

Beyond Hunger: Assessing Influence of School Feeding Programmes on Primary Education Enrolment Rate in Twic East County, South Sudan.

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Abstract:- School feeding programmes attract learners in developing countries, improves enrolment rates, academic performance, nutrition and participation. However, challenges like persistent hunger and food scarcity greatly impede their ability to learn and grow. Therefore, in this paper we investigate the influence of school feeding programme on learners' enrolment rates in primary education in Twic East County, Jonglei State, South Sudan. The paper employed descriptive survey design, the sample size was 371 respondents who included; County Education Director (CED,1), Headteacher (10), Teachers (30), Learners (300), and Parents (PTA, 30). The paper primarily collected data through questionnaires and interviews. The study established that 90% of head teachers, 97% of teachers, 87% of learners, 96% of parents, and one CED acknowledged the presence of the School Feeding Programme (SFP) and meals in primary schools. The paper established that School feeding programmes (SFP) during education in emergencies (EiE) had a positive effect on enrolment rate in primary education in Twic East County, Jonglei State, South Sudan. The paper recommends the upscaling of school feeding programmes to other schools to enhance learners' participation and academic performance in South Sudan.

Keywords:- Beyond Hunger, School Feeding Programmes, Enrolment Rate, Twic East County, South Sudan.

I. INTRODUCTION

School Feeding Programmes (SFP) as noted by Hatløy and Sommerfelt (2017) is a crucial intervention strategy for children's well-being and access to nourishment in educational settings. This approach not only addresses immediate nutritional needs but also aligns with broader educational objectives, fostering an environment conducive to learning and bolstering educational attainment and cognitive development. The school feeding program is recognized for its significant savings in local economies and

human capital, boosting national demand and impacting social stability, peace, national development, and emergency situations, especially in developing countries like South Sudan.

In educational setting, SFP assist Learners in laying a solid foundation and in developing the social skills they were need in adulthood. Most children in South Sudan may never learn these skills since the school was not be attended by all, especially those from displaced and low-income households. The SFP ultimately assist in reducing child beyond hunger and contribute to the goal of eradicating global poverty (UN, 2009).

The United Nations (UN) established 17 global goals in 2015 to address globalization-related issues such as hunger, poverty, health, education, gender equality, urbanization, environment, and social justice (UNESCO,2019). These goals focus on eradicating extreme hunger and poverty, addressing social and economic development challenges, and promoting gender equality, urbanization, and environmental sustainability. The United Nations Hunger Task Force (2008) assert that utilizing local, emergency food sources in school feeding programs, rather than relying on imported food aid, can help achieve the Sustainable Development Goals for education (United Nations Organization, 2015a).

In this paper, we define school feeding programme as an intervention in a school setting, usually short-term, to guarantee children's safety and access to meals in support of educational objectives. While, enrolment rate is defined as the process of registration for a new learner into a particular school or class. Further, learner participation refers to access to education in Twic East County. It involves the enrolment, attendance, retaining, and primary schooling completion by students in Twic East County.

In Africa, no nation has achieved universal primary enrollment, over 90% of countries have higher than-average enrollment rates (Africa Sustainable Development Goals

Three-Year Reality Check, 2019). Nevertheless, a number of nations have percentages that are lower than 90%. The lowest rates are found in Eritrea, Djibouti, and Niger, with respective figures of 41.7%, 51.4%, and 61.8%.

However, South Sudan's enrollment rate at 30.9% is below the regional average. As a result, only access can be evaluated using the data currently available, and school feeding is one of the markers for obtaining high enrollment.

South Sudan faces a lack of essential services such as clean water, health promotion, and food production. Schools lack adequate facilities, affecting children who often go without drinking water due to unsafe boreholes or hand pumps. The government faces challenges in providing clean water to the population, as schools and communities rely on these methods. The UNO highlights the need for improved educational institutions, community involvement, and a running water system to improve the quality of life in South Sudan (UNO, 2015b).

South Sudan is ongoing civil war poses a significant threat to 85% of its children and women, leading to starvation, sickness, and malnutrition. To alleviate this, the South Sudan Humanitarian Fund prioritized areas experiencing displacement or famine, with 25 priority counties chosen based on IPC data, GAM rates, and disease outbreaks. Boys in South Sudan are more likely to drop out of school due to hunger than females (National Education Assessment, 2016; SSEC, 2017).

