The Extent Implementation of School Based Feeding Program: An Assessment Among Elementary Schools in Kabugao District II

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ABSTRACT

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| --- |
| In the Philippines, childhood malnutrition is still a major problem, especially in areas that are economically and geographically deprived. Under the direction of the Department of Education, the School-Based Feeding Program (SBFP) seeks to increase schoolchildren's attendance and academic achievement while also addressing undernutrition. During the 2022–2024 academic year, this study evaluated the degree of SBFP implementation and its effects in 13 public elementary schools located in Kabugao District II, Apayao, Philippines. Its particular objectives were to assess the nutritional condition of beneficiaries both before and after the program, as well as to examine variations in program implementation among school categories, staff profiles, and parental engagement. Data were gathered from 103 respondents—including school heads, instructors, and PTA officers—using a descriptive survey approach and validated questions that were modified from DepEd Order No. 39, s. 2017 with the addition of unofficial interviews. Frequency, mean, standard deviation, one-way ANOVA, and t-tests were used to examine quantitative data. SBFP was largely implemented. Program reporting and supplementary activities were only partially completed, while core activities like proper eating, food safety, and life skills training were successfully carried out. The number of teachers, school type (primary vs. complete), and school categorization (monograde vs. multigrade) all had a significant impact on implementation, but neither did the number of PTA officers or school leaders. Following implementation, the number of severely wasted and wasted students dropped from 71 to 49, indicating a slight improvement in nutritional outcomes. The need for additional program modification is indicated by the fact that the change was not statistically significant (p = 0.303). Comparison research showed that because comprehensive and multigrade schools had superior staffing and resources, they were able to execute their programs at higher levels. Implementation was more difficult at schools with fewer teachers or that were primary or monograde, which probably had an impact on nutritional results. Additionally, the degree of adoption was not substantially impacted by the number of PTA and school heads, underscoring the significance of operational systems over structural headcounts. Insufficient meal facilities, inadequate utensils, a lack of staff, and poor parental involvement were major obstacles, especially in rural and monograde schools where teachers frequently handled the program's operating duties. Furthermore, the collaborative model that is necessary for program success was weakened because many parents were unable to fulfill their agreed-upon participation commitments because of conflicting duties. In conclusion, even though Kabugao District II's SBFP has excellent foundational implementation, its nutritional impact is still restricted in the absence of strong stakeholder engagement, sufficient infrastructure, and reliable implementation. Increased funding flexibility, daily milk supplementation, dual SBFP coordinators, integration of Barangay Health Workers for monitoring, and improved community engagement through LGU-partnered resolutions are all suggested by the study as ways to improve program effectiveness. These enhancements are necessary to maintain and expand the beneficial impacts of the SBFP on long-term development outcomes, educational participation, and child health. |

*Keywords: School-Based Feeding Program, nutritional status, program implementation, educational management, malnutrition intervention*

1. INTRODUCTION

Childhood malnutrition is an immediate, lifetime, and intergenerational concern. Undernutrition increases risk of diseases, hampers cognitive development, and leads to considerable economic losses. Inadequate nutrition has also been linked to poor education outcomes, and crucial element of poverty reduction.

Globally, over 618 million people experienced hunger in 2019 (World Health Organization 2024). The prevalence of under nourishment has since increased from 8.0% before the coronavirus disease (COVID-19) pandemic to 9.8% in 2021 [2]. Chronic hunger leads to negative childhood nutritional outcomes, such as being under weight for one’s age, and stunting, being short for one’s age (

Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development (IFAD), United Nations Children’s Fund (UNICEF), World Food Programme (WFP), & World Health Organization (WHO). (2020). Today more than 55% of people facing hunger live in Asia, 8 and 24.7% of children in Southeast Asia are considered stunted, higher than the global average (Food and Agriculture Organization of the United Nations 2022).

