but also their educational success.

While there has been considerable research on the benefits of school feeding programs, including improved academic performance and health outcomes (Ahmed, 2004; Bundy et al., 2009), fewer studies have explored how these programs interact with geographical barriers such as distance to school. In particular, the relationship between distance to school and school feeding has not been sufficiently examined, despite the possibility that the provision of meals may influence children's decision to attend school, especially when they face the burden of long commutes.

This study aimed to fill this gap by exploring how long distances to school in Tharaka Nithi County

interact with the School Feeding Programme and influence critical educational metrics such as enrollment, attendance, retention, and dropout rates. It sought to determine whether the SFP has a mitigating effect on the challenges posed by long travel distances and how food provision can act as a catalyst for improving educational outcomes. Additionally, the study investigated the quality of meals provided under the SFP, as the nutritional content of school meals is known to significantly impact cognitive development, energy levels, and overall school performance (Sheng, 2016).

Further, the study assessed the challenges associated with the implementation and sustainability of the School Feeding Programme in Tharaka Nithi County, with a focus on the logistical difficulties that arise in remote areas where infrastructure is weak and resources are limited (GOK, 2020). It explored how long distances to school may hinder the effective delivery of meals and how schools, teachers, and parents are addressing these challenges.

The findings from this study contributed to a better understanding of how distance and food insecurity interact in shaping educational outcomes in rural Kenya, and will provide evidence-based recommendations for improving the implementation and sustainability of the School Feeding Programme in Tharaka Nithi County and similar regions across the country. By focusing on the intersection between distance, food provision, and educational participation, this study offered insights into how these challenges can be addressed to enhance educational outcomes for children in Kenya's rural and ASAL regions.

## METHODOLOGY

The study employs a mixed-methods research design, combining both quantitative and qualitative approaches to explore the effects of long distances to school and the role of the School Feeding Programme (SFP) on enrollment,

attendance, and retention in Tharaka Nithi County.

The quantitative approach involves surveying headteachers, teachers, and parents to gather data on the distance students travel to school, the presence of the SFP, and its impact on school outcomes. The survey addressed how far students travel, the availability of meals at school, and the effect of the SFP on enrollment, attendance, and retention rates. Descriptive statistics was used to analyse the demographic data, while inferential statistics, such as Chi-square tests or t-tests, helped to examine the relationships between school distance, SFP implementation, and educational outcomes.

For the qualitative approach, in-depth interviews and Focus Group Discussions (FGDs) were conducted with head teachers, teachers, education officials, parents, and students. These interviews and discussions captured the lived experiences, challenges, and perceptions regarding the long distances students must travel to school, as well as the impact of the SFP. Themes such as fatigue, hunger, community support, and the role of food in enhancing school participation were analysed through thematic analysis.

To ensure a representative sample, the quantitative sampling used simple random sampling for teachers and head teachers, and stratified random sampling for students to account for variations between urban and rural schools. The qualitative sampling used purposive sampling to select key informants, including head teachers, teachers, and local education officials, who have direct experience with the challenges posed by long distances and the SFP. FGDs involved a mix of parents and students who have direct experience with long commutes.

Ethical considerations are central to the study, and all participants were fully informed about the study's objectives. Their participation was voluntary, and they had the right to withdraw at any time. Confidentiality was ensured throughout

the research process, with all personal data anonymised.

By integrating both quantitative and qualitative data, this mixed-methods approach provided a comprehensive understanding of how long distances and the SFP collectively affect educational participation in Tharaka Nithi County, offering valuable insights for improving school access and educational outcomes in similar rural contexts.

### Theoretical Framework

This study is anchored in Maslow's Hierarchy of Needs and Social Exclusion Theory, two complementary theoretical perspectives that offer a robust framework for understanding how long distances to school and the provision of school meals influence the enrollment, attendance, and retention of children in public primary schools in Tharaka Nithi County.

Maslow's Hierarchy of Needs (1943) suggests that human beings are motivated by a series of hierarchical needs, with physiological needs forming the foundation of this pyramid. At the base of this hierarchy are the basic needs for survival, such as food, water, and shelter. According to Maslow, these foundational needs must be met before individuals can pursue higher-level needs like safety, belonging, and ultimately self-actualisation. For children, access to education and academic success are part of these higher-level needs, but they can only be realised when their basic needs, especially nutrition, are addressed.