Therefore, Twic East County in Jonglei State, South Sudan, experiences low primary school attendance due to ongoing civil wars, cattle raiding, and flooding. These conflicts cause massive displacement and obstruct education services, leading to a high number of learners not attending primary education. This emergencies situation may have a drastic decrease in enrolment rates among learners with limited access to education participation. In light of this, we aim to investigate the influence of school feeding programme on enrolment rates in primary schools in Twic East County in Jonglei State.

II. SCHOOL FEEDING PROGRAMMES AND LEARNERS' ENROLMENT RATE

The process of enrolling a new learner into a specific school or class is known as the enrolment rate. For providing incentives for school enrolment and attendance, as well as by enhancing overall attentiveness and learning capacity. Sachs (2005) asserts that SFP solely benefited impoverished children. Adelman et al., (2008) found that in Bangladesh, student enrollment increased to 20% from 2% at schools where free meals were not provided.

A study was conducted in Uganda to assess the school feeding programmes impact on learners' engagement. Enrollment in gross primary schools and net primary school enrollment, two common measures of student enrollment, are used to analyze the effects on admission. Gross enrollment represents the number of children attending a

particular elementary school as a percentage of the total number of children between the ages of 6 and 13 in the school's attendance zone. This ratio may be higher than one since many children participate in primary school after the traditional cut-off age of 13 due to early or late enrolment, breaks in education, and grade repetition. The proportion of children aged 6 to 13 who are enrolled in primary school to all the children in the service area of the school is known as net enrolment (Adelman, et al. 2010).

According to Osei-Fuso (2011), programmes of providing food to learners including the rest of the nutritionist and health initiatives offered through schools encourage guardians and parents to the kids to register kids in classes as well as to make sure they learn consistently. Food prizes for excellent attendance at school have been shown in case studies by the World Food Programme in many West African countries, including Niger to significantly improve enrolment (WFP, 2019). The paper argued that meals served in school have a considerable positive impact on metrics like exam results and completion and continuation of basic school into secondary education rates Particularly in the early grades, enrolment is higher in the schools that provided school meals.

The school feeding program is a joint effort between the World Food Programme (WFP) and the Ministry of General Education and Instruction (MOGEI). WFP is aiding the government in creating a homegrown school meals plan to improve children's access to education via school meals cooked using locally produced food. As a result of the creation of the HGSM (WFP, 2019) Strategy, WFP's collaboration with the government: additional important ministries, including those in charge of gender, children, and social welfare, food security, and agriculture.

Funded by the European Union, the Education in Emergencies initiative is a joint effort between the World Food Programme and the United Nations Children's Fund (UNICEF) to enhance educational opportunities and outcomes in crisis zones like South Sudan. Food, education, and infrastructure upgrades are all part of the initiative.

School feeding programmes increase enrolment while also influencing the age at entry by luring in kids at the appropriate developmental stage. It's possible for kids to start preschool considerably later than what's suggested in underdeveloped nations like Ethiopia for a variety of reasons. Some of the reasons why children do not join at the recommended age include a lack of financial support, a lack of available daycare, and a lack of parental education on the benefits of early enrollment (Adelman et al., 2008).

III. OBJECTIVES

The purpose of the paper is to evaluate the influence of school feeding programmes on learners' enrollment rates in public primary schools in Twic East County, South Sudan. The specific objectives are:

- To determine the level of implementation of the school feeding program and the learners' enrolment rates in

primary schools in Twic East County, Jonglei State, South Sudan.

- To investigate the contribution of school feeding programs in learners' enrolment rates in primary schools in Twic East County, Jonglei State, South Sudan.

IV. METHODOLOGY

The study used a descriptive survey design to explore how a school feeding program in South Sudan affects primary school enrollment rates. The research design involves gathering information from teachers, students, parents and county education officers about the influence of the school meal programme on primary school enrollment rates in Twic East County, Jonglei State, South Sudan. A descriptive survey was conducted to examine and confirm the characteristics of a population by gathering samples as noted by Mugenda and Mugenda (2003).

