

# The Impact of School Feeding Program on School Attendance, Performance and Enrolment: A Case Study of Serenje District Central Province of Zambia

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## Abstract

Provision of education is key to achieving Zambia's Vision 2030, but poverty limits equal access for many children. This study examined the influence of school feeding programmes on pupils' performance in primary schools in Serenje District, Zambia. Guided by Maslow's Basic Needs Theory, it focused on enrolment, attendance, and performance before and after the programme. A mixed-methods approach was used, combining questionnaires, focus group discussions, and semi-structured interviews. The sample included 55 respondents: head teachers, teachers, pupils, parents, and an education official. Data were analysed using tables, graphs, and thematic analysis. Findings revealed increased enrolment and attendance after the introduction of school feeding programmes. Contributing factors included free education, parental support, and improved school facilities. However, some schools reported declines due to poverty, long distances, illness, household chores, and negative attitudes toward education.

**Keywords:** School Feeding Programme, Pupil Performance, Enrolment, Attendance, Primary Education, Zambia, Serenje District, Poverty, Maslow's Basic Needs Theory, Mixed-Methods Research.

## 1. INTRODUCTION

This chapter introduces the chapter to the study, the Background knowledge, the Statement Problem and the Purpose why this study was carried out in Serenje District. To add on, the chapter also presents the Objectives and Research Questions to the study. Not just that, it also shows how Significance will the current study be on the subject matter and furthermore, the Limitations and the Delimitations of the study. Lastly, the chapter outlines and explains the Operational Key Terms used in this paper.

However, the school feeding program has been a vital component of educational development in many countries, including Zambia. The program aims to provide meals to students in schools, improving their nutritional status, attendance, performance, and overall educational experience. This study seeks to investigate the impact of the school feeding program on school attendance, performance, and enrollment in Serenje district, Central Province of Zambia.

### Background of the Study

School feeding programs have been implemented in various parts of the world to address issues of hunger, malnutrition, and poor educational outcomes. These programs have been shown to have a positive impact on students' health, cognitive function, and academic performance. In Zambia, the school feeding program has been implemented in several districts, including Serenje District, with the aim of improving educational outcomes and reducing poverty.

School feeding programs however have been implemented globally, regionally, and nationally to address issues of hunger, malnutrition, and poor educational outcomes. Worldwide, the World Food Programme (WFP) has been a major player in implementing school feeding programs, reaching millions of children in over 60 countries. According to the WFP, school feeding programs can help improve attendance, reduce absenteeism, and increase enrollment rates.

Regionally, in sub-Saharan Africa, school feeding programs have been implemented to address the high prevalence of hunger and malnutrition among school-aged children. The African Union's Comprehensive Africa Agriculture Development Programme (CAADP) has emphasized the importance of school feeding programs in improving educational outcomes and promoting social development.

In Zambia, the school feeding program has been implemented in several districts, including Serenje, with the aim of improving educational outcomes and reducing poverty. The program is designed to provide meals to students in schools, improving their nutritional status and enabling them to focus on their studies. According to the Zambian Ministry of Education, the school feeding program has contributed to improved attendance and enrollment rates in schools where the program has been implemented.

The implementation of school feeding programs in Zambia is also aligned with the country's commitment to achieving the Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger) and SDG 4 (Quality Education). By providing meals to students, the program aims to improve their nutritional status, which is essential for their overall health and well-being.

Overall, the background of the study highlighted the importance of school feeding programs in improving educational outcomes and promoting social development. The study aimed at investigating the impact of the school feeding program on school attendance, performance, and enrollment in Serenje district, Central Province of Zambia.

### **Statement of Problem**

Despite the implementation of the school feeding program in Serenje district, there was limited evidence on its effectiveness in improving school attendance, performance, and enrollment. This study aims to fill this knowledge gap by investigating the impact of the school feeding program on these educational outcomes in Serenje district.

The purpose of this study is to assess the impact of the school feeding program on school attendance, performance and enrollment in Serenje District, Central Province of Zambia. The study aims to provide evidence-based information that can inform policy and programmatic decisions related to school feeding programs in Zambia.

### **Research Objectives**

The specific objectives of this study are:

1. To examine the impact of the school feeding program on school attendance in Serenje district.
2. To investigate the impact of the school feeding program on academic performance in Serenje district.
3. To assess the impact of the school feeding program on enrollment in district Serenje.

### **Research Questions**

The study answers the following research questions;

1. What is the impact of the school feeding program on school attendance in Serenje district?

2. Does the school feeding program improve academic performance in Serenje district?
3. What is the impact of the school feeding program on enrollment in Serenje district?

### **Significance of Study**

This study is significant because it provides valuable insights into the effectiveness of the school feeding program in improving educational outcomes in Serenje district. The findings of the study will inform policy and programmatic decisions related to school feeding programs in Zambia, and contribute to the existing body of knowledge on the impact of school feeding programs on educational outcomes.