The Republic of the Philippines is a country with a high incidence of poverty. It is an archipelago in the southwestern Pacific Ocean that includes some 7,000 islands. Geographical divisions are basically com posed of a pyramidal structure, with 18 regions including an autonomous district or a metropolitan area, 81 provinces, and small government units called municipalities and barangays( Yamaguchi, M., & Takagi, A. (2018). In 2015, the population was over one hundred million, and nearly 27% of the land in the country is used for agriculture, forest-related industries, or fisheries. The gross domestic product (GDP) and GDP per capita in 2015 were about 2,925 hundred million US dollars and 2,858 US dollars, respectively, which have been gradually increasing year by (Yamaguchi, M., & Takagi, A. (2018). Concerning nutritional status, rates of stunted and underweight children are approximately 30%, though these rates have gradually decreased, and the rate of being wasted has continued to increase since 2005 (Food and Nutrition Research Institute. (2015).

To resolve these poor nutritional situations, the Department of Education (DepEd) in the Philippines has carried out the School-Based Feeding Program (SBFP) and discloses the guidelines of the SBFP every year (Tabunda, A. M., Albert, J. R., & Angeles-Agdeppa, I. (2016) According to them, the DepEd started its first feeding program in 1997, and its original aim was to provide breakfast for short-term hunger among public school children. That program was called the Breakfast Feeding Program (BFP). Through the next several years, this program gradually varied, with changes in the target beneficiaries, coverage, and service delivery mode (Tabunda, A. M., Albert, J. R., & Angeles-Agdeppa, I. (2016). In particular, the program was renamed from the BFP to the SBFP and it functioned so as not to limit breakfast time in school years 2012-2013(Department of Education. (2012). Moreover, the beneficiaries and budget were scaled up in the SY 2015-2016 and 2016-2017. In the newest guideline, the adaptation period of the SBFP has changed from every year to 5 years, though the evaluation is practiced every year (Department of Education. (2016).

As the implementation of SBFP by the DepED took place, they emphasized the goals of the program which are: 1. to rehabilitate at least 70% of the severely wasted beneficiaries to normal nutritional status at the end of 100 to 120 feeding days; 2. to ensure 85% to 100% classroom attendance of beneficiaries; and 3. to improve the children's health and nutrition values and behavior (Department of Education. (2016).

School feeding programs (SFPs) were originally started for hungry children. In the most impoverished regions of the world, hunger is a serious problem and many people are hungry (Taras, H. (2005). To deal with this unfavorable situation, the United Nations Millennium Declaration was adopted in 2000, and some goals, such as the eradication of poverty and hunger were established (Van, V. T., Siguin, C. P., Lacsina, A. C., Yao, L. F., Sales, Z. G., Gordoncillo, N. P., Advincula-Lopez, L., Sescon, J. T., & Miro, E. D. (2022). In some cases, following this declaration, evidence has shown that SFPs have provided nutritional, health, and educational impacts on the diets and nutrition of school-aged children.

The benefits of school feeding programs, emphasizing their role in alleviating short-term hunger, incentivizing school attendance, and potentially enhancing cognitive development (Adelman, S., Gilligan, D., & Lehrer, K. (2008). In addition, the pivotal contribution of these programs to children’s nutritional status and overall health. It was then underscored the positive impact of proper nutrition on academic performance highlighting the significant role of school feeding programs in alleviating hunger and improving educational quality (Bundy, D. A. (2009), Shahid, B. (n.d.), Taras, H. (2005), Ahmed, A. U. (2004).

In examining the contextual factors influencing academic performance, it was emphasized the extensive effects of school feeding programs in the Philippines, particularly addressing poverty-related factors [16]. Despite contextual differences, parent’s and children’s perceptions suggests positive feedback regarding the potential influence of feeding programs on academic performance in a specific setting( Poppe, R., Frölich, M., & Haile, G. (2019)Insights into nutrition program implementation during the COVID-19 pandemic has positive outcomes from the Department of Education’s School-Based Feeding Program in the Philippines collectively highlight the need for tailored research to address existing gaps and comprehensively understand the impact of school-based nutrition programs on academic success [18, 19, 20].( Francis & Pegg (2020), Rector et al. (2021), Tabunda, Albert, & Angeles-Agdeppa (2016).