Mugenda and Mugenda (2003) define a target population as a group of individuals, events, or objectives with common observable characteristics. The target population of this study consists of fifteen (15) primary schools in Twi East County consisting of fifteen (15) Headteachers, 81 teachers, and 3,100 learners both IDPS,

Host communities from Primary one (P1) to primary eight (P8) in Primary schools and 165 Parents-teachers' association members (County Education Director, 2022).

Orodho (2002) defines sampling as the selection of a predetermined number of people from a population to represent the study population. A sample is a small part of the target population chosen for examination, and conclusions drawn from the sample should apply to the entire population. This study considered all fifteen (15) primary schools in Twic East.

The study involved a total of 67% participation from 10 headteachers from fifteen primary schools in Twic East County, 37% from 81 teachers, and 300 learners from P1 to P8 in the 15 primary schools. A total of 30 parents from the total population, representing 18%, were also included in the study. The County Education Director was considered as respondents. The study aimed to understand the effectiveness of various teaching methods and strategies in promoting student learning. The study involved 371 respondents, accounting for 11% of the total population, following Gay & Airasian (2003) guidelines, as depicted in Table 1.

Table 1. Sample Size

Category	Population	Sample Size	Percentage
County Education Director (CED)	1	1	100%
Headteacher	15	10	67%
Teachers	81	30	37%
Leaners	3,100	300	10%
Parents (PTAs)	165	30	18%
Total	3362	371	11%

The paper utilized questionnaires and interviews as research tools, the data was collected from head teachers, teachers, and students through questionnaires. While, interview schedules were used for the County Education Director and Parents. The study utilized research tools to gather data from respondents to assess the influence of a school feeding program on primary school learners' enrolment rate in Twic East County, Jonglei State, South Sudan.

The study ensured the content validity of research instruments by having them evaluated by supervisors and experts in the field of education in emergencies (EiE) to ensure that the questionnaires accurately answer the intended questions. While, the study used a test-retest reliability test to assess the reliability of instruments. The instrument was administered to the same group twice, with the second administration completed a week later. This ensured the instrument's accuracy and consistency in measuring variables under the same conditions. Further, the Pearson Product-moment correlation formula was used to correlate the responses from two sets of data to assess the reliability through the coefficient values. The reliability coefficient was calculated using a formula between +1 and -

1, indicates the instrument's trustworthiness for data collection. For this study, a coefficient above 0.7 was considered sufficient to confirm the instruments' reliability.

This study analyzed data using descriptive statistical techniques using SPSS for quantitative data and content analysis for qualitative data. Results from questionnaires were presented in percentages, frequencies, tables, and figures, while interview guides were coded and organized into thematic categories. Audio recordings from interviews with County Education Director and Parents were transcribed and coded for data analysis. The study aimed to provide a comprehensive understanding of the phenomena under scrutiny.

Kothari (2004) emphasizes on respect for participants, informed consent, anonymity, and secrecy. The study involved all participants who provided consent, informed them of their right to withdraw without penalties, and kept their data private for academic purposes.

V. FINDINGS AND DISCUSSIONS

The study's findings are based on the specific objectives, which are as follows: 1) To determine the level of implementation of the school feeding program and the learners' enrolment rates in primary schools in Twic East County, Jonglei State, South Sudan. 2) To investigate the contribution of school feeding programs in learners' enrolment rates in primary schools in Twic East County, Jonglei State, South Sudan. The paper aimed to investigate

the effect of school feeding programs on enrollment rates in Twic East County. Participants from all categories were included in the study, and the data collected was analyzed and presented in the following sections.

Responses from Teachers and Learners on the Influence of School Feeding Program (SFP) on Learners' Enrolment Rate. The data on teachers and learners was analyzed and presented in Figure 1.