### **Limitations**

The study was limited by factors such as data quality, sample size, and potential biases in the data collection process. Additionally, the study may not be generalizable to other districts or contexts.

### **Delimitation**

The study was conducted in Serenje district, Central Province of Zambia, and focused on the impact of the school feeding program on school attendance, performance, and enrollment.

### **Definition of Key Terms**

1. **School feeding program:** A program that provides meals to students in schools.
2. **Attendance:** The number of students present in school on a given day.
3. **Performance:** The academic achievement of students, measured through grades and test scores.
4. **Enrollment:** The number of students registered in school.

### **Chapter Summary**

This chapter has introduced the research, providing an overview of the background, statement of problem, purpose, objectives, questions, significance, limitations, delimitation, and definition of key terms. The next chapter reviewed the literature on school feeding programs and their impact on educational outcomes.

## **2. LITERATURE REVIEW**

This chapter reviews the existing literature on school feeding programs and their impact on educational outcomes. The chapter examines the theoretical and empirical evidence on the effectiveness of school feeding programs in improving attendance, performance, and enrollment.

### **Theoretical Framework**

The study was guided by the Human Capital Theory, which investments in education and health can improve individual productivity and economic growth (Becker, 2014). This theory is relevant to the study of school feeding programs, as it suggests that investments in students' health and nutrition can have long-term benefits for their educational outcomes and future productivity.

Human capital theory emphasizes the importance of education and health in improving individual productivity and economic growth. According to this theory, education and health are forms of human capital that can be invested in to improved individual productivity and

earnings. School feeding programs can be seen as an investment in human capital, as they aim to improve students' nutritional status, cognitive function, and academic performance.

The Human Capital Theory is based on several key assumptions. Firstly, it assumed that individuals make rational decisions about investments in education and health based on expected returns. Secondly, it assumed that education and health can improve individual productivity and earnings. Finally, it assumed that investments in education and health can have long-term benefits for individuals and society.

In the context of school feeding programs, the human capital theory suggests that investments in students' health and nutrition can have long-term benefits for their educational outcomes and future productivity. By improving students' nutritional status, cognitive function, and academic performance, school feeding programs can increase their chances of success in school and beyond.

In the context of school feeding programs, the human capital theory provides a useful framework for understanding the potential benefits of these programs. By investing in students' health and nutrition, school feeding programs can improve their educational outcomes and future productivity, which can have long-term benefits for individuals and society.

### **Empirical Evidence**

Numerous studies have shown that school feeding programs can have a positive impact on educational outcomes. For example, a study in Kenya found that school feeding programs improved attendance and reduced absenteeism. Another study in India found that school feeding programs improved academic performance and reduced dropout rates.

### **Global View Perspectives**

Worldwide, school feeding programs have been implemented to address issues of hunger, malnutrition, and poor educational outcomes. According to the World Food Programme (WFP), school feeding programs can help improve attendance, reduce absenteeism, and increase enrollment rates (WFP, 2020). A study by Adelman et al. (2018) found that school feeding programs can have a positive impact on educational outcomes, including attendance and academic performance.

In sub-Saharan Africa, school feeding programs have been implemented to address the high prevalence of hunger and malnutrition among school-aged children. According to a report by the World Food Programme (WFP, 2020), school feeding programs are a critical component of the region's efforts to improve education and nutrition outcomes.

Sub-Saharan Africa is one of the regions most affected by hunger and malnutrition, with approximately 25% of children under the age of five suffering from stunting due to chronic malnutrition (UNICEF, 2020). School feeding programs have been shown to be an effective way to address this challenge, by providing meals to students in schools and improving their nutritional status.

The African Union's Comprehensive Africa Agriculture Development Programme (CAADP) has emphasized the importance of school feeding programs in improving educational outcomes and promoting social development in Africa. According to CAADP, school feeding programs can help to increase enrollment rates, improve attendance, and reduce dropout rates, particularly among girls (CAADP, 2014).

Several countries in sub-Saharan Africa have implemented school feeding programs, with support from international organizations such as the WFP and the United Nations Children's Fund (UNICEF).

Studies have shown that school feeding programs can have a positive impact on educational outcomes in sub-Saharan Africa. For example, a study by Kristjansson et al. (2007) found that school feeding programs can improve cognitive function and academic achievement in children. Another study by Adelman et al. (2018) found that school feeding programs can increase enrollment rates and improve attendance in schools.

Overall, the regional view highlights the importance of school feeding programs in improving educational outcomes and promoting social development in sub-Saharan Africa. By providing meals to students in schools, school feeding programs can help to address the high prevalence of hunger and malnutrition among school-aged children, and improve their chances of success in school and beyond.