In the context of Tharaka Nithi County, the study explores how long distances to school hinder children's ability to meet their basic needs, such as access to food, which is crucial for their physical and mental well-being. The School Feeding Programme (SFP) acts as a means to address these basic physiological needs by ensuring that children receive meals at school. Without such nutritional support, many children may arrive at school hungry or exhausted from

their long journeys, making it difficult for them to focus on learning and perform academically. By providing meals, the SFP ensures that children's basic nutritional needs are met, allowing them to attend school more regularly, stay focused during lessons, and, ultimately, achieve better academic outcomes.

In parallel, Social Exclusion Theory (Burchardt et al., 2002) helps to explain how children living in remote areas, particularly those who face significant geographic isolation due to long distances to school, may experience social exclusion from the educational system. Social exclusion refers to the barriers that prevent individuals from fully participating in social and economic activities, such as education. In the case of Tharaka Nithi County, children living in remote areas are not only distanced physically from their schools, but may also face food insecurity at home, further preventing them from attending school regularly. These challenges create a form of exclusion from education, as children are unable to participate fully in school life due to hunger, fatigue, or the inability to make the long trek to school.

The School Feeding Programme serves as a key inclusionary tool, mitigating the barriers caused by geographic isolation and food insecurity. By ensuring that all children, regardless of their distance from the school, have access to a meal each day, the SFP reduces the effects of social exclusion. This intervention makes education more accessible by providing the necessary resources (food) to keep children engaged in school, regardless of the challenges they face at home or in their communities. The SFP ensures that the most vulnerable students—those at risk of dropout due to hunger or distance—are not excluded from education, thereby improving enrollment, attendance, and retention.

Together, these two theories offer a comprehensive framework for understanding how basic needs and social inclusion are essential for fostering educational engagement. Maslow's Hierarchy of Needs explains that children's

nutritional needs must be met before they can succeed academically, while Social Exclusion Theory highlights how long distances and food insecurity create exclusion from education. The School Feeding Programme acts as a critical intervention that addresses both of these theoretical concerns by ensuring that children are able to meet their basic physiological needs and are no longer excluded from the educational system due to hunger or geographical isolation.

Thus, by meeting basic needs through school meals and addressing the social exclusion created by long distances and food insecurity, the SFP plays a pivotal role in enhancing educational participation in Tharaka Nithi County, contributing to increased enrollment, regular attendance, and better retention rates.

## RESULTS

**Table 1: Perceptions of the Impact of Long Distance on Pupil Enrollment, Attendance, and Retention, and the Role of School Feeding Programme (SFP) in Tharaka Nithi County (n = 70)**

Factor	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Total (%)
<b>Impact of Distance on Enrollment</b>	45.7%	42.9%	8.6%	2.8%	0.0%	100.0%
<b>Impact of SFP on Enrollment</b>	55.7%	44.3%	0.0%	0.0%	0.0%	100.0%
<b>Impact of Distance on Attendance</b>	48.6%	40.0%	5.7%	5.7%	0.0%	100.0%
<b>Impact of SFP on Attendance</b>	61.4%	37.1%	1.4%	0.0%	0.0%	100.0%
<b>Impact of Distance on Retention</b>	50.0%	42.9%	5.7%	1.4%	0.0%	100.0%
<b>Impact of SFP on Retention</b>	64.3%	35.7%	0.0%	0.0%	0.0%	100.0%

The data presented in Table 1 highlights the significant role that distance plays in affecting pupil enrollment, attendance, and retention, as well as the School Feeding Programme (SFP)'s role in mitigating these challenges in Tharaka Nithi County.

A combined 88.6% of respondents either strongly agreed (45.7%) or agreed (42.9%) that long distances to school negatively affect pupil enrollment. This demonstrates how geographic isolation can prevent children from attending school, particularly when the distance they must travel is long and exhausting. For many students, the effort required to travel long distances often discourages regular attendance, highlighting the direct link between distance and enrollment challenges.

In contrast, the study found that an overwhelming 100% of respondents either strongly agreed (55.7%) or agreed (44.3%) that the School Feeding Programme (SFP) plays a crucial role in increasing enrollment. This indicates that when meals are provided at school, students are more likely to attend, even when faced with long travel distances. The availability of nutritious food ensures that children have a compelling reason to attend school, thus addressing the motivational barrier caused by the hardships of long journeys.