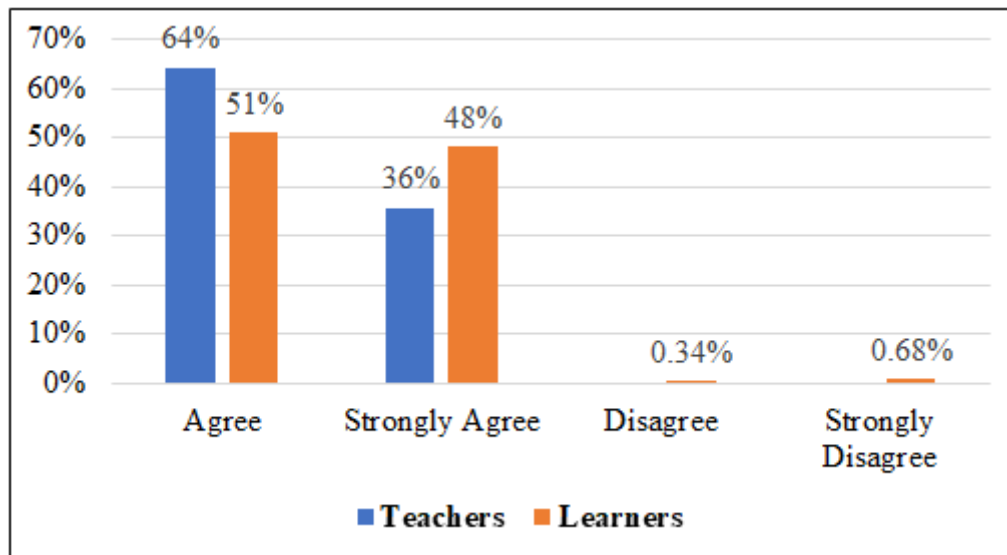


Fig 1: Teachers and Learners' Responses on Learners' Enrolment Rate

According to Figure 1, most teachers (64%) and learners (51%) agreed that the school feeding programme (SFP) had a positive influence on learner enrolment in primary education. Additionally, 36% of teachers and 48% of learners strongly agreed that the SFP significantly influenced enrolment in primary schools. These results indicate that providing the school feeding programme during education in emergencies (EiE) effectively increased learner enrolment in primary schools in Twic East, South Sudan.

During the parent interview schedule, it was revealed that, *"the school feeding programme (SFP) has a significant effect on the enrollment rates of learners. Additionally, parents emphasized that while the SFP does have positive effects on enrollment, there is still room for improvement"*.
Parent 2023.

The results showed that including a school feeding program as part of education in emergencies (EiE) had a moderate effect on increasing the enrollment rate of primary school learners in Twic East County. However, CED reported that the enrollment rate of learners in Twic East County, Jonglei State, South Sudan was still low. The findings suggested that although education in emergencies (EiE) and the provision of a school feeding program partially addressed the enrollment gap and improved students' participation in primary education in Twic East, Jonglei State, South Sudan.

Further, Headteachers' Responses on the Influence of the School Feeding Program on Learners' Enrolment Rate. The information collected from the head teachers was organized and presented in Figure 2.

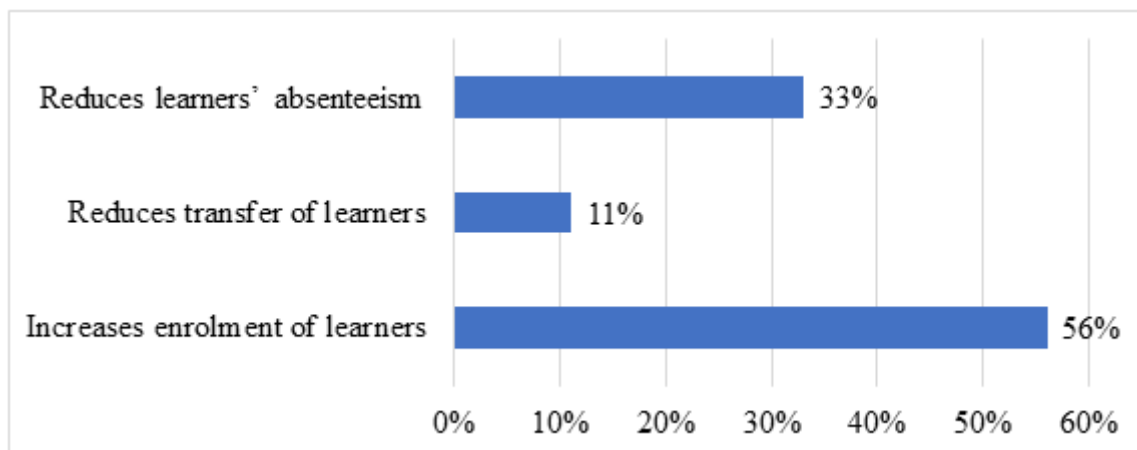


Fig 2: Headteachers' Responses on Influence of SFP on Enrolment Rate

The results presented in Figure 2 indicate that 56% of head teachers observed an increase in the enrollment rate of students in primary schools in Twic East County due to the implementation of the school feeding program (SFP) during education in emergencies (EiE). Notably, the SFP during EiE played a crucial role in fostering greater student enrolment in primary education. Furthermore, these findings suggest that the school feeding program, which has been implemented in some primary schools, has positively influenced the enrollment rates of primary education learners in Twic East County.