At present, DepED targets severely wasted pupils and, to the extent that the program budget allows, moderately wasted or wasted pupils for its feeding programs. Severely wasted children are those whose weight-for height is below minus 3 standard deviations from the median weight-for-height of reference population, while moderately wasted children have weight-for-height below minus 2 standard deviations from the median weight-for height (Department of Education. (2017). DepED uses the World Health Organization (WHO) weight-for-age tables for pre-elementary school children aged 5 years old and below and the WHO Body Mass Index–for-age tables for pre-elementary, elementary and secondary students aged 6 to 19 years old in determining nutrition status (Department of Education. (2017, August 7). DepEd Order No. 39, s. 2017).

Under the GPP, beneficiary schools are to grow vegetable gardens that contain at least 50 malunggay trees, other vegetables as well as fruits. The malunggay, other vegetables, and fruits are to be used in the food to be served the children. The EHCP, on the other hand, advocates simple and cost-effective health interventions that promote cleanliness and prevent sickness among students (Department of Education. (2017, August 7). DepEd Order No. 39, s. 2017).

By examining the extent of implementation of the School-Based Feeding Program particularly at Kabugao District 2, this study aims to provide valuable insights into its effectiveness, challenges, and areas for improvement. It seeks to evaluate key factors influencing its execution, such as resource allocation, logistical efficiency, and student engagement, while also assessing its impact on classroom participation, cognitive development, and overall student well-being. By identifying both strengths and limitations, this research will offer recommendations that support the sustainability and long-term success of the program. Ultimately, the study aspires to contribute to the enhancement of school feeding initiatives, ensuring they fulfill their purpose of promoting equitable access to nutrition, fostering student health, and improving academic performance in educational settings.

2. STATEMENT OF THE PROBLEM

Generally, this study assessed the school-Based Feeding Programs implemented in elementary Schools in Kabugao District 2 over the past two school years.

Specifically, it sought to answer the following questions:

1. What is the profile of the school in terms of?
   1. Classification of the school

* Multigrade
* Complete grade
  1. Number of teachers
  2. School heads
  3. PTA Officials

1. What is the respondent’s assessment of the extent of implementation of school-based feeding program?
2. Is there a significant difference in the respondents’ assessment of the extent of implementation of SBFP?
3. What is the nutritional status of the beneficiaries before and after the implementation of the SBFP?
4. Is there a significant difference in the beneficiary’s nutritional status before and after the implementation of the SBFP?
5. What are the challenges encountered in the implementation of the SBFP?
6. What are the recommendations to improve the implementation of SBFP?

**2.1 HYPOTHESES**

The study was guided by these hypotheses:

**1.**There is no significant difference in the respondents’ assessment of the extent of implementation of the SBFP.

2. There is no significant difference in the beneficiary’s nutritional status before and after the implementation of the SBFP.

3. METHODOLOGY

3.1 Research and DESIGN

The study made use of descriptive survey-method of research to determine the extent of implementation of School-based Feeding Program (SBFP) among public elementary schools in Kabugao District 2, School Year 2022-2024.

3.2 Locale of the Study

The study was conducted in the 13 Elementary schools of Kabugao District II.