Similarly, 88.6% of respondents agreed that long distances are a significant barrier to consistent school attendance. Children who walk long distances to school often arrive exhausted and hungry, which directly impacts their ability to concentrate and participate in lessons. In some cases, they may even choose not to attend school altogether. The fatigue and hunger resulting from

these long journeys contribute significantly to irregular attendance and disengagement from learning.

On the other hand, the data revealed that 98.5% of respondents either strongly agreed (61.4%) or agreed (37.1%) that the SFP improves school attendance. The availability of meals at school helps to counteract the negative effects of hunger and fatigue, motivating children to attend school regularly. Knowing that they will receive a meal alleviates the stress of worrying about food at home and encourages children to stay in school, even when the journey is long.

When it comes to retention, 92.9% of respondents indicated that long distances contribute significantly to higher dropout rates. For children in remote areas, the long trek to school, combined with the lack of food, can make it difficult for them to stay motivated and continue their education. Many children drop out because the challenges of travelling long distances and the absence of meals during the school day make it hard for them to remain engaged in their education.

However, the presence of the SFP has a positive impact on retention. A full 100% of respondents either strongly agreed (64.3%) or agreed (35.7%) that the SFP contributes to improved retention rates. The provision of meals ensures that students stay motivated and engaged throughout the term, making it easier for them to remain in school. By alleviating the challenges posed by long travel distances and food insecurity, the SFP helps children stay in school, reducing the risk of dropout and promoting consistent learning.

In conclusion, the results from this study highlight the vital role that the School Feeding Programme (SFP) plays in overcoming the challenges posed by long distances to school. The data clearly show that distance is a major barrier to enrollment, attendance, and retention, but the SFP significantly mitigates these challenges. By providing meals at school, the programme ensures that children are more likely to attend and stay in

school, even when they face geographic isolation. The findings underscore the importance of the SFP as a tool for improving educational participation in regions like Tharaka Nithi County, where long distances and food insecurity are common barriers to education.

The qualitative data reveal several key insights regarding the effects of long distances to school on educational participation in Tharaka Nithi County, particularly in relation to the School Feeding Programme (SFP). These findings show how distance plays a significant role in determining children's enrollment, attendance, retention, and dropout rates, while also highlighting the positive role the SFP plays in overcoming these challenges.

### **Geographic Isolation and Enrollment Challenges**

A major challenge for students in remote areas is geographic isolation, which directly affects their enrollment in school. Many head teachers and parents reported that children from villages located far from school often find it difficult to attend regularly. One head teacher mentioned that some children have to walk as far as five kilometres to reach school, a journey that is both physically demanding and discouraging for many families. This exhaustion and the long travel times discourage enrollment, as families are hesitant to send their children on such long and tiring journeys.

*“Some children come from as far as five kilometres away from the school. When there is no food at school, they go home for lunch, and they do not come back to school in the afternoon. They therefore miss the afternoon lessons.”*

### **Fatigue and Its Effect on Attendance**

Long distances to school also have a profound impact on attendance. Many students, especially those walking long distances, suffer from fatigue and hunger, which often leads to absenteeism.

One head teacher shared that children from distant areas typically struggle to return to school after lunch due to the exhaustion from the long walk. They may even miss the afternoon sessions, which negatively impacts their education. This challenge is exacerbated when children are walking on an empty stomach because food is not readily available at home. The SFP mitigates this issue by ensuring children have a meal during the school day, which helps them stay energised and motivated to return in the afternoon.

One head teacher explained how distance, fatigue, and hunger combine to affect attendance:

*“Children who walk long distances get very tired, especially when they have not eaten. Once they go home for lunch, most of them do not have the energy to return to school in the afternoon.”*

### **The School Feeding Programme as a Motivational Factor**

Despite the challenges posed by distance, the SFP acts as a strong motivator for children to attend school. One head teacher explained that when food is provided at school, children are much more likely to attend, even if they live far away. This suggests that the guarantee of a meal at school is a powerful incentive, particularly for those facing long and tiring journeys. The SFP reduces the barriers posed by distance by making the school experience more attractive to children who might otherwise be discouraged from attending due to the physical strain of the journey. The head teacher had this to say:

*“Food at school encourages attendance. Children who walk long distances still come because they know they will get a meal.”*

### **Reduced Risk of Dropout Due to the School Feeding Programme**

The SFP has proven to be effective in addressing dropout rates, especially for children living in areas that are geographically isolated. Many head

teachers noted that before the program was implemented, children who had to walk long distances were at a higher risk of dropping out, particularly when they did not return after lunch due to fatigue. However, with the SFP in place, the rates of dropout have significantly decreased. Head teachers reported a notable reduction in dropout following the introduction of the school feeding programme.