### **Local View (Zambian) Perspectives**

In Zambia, school feeding programs have been implemented to address the high prevalence of hunger and malnutrition among school-aged children. According to the Zambian Ministry of Education (2020), school feeding programs are a critical component of the country's efforts to improve education and nutrition outcomes.

The Zambian government has implemented school feeding programs in several districts, with support from international organizations such as the World Food Programme (WFP) and the United Nations Children's Fund (UNICEF). The programs aim to provide meals to students in schools, improving their nutritional status and enabling them to focus on their studies.

Studies have shown that school feeding programs can have a positive impact on educational outcomes in Zambia. For example, a study by Mumba et al. (2017) found that school feeding programs can improve nutritional status and academic performance in Zambian schoolchildren. Another study by Sichinga et al. (2019) found that school feeding programs can increase enrollment rates and improve attendance in schools.

The Zambian government has also emphasized the importance of school feeding programs in improving educational outcomes and promoting social development. According to the Zambian Ministry of Education (2020), school feeding programs can help to address the high prevalence of hunger and malnutrition among school-aged children, and improve their chances of success in school and beyond.

In addition, the Zambian government has implemented policies and programs to support the implementation of school feeding programs. For example, the government has established a School Feeding Programme Unit within the Ministry of Education, which is responsible for coordinating and implementing school feeding programs across the country (Zambian Ministry of Education, 2020).

Overall, the local view highlights the importance of school feeding programs in improving educational outcomes and promoting social development in Zambia. By providing meals to students in schools, school feeding programs can help to address the high prevalence of hunger and malnutrition among school-aged children, and improve their chances of success in school and beyond.

### **School Feeding Program In Zambia**

In Zambia, school feeding programs have been implemented in several districts, including Serenje. The programs aim to improve educational outcomes and reduce poverty. However, there is limited evidence on the effectiveness of these programs in improving attendance, performance, and enrollment.

**Research Gap:** Despite the implementation of school feeding programs in Zambia, there was limited evidence on the impact of these programs on educational outcomes in Serenje district.

According to a study by Ahmed (2014), school feeding programs can have a positive impact on enrollment and attendance, but the evidence is not conclusive. The study aimed to fill this knowledge gap by investigating the impact of the school feeding program on school attendance, performance, and enrollment in Serenje district.

### **Conceptual Framework**

The conceptual framework for this study is based on the relationship between school feeding programs and educational outcomes. The framework posits that school feeding programs can have a positive impact on students' nutritional status, cognitive function, and academic performance, which in turn can improve their educational outcomes.

### **Explanation of the Conceptual Framework**

The conceptual framework suggests that school feeding programs can have a positive impact on students' nutritional status, which in turn can improve their cognitive function and academic performance. Improved academic performance can then lead to improved educational outcomes, such as increased enrollment rates, improved attendance rates, and reduced dropout rates.

The framework also acknowledges the role of intervening variables, such as socio-economic status of students, quality of education, availability of educational resources, and parental involvement, which can influence the relationship between school feeding programs and educational outcomes.

### **Theoretical Underpinnings**

The conceptual framework is based on the Human Capital Theory, which points that investments in education and health can improve individual productivity and economic growth. The framework is also informed by the nutritional sciences literature, which suggests that adequate nutrition is essential for cognitive function and academic performance.

### **Application of the Conceptual Framework**

The conceptual framework can be applied to understand the impact of school feeding programs on educational outcomes in different contexts. It can also be used to inform the design and implementation of school feeding programs, by identifying the key factors that influence their effectiveness.

Overall, the conceptual framework provides a useful tool for understanding the relationship between school feeding programs and educational outcomes, and for identifying the key factors that influence their effectiveness.

### **Chapter Summary**

This chapter reviewed the literature on school feeding programs and their impact on educational outcomes. The chapter has examined the theoretical framework, worldwide view, regional view, local view, and research gap in the literature. The study aims to contribute to the existing body of knowledge on the impact of school feeding programs on educational outcomes in Zambia.

## **3. RESEARCH METHODOLOGY**

This chapter outlines the methodology used to investigate the impact of school feeding programs on educational outcomes in Serenje district, Central Province of Zambia. The chapter describes the study design, study area, population and sample size, instruments for data collection, sampling techniques, data analysis, and ethical considerations.

### **Study Design**

The study employed a mixed-methods design, combining both quantitative and qualitative approaches. According to Creswell (2014), mixed-methods design is a research approach that combines both quantitative and qualitative methods to achieve a more comprehensive understanding of the research problem. This design allows researchers to triangulate findings, increase validity, and provide a more nuanced understanding of the research problem (Bryman, 2016).

In this study, the quantitative approach provides numerical data on the impact of school feeding programs, while the qualitative approach provides in-depth insights into the experiences and perceptions of stakeholders.