Table 1: Classification of Elementary schools in Kabugao District II

|  |  |
| --- | --- |
| **Classification** | **Name of School** |
| Monograde | Lenneng Elementary School |
| Taracay Primary School |
| Kalliat Integrated School |
| Binuan Elementary School |
| Baduat Elementary School |
| Multigrade | Banan Elementary School |
| Paco Valley Elementary School |
| Guimitan Primary School |
| Magbata Elementary School |
| Waga Elementary School, |
| Mallag Primary School |
| Dangla Elementary School |
| Kumao Elementary School |

3.3 Respondents of the study

There were 103 respondents of the study consisting of six (6) School Heads, fifty-eight (58) Teachers, and thirty-nine (39) Parent-Teachers- Association (PTA) officers, (PTA President, Vice President and Secretary) from the thirteen (13) selected Public Schools of Kabugao Distric II distributed as follows:

Table 2: Number of Respondents in Public Schools of Kabugao District II

|  |  |  |  |
| --- | --- | --- | --- |
| Name of school | Number of school heads | Number of teachers | School’s PTA Officers |
| 1. Banan E/S | 1 | 4 | 3 |
| 1. Taracay P/S |  | 3 | 3 |
| 1. Paco Valley P/S |  | 4 | 3 |
| 1. Kalliat Is | 1 | 7 | 3 |
| 1. Lenneng E/S | 1 | 8 | 3 |
| 1. Guimitan P/S |  | 2 | 3 |
| 1. Badduat E/S | 1 | 7 | 3 |
| 1. Mallag PS |  | 2 | 3 |
| 1. Culilimtao E/S |  | 3 | 3 |
| 1. Binuan E/S | 1 | 7 | 3 |
| 1. Dangla E/S |  | 4 | 3 |
| 1. Magabta E/S | 1 | 3 | 3 |
| 1. Waga E/S |  | 4 | 3 |
| **TOTAL** | **6** | **58** | **39** |
| **Overall Total 103** | | | |

3.4 Research instrument

The researcher used a questionnaire adapted from the Operational Guidelines in the Implementation of the School-Based Feeding Program as stipulated in DepEd Order No. 39, s. 2017. Part 1 consists of the assessment of the implementation of school-based feeding programs while part 2 of the questionnaire are open-ended questions on the challenges encountered and recommendations on how to improve the implementation of the SBFP.

3.5 DATA GATHERING PROCEDURES

The researcher sought the permission of the Public Schools District Supervisor (PSDS) of Kabugao District 2 and all the school Heads concerned for the conduct of the study. After which, the questionnaires were administered and retrieved by the researcher to the respondents in the different schools.

The profile of the school was obtained from the records and reports of the elementary schools and informal interviews were also conducted to substantiate data from the survey questionnaires. The data was tabulated, consolidated and analyzed by the researcher with the assistance of a statistician.

3.6 DATA ANALYSIS

Frequency and percentage distribution were employed to determine the profile of the school while mean and standard deviation were used to assess the extent of implementation of the SBFP. Moreover, one-way Anova was employed on significant difference of the respondents’ assessment of the SBFP extent of implementation. Rank was used on problems encountered in the implementation of SBFP in the elementary schools and measures recommended to improve the implementation of SBFP in public elementary schools in Kabugao District 2.

**4. RESULT AND DISCUSSION**

**1.PROFILE OF THE PUBLIC ELEMENTARY SCHOOLS IN KABUGAO DISTRICT II.**

**1. Profile of the Public Elementary Schools in Kabugao District II**

***Table 3.*** ***Profile of the public elementary schools in Kabugao 2 in terms of classification of the schools.***

|  |  |  |
| --- | --- | --- |
| **Name of school** | **Classification** | |
| **(Complete or Primary)** | **(Monograde or Multi-Grade)** |
| Banan Elementary School | Complete | Multi-grade |
| Taracay Primary School | Primary | Monograde |
| Paco Valley Elementary School | Complete | Multi-grade |
| Kalliat Integrated School | Complete | Monograde |
| Lenneng Elementarys School | Complete | Monograde |
| Guimitan Primary School | Primary | Multi-grade |
| Badduat Elementary School | Complete | Monograde |
| Mallag Primary School | Primary | Multi-grade |
| Culilimtao Elementray School | Complete | Multi-grade |
| Binuan Elementary School | Complete | Monograde |
| Dangla Elementray School | Complete | Multi-grade |
| Magabta Elementary School | Complete | Multi-grade |
| Waga Elementary School | Complete | Multi-grade |