Some of the head teachers had this to say:

*“With the inception of the program, we do not experience much dropout rate now.”*

Another head teacher said this:

*“Some learners used to go home for lunch and never return because they were tired and hungry. After the introduction of the school feeding programme, such cases have greatly reduced.”*

By ensuring that students are given food, the SFP reduces the likelihood of children dropping out because of the exhaustion and hunger exacerbated by long distances to school.

### **Improved Health and Reduced Absenteeism**

In addition to mitigating dropout rates, the SFP also plays a significant role in reducing absenteeism related to health issues caused by long distances. Children from remote areas often face health problems due to the poor nutrition they receive at home, especially if they are forced to walk long distances on an empty stomach. A head teacher shared that when food is not provided at school, children are more likely to suffer from stomach-related illnesses, as food left in the sun during long walks home spoils and leads to health problems. With the SFP in place, these risks are significantly reduced because children are given a balanced meal at school, improving their overall health and, in turn, their attendance.

Head teachers linked improved learner health and reduced absenteeism to the provision of school meals:

*“When there is no food at school, children carry food from home, and because of the long walk and heat, the food spoils. They end up with stomach problems and stay away from school.”*

*“Providing food at school has improved the health of learners. We no longer see frequent absenteeism caused by stomach aches and weakness.”*

### **Food Insecurity and Community Participation in the SFP**

Another challenge affecting community participation in the School Feeding Programme is household food insecurity. Head teachers reported that parents do not fail to contribute food to the programme due to unwillingness, but because many households lack sufficient food to spare. During seasons of poor or failed rains, harvests are minimal or nonexistent, making it impossible for families to provide the required quantities of maize or beans for the school feeding programme. As one head teacher explained:

*“Parents are willing to support the school feeding programme, but many of them do not have food. When the rains fail, and there is no harvest, they cannot bring maize or beans to school.”*

Consequently, parental participation in the SFP is constrained by limited household food availability, which affects the consistency and sustainability of the programme in food-insecure communities.

### **CONCLUSION**

In conclusion, the findings highlight the profound impact that distance to school has on educational participation in Tharaka Nithi County. Long distances lead to significant challenges in terms of

enrollment, attendance, retention, and dropout rates, with many children unable to attend school regularly or even drop out due to the physical strain of the journey. However, the School Feeding Programme plays a crucial role in alleviating some of these challenges. By providing meals, the SFP not only ensures that children are nourished but also serves as a strong motivator for children to attend school and stay enrolled despite the distance. The program also helps mitigate the negative effects of hunger and fatigue, which can be exacerbated by the long walks to school, ensuring that children have the energy and motivation to participate in their education. Nonetheless, the logistical and geographical challenges remain, highlighting the need for continued support and innovative solutions to further enhance the effectiveness of the SFP in these distant communities.

### **REFERENCES**

- Ahmed, A. (2004). *The Impact of Feeding Programs on Educational Performance*. Food and Nutrition Bulletin, 25(4), 297–305.
- Bryce, J., Boschi-Pinto, C., Shibuya, K., & Black, R. (2005). *WHO Estimates of the Causes of Death in Children*. The Lancet, 365(9465), 1147–1152.
- Bundy, D. A. P., de Silva, N., Horton, S., Patton, G., & Jamison, D. T. (2009). *School-based Deworming and Other Interventions for Health and Education in Developing Countries*. The Lancet, 374(9700), 1730–1739.
- Grantham-McGregor, S., & Baker-Henningham, H. (2007). *The Importance of Nutrition for Mental Development in Early Childhood*. International Food Policy Research Institute.
- Kenya National Bureau of Statistics (KNBS). (2020). *Poverty Trends in Kenya, 2005/06-2015/16*. Government of Kenya.

- Mwaura, P., Okumu, L., & Otiende, E. (2015). *Impact of School Feeding Programs on Student Attendance and Retention in Kenya*. International Journal of Educational Development, 41(1), 104-113.
- Republic of Kenya. (2018). *Education Sector Report: The Status of Educational Access in Kenya*. Ministry of Education.
- Sheng, F. (2016). *The Role of Nutrition in Education: How School Feeding Improves Student Performance*. Journal of Educational Research and Practice, 6(1), 58-67.