Moreover, the study found that implementing the School Feeding Programme (SFP) as part of Education in Emergencies (EiE) was crucial in learners' enrolment. It enabled students to remain in their current schools instead of having to transfer to different schools. Thus, SFP created stability and continuity within the school environment and potentially increased students' motivation to enroll and continue their primary education during times of emergency. Consequently, the paper concluded that reducing the rate of enrollment rates minimized the necessity for students to transfer to other schools and significantly influenced primary education enrollment rates in Twic East County.

These findings support Alderman, Gilligan, and Lehrer (2012) that in Uganda, school-based food distribution increased enrolment to 20% in participating schools, compared to only 2% in non-participating schools. Further, the findings align with the perspectives shared by parents during the interview. They expressed that school feeding programs have a positive effect on learner enrollment. This is attributed to the fact that learners greatly enjoy the meals and are more likely to attend school when they are assured of being fed. Moreover:

“Many children are unable to go without food from morning until noon, so school feeding programs ensure that learners are adequately nourished and able to concentrate on their studies. Consequently, school feeding programs contribute to an increase in the number of learners attending school and enhance their academic performance” (Parent, 2023).

Similarly, the responses from CED revealed that;

“The school feeding program enables learners in primary schools to register in schools where free meals are available. Therefore, the school feeding program plays a significant role in addressing education in emergencies by encouraging more learners to enroll in primary education. Consequently, in Twic East County, the number of learners has increased since the inception of the school feeding programs”. (CED, 2023).

The findings suggest that implementing a school feeding program in Twic East, Jonglei State, South Sudan, during education in emergencies (EiE) is a cost-effective way to improve educational outcomes. This program provides nutritious meals to learners, reduces absenteeism, improves concentration, and enhances academic performance in Twic East County. Additionally, school feeding programs contribute to developing a more educated and productive workforce, leading to long-term economic benefits for primary education in Twic East County, Jonglei State, South Sudan.

Further, the findings of the study support those of Del-Rosso (2013), which suggests that school-based nutrition and health initiatives, such as school feeding programs, are vital in encouraging regular attendance among students. These programs effectively address short-term hunger in underweight children, as well as promoting the overall health of all students. Consequently, students experience improved concentration and awareness, leading to enhanced cognitive function and learning. Furthermore, when these programs successfully reduce absenteeism and extend the school day, they also improve educational outcomes, including academic achievement, reduced drop-out rates, and fewer repetitions. Also, Bundy et al., (2018) found out that the study's findings confirm that school feeding programs have been proven to increase enrollment by an average of 9% and can help children enter and stay in school.

VI. CONCLUSION AND RECOMMENDATIONS

The study aimed to determine the influence of school feeding programs (SFP) on primary education enrollment rates as its first objective. The paper concluded that majority of teachers (64%) and of learners (51%) agreed that SFPs positively influenced enrollment rates. The school food program (SFP) significantly affected primary school enrollment rates, with 56% improvement in enrollment and a 33% decrease in student absences. However, some head teachers reported that the program reduced learners' transfers to neighboring schools, as they received meals at primary schools in Jonglei State, South Sudan.

The study found that providing school feeding programs (SFP) during education in emergencies (EiE) had a positive influence on enrollment rates in primary education in Twic East County. This means that the SFP is a valuable tool that creates a nourishing educational environment, allowing children to take advantage of educational opportunities and reach their full potential in primary education in Twic East County, South Sudan.

The paper recommends that School Feeding Programmes(SFP) need to be upscaled to other schools as a valuable tool for improving learners' enrolment rate during education in emergencies (EiE) in Twic East County, South Sudan.

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