Table 3, the public elementary schools in Kabugao District II show a diverse classification in terms of school type and instructional setup. Out of the 13 schools, 10 are classified as complete schools offering pupils from Kindergarten through Grade 6, with 4 operating under a monograde system and 6 under a multigrade setup. The remaining 3 schools are classified as primary schools, with one operating as a monograde school (up to Grade 3) and two as multigrade schools (up to Grades 3 and 4), where teachers handle multiple grade levels. This distribution implies varying teaching conditions and resource needs, particularly in multigrade schools where teachers manage multiple grade levels simultaneously. These variations in school structure may influence the effectiveness and implementation of the School-Based Feeding Program (SBFP), as multigrade settings could pose additional logistical and instructional challenges that need to be considered when assessing the program's impact and sustainability. These results aligned in the study of [23], which emphasized that the extent of School-Based Feeding Program (SBFP) implementation is influenced by the type and structure of schools, particularly in multigrade settings where teachers face added instructional demands. Gahite's findings suggest that variations in school classification can significantly impact the efficiency and delivery of feeding programs, thereby affecting students' nutritional outcomes and learning achievements.

***Table 4.*** ***Profile of the public elementary schools in Kabugao District 2 in terms of number of employees***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of school** | **Number of Employees** | | | |
| **School Head/Principal** | **Teachers** | **Staff** | **Total** |
| Banan Elementary School | 1 | 4 | 1 | 6 |
| Taracay Primary School | 3 | 1 | 4 |
| Paco Valley Elementary School | 4 | 1 | 5 |
| Kalliat Integrated School | 1 | 7 | 1 | 9 |
| Lenneng Elementarys School | 1 | 8 | 1 | 10 |
| Guimitan Primary School | 2 | 1 | 3 |
| Badduat Elementary School | 1 | 7 | 1 | 9 |
| Mallag Primary School | 2 | 1 | 3 |
| Culilimtao Elementray School | 3 | 1 | 4 |
| Binuan Elementary School | 1 | 7 | 1 | 9 |
| Dangla Elementray School | 4 | 1 | 5 |
| Magabta Elementary School | 1 | 3 | 1 | 5 |
| Waga Elementary School | 4 | 1 | 5 |

As shown in Table 4 the highest concentration of employees is found at Lenneng Elementary School, followed by Badduat Elementary School, Kalliat Integrated School, and Binuan Elementary School. These schools host the main campus or are where the school heads are primarily stationed, which explains the higher staffing levels. In contrast, schools such as Banan Elementary School, Taracay Primary School, Paco Valley Elementary School, and others have fewer than ten employees due to significantly lower student enrollment. This distribution implies that staffing is influenced by both administrative centralization and enrollment size, which affect the consistency and efficiency of the School-Based Feeding Program (SBFP) implementation across schools, with larger schools likely having more resources and personnel to support program delivery. These results aligned in the study of [23], who emphasized that the extent of School-Based Feeding Program (SBFP) implementation is significantly influenced by the availability of human resources and organizational support within schools. Gahite’s findings support the idea that schools with more personnel—particularly those with assigned school heads and higher numbers of teachers—tend to exhibit more structured and consistent implementation of the SBFP.