The quantitative approach involved the use of questionnaires to collect data from a large sample of *students, teachers, and parents*, while the qualitative approach will be involved in-depth interviews with key stakeholders, including school administrators and policymakers.

### **Study Area**

The study was conducted in Serenje District Central Province of Zambia. Kothari (2004) defines study area as the geographical location where the study will be conducted. The study area is selected based on the research problem and objectives, and it provides context for the study (Miles & Huberman, 2014). Serenje district was selected for this study due to the presence of school feeding programs and the need to assess their impact on educational outcomes.

### **Population**

Population is known as the entire group of individuals or cases that the researcher is interested in understanding or describing (Creswell, 2014). Therefore, in qualitative research, the population provides the context for the study and helps to define the scope of the research (Polit & Beck, 2012).

Apparently, in the current study, the population consisted of *students, teachers, parents, and school administrators* in Serenje district, Central Province of Zambia. The study focused on primary schools that have been implementing school feeding programs.

### **Sample Size**

Kothari (2004) defines sample size as the number of participants or cases selected from the population to participate in the study. In this case, in qualitative research, the sample size is determined based on the research objectives, design, and methodology (Guest et al., 2016). In the current study, a sample size of 4 headteachers, one educational officer 4 *groups of 6 students, 4 teachers, and 6 parents* were selected for the study using the *Yamane formula* which considers the margin of error and the confidence level.

### **Instruments For Data Collection**

The study used questionnaires and in-depth interviews to collect data from students, *teachers, parents, and school administrators*. According to Creswell (2014), instruments for data collection are tools used to collect data, such as questionnaires, interviews, and observations. The choice of instrument depends on the research question, design, and methodology (Patton, 2022). The study will use the following instruments for data collection:

***Interviews***

In-depth interviews were conducted with key stakeholders, including school administrators and policymakers. The interviews were used to gather qualitative data on the impact of school feeding programs on educational outcomes.

***Questionnaires***

Questionnaires were used to collect quantitative data from students, teachers, and parents. The questionnaires were designed to gather data on the impact of school feeding programs on students' nutritional status, cognitive function, and academic performance.

***Primary and Secondary Data***

The study used both primary and secondary data. Primary data were collected through interviews and questionnaires, while secondary data were obtained from existing literature and reports.

**Sampling Techniques**

The study used a combination of stratified and random sampling techniques to select schools and participants. Kothari (2004) defines sampling techniques as methods used to select participants or cases from the population. The choice of sampling technique depends on the research question, design, and methodology (Etikan et al., 2016).

**Sampling Procedure**

The sampling procedure involved selecting schools that have been implementing school feeding programs, randomly selecting students, teachers, and parents, administering questionnaires, and conducting in-depth interviews. According to Creswell (2014), sampling procedure refers to the steps taken to select participants or cases from the population.

**Methods for Data Presentation**

The study used descriptive statistics and tables, figures, and charts to present the findings. Kothari (2004) defines methods for data presentation as techniques used to present data, such as tables, figures, and charts. Data presentation is critical to communicating findings and facilitating understanding (Patton, 2012). Therefore, in the current study, the study will use descriptive statistics and tables, figures, and charts to present the findings

**Data Analysis**

The study used descriptive and inferential statistics to analyze quantitative data, and thematic analysis to analyze qualitative data. According to Creswell (2014), data analysis is the process of examining and interpreting data to answer research questions or test hypotheses.

**Ethical Considerations**

The study adhered to ethical considerations, including informed consent, confidentiality, and anonymity. According to Polit and Beck (2012), ethical considerations are principles and guidelines that ensure the protection of participants' rights and welfare. Ethical considerations are critical to ensuring the validity and reliability of the study (Miles & Huberman, 2014).

**Reliability And Validity Of Instruments**

The reliability and validity of the instruments were ensured through pilot testing and validation by experts.

The trustworthiness of the study ensured through the use of multiple data sources and methods, including triangulation.

**Chapter Summary**

This chapter outlined the methodology used to investigate the impact of school feeding programs on educational outcomes in Serenje district, Central Province of Zambia. The chapter has described the study design, study area, population and sample size, instruments for data collection, sampling techniques, data analysis, and ethical considerations. The next chapter will present the findings of the study.

#### 4. CONCLUSIONS

School feeding program can significantly boost learner enrolment, attendance and performance in schools by acting as a powerful incentive for parents and addressing basic hunger needs, which can improve concentration and while generally enhancing academic performance through better nutrition that unlocks educational potential by ensuring more children attend school regularly.

The study showed that school feeding program in Serenje District caused a significant increase in school participation because both nutritional and economic values were neglectable relatively to the cost of schooling. However, their impact on grades can be moderated by factors like shortage or poor learning environments, though they consistently reduce absenteeism and improve focus, leading to better education outcomes.

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