***Table 5.*** ***Profile of the public elementary schools in Kabugao District 2 in terms of Number of School Head/Principal***

|  |  |
| --- | --- |
| **Name of school** | **School Head/Principal** |
| Banan Elementary School | 1 |
| Taracay Primary School |
| Paco Valley Elementary School |
| Kalliat Integrated School | 1 |
| Lenneng Elementarys School | 1 |
| Guimitan Primary School |
| Badduat Elementary School | 1 |
| Mallag Primary School |
| Culilimtao Elementray School |
| Binuan Elementary School | 1 |
| Dangla Elementray School |
| Magabta Elementary School | 1 |
| Waga Elementary School |

Based on Table 5., a single school head is assigned to oversee multiple schools in the implementation of the School-Based Feeding Program (SBFP). Specifically, school heads are responsible for managing as few as one and as many as three schools each. This distribution suggests potential challenges in effective monitoring and program execution, as the workload and scope of responsibility may stretch the capacity of each school head. The implication is that the efficiency and quality of SBFP implementation may vary across schools. It highlights the need for either additional personnel or support mechanisms to ensure optimal program oversight and effectiveness across all participating schools. These results align with the study of [23], which examined the extent of School-Based Feeding Program implementation on students’ learning outcomes and academic performance. Gahite emphasized that challenges in program execution—such as limited personnel and overlapping responsibilities—can negatively affect the consistency and impact of feeding initiatives. Similarly, the finding that a single school head is assigned to manage multiple schools in Kabugao District 2 highlights a structural concern that may compromise the efficiency and quality of the SBFP’s implementation.

***Table 6. Profile of the public elementary schools in Kabugao District 2 in terms of Number of PTA officers.***

|  |  |
| --- | --- |
| **Name of school** | **Number of PTA Officers** |
| Banan Elementary School | 3 |
| Taracay Primary School | 3 |
| Paco Valley Elementary School | 3 |
| Kalliat Integrated School | 3 |
| Lenneng Elementarys School | 3 |
| Guimitan Primary School | 3 |
| Badduat Elementary School | 3 |
| Mallag Primary School | 3 |
| Culilimtao Elementray School | 3 |
| Binuan Elementary School | 3 |
| Dangla Elementray School | 3 |
| Magabta Elementary School | 3 |
| Waga Elementary School | 3 |

The data in Table 6 reveals that all public elementary and primary schools in Kabugao District 2 have a uniform number of PTA officers, with each school having three officers. This consistency suggests a standardized approach in organizing parental involvement across the district. The uniform presence of PTA officers may imply that all schools are equally equipped in terms of parental support and participation, which can play a significant role in the successful implementation and monitoring of programs like the School-Based Feeding Program. Strengthening the role of these PTA officers could further enhance community involvement and contribute positively to the nutritional outcomes of student beneficiaries. These results align with the study of [24], which emphasized the significance of consistent parental involvement through organized structures such as the Parent-Teacher Association (PTA). The presence of PTA officers in all schools strengthens the support system necessary for effective implementation of the School-Based Feeding Program. Flores highlighted that active parental engagement not only ensures better program monitoring but also reinforces nutritional education at home, leading to improved health outcomes among student beneficiaries.

**2. ASSESSMENT OF THE EXTENT OF IMPLEMENTATION OF SCHOOL-BASED FEEDING PROGRAMS IN THE SCHOOL**

***Table 7.*** ***Assessment of the Extent of Implementation of School-Based Feeding Programs in the School***

|  |  |  |
| --- | --- | --- |
| **SBFP ACTIVITIES** | **MEAN** | **DESCRIPTIVE INTERPRETATION** |
| 1. Pre-activities | 2.65 | Fully Implemented |
| 1. Feeding proper | 2.69 | Fully Implemented |
| 1. Food Production and Process | 2.67 | Fully Implemented |
| 1. Adherence to Food Safety | 2.63 | Fully Implemented |
| 1. Storage and controlled system | 2.75 | Fully Implemented |
| 1. Complementary activities | 2.49 | Partially Implemented |
| 1. Productivity, Life and Values Development Training | 2.82 | Fully Implemented |
| 1. Principal/School Head Program Leadership | 2.73 | Fully Implemented |
| 1. Participation of parents, PTAs and feeding coordinator | 2.66 | Fully Implemented |
| 1. Program Reporting | 2.40 | Partially Implemented |
| **Overall Mean** | **2.56** | **Fully Implemented** |
| **Standard Deviation = 0.12** | | |

The data in Table 7 reveal that the School-Based Feeding Program (SBFP) is generally fully implemented in the assessed school, with an overall mean score of 2.56 and standard deviation of 0.12. Most activities, including key components such as feeding proper (2.69), food production and process (2.67), and adherence to food safety (2.63), fall within the fully implemented range, indicating a consistent execution of core program elements. The highest-rated area is Productivity, Life and Values Development Training (2.82), suggesting strong integration of holistic student development. However, areas such as complementary activities (2.49) and program reporting (2.40) are only partially implemented, pointing to gaps in enrichment efforts and monitoring processes. These results imply that while SBFP is effectively meeting its basic operational goals, improvements in reporting systems and the inclusion of complementary programs could enhance the program’s overall impact and sustainability. These results aligned in the study of [23] which emphasized that the School-Based Feeding Program (SBFP) was generally implemented to a full extent across core areas, such as feeding proper and food safety, mirroring the findings in the current assessment. In Gahite’s study, it was also observed that while fundamental operations were carried out effectively, there were identifiable gaps in areas like program reporting and supplementary activities—similar to the present study’s findings that complementary activities and reporting were only partially implemented. This alignment reinforces the notion that while SBFP meets essential nutritional objectives, systematic improvements in auxiliary services and documentation are vital for enhancing its long-term impact.

**3. SIGNIFICANT DIFFERENCE IN THE EXTENT OF THE IMPLEMENTATION OF THE SCHOOL-BASED FEEDING PROGRAM BASED ON RESPONDENTS’ ASSESSMENT**

***Table 8.*** ***Comparison of the Extent of Implementation of the School-Based Feeding Program Based on Classification of School (Multigrade and Monograde)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Mean** | **Standard Deviation** | **t-value** | **p-value** | **Decision at** |
| Monograde | 1.86 | 0.89 | -1.56 | 0.019 | Reject Ho |
| Multigrade | 2.57 | 0.52 |

Table 8 presents a comparison of the extent of implementation of the School-Based Feeding Program based on the classification of schools, specifically between monograde and multigrade settings. The results show that multigrade schools obtained a higher mean score of 2.57 with a standard deviation of 0.52, while monograde schools recorded a lower mean of 1.86 with a standard deviation of 0.89. The results showed a statistically significant difference (t = -1.56, p = 0.019) in the implementation of the program between the two types of schools. This suggests that multigrade schools tend to implement the feeding program more effectively than monograde schools. The implication of this result is that monograde schools may be facing more challenges in delivering the program consistently and efficiently, which may necessitate targeted interventions, additional support, or capacity-building efforts to improve their implementation strategies and ensure that the nutritional needs of their learners are met effectively. These results align with the study of [25], who found that the extent of implementation of the School-Based Feeding Program significantly influences student outcomes and varies across school types, with multigrade settings often demonstrating more consistent program execution due to stronger community involvement and localized management strategies.

***Table 9.*** ***Comparison of the Extent of Implementation of the School-Based Feeding Program Based on Classification of School (Complete and Primary)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Mean** | **Standard Deviation** | **t-value** | **p-value** | **Decision at** |
| Primary | 1.61 | 0.97 | -1.89 | <0.001 | Reject Ho |
| Complete | 2.73 | 0.28 |

Table 9 reveals a significant difference in the extent of implementation of the School-Based Feeding Program when schools are classified as either primary or complete. The mean score for primary schools is 1.61 with a standard deviation of 0.97, while complete schools have a higher mean of 2.73 with a lower standard deviation of 0.28. The computed t-value is negative 1.89 and the p-value is less than 0.001, which leads to the rejection of the null hypothesis at a significance level of 0.05. This indicates that complete schools implement the feeding program to a significantly greater extent than primary schools. The implication of this result suggests that primary schools may be facing more limitations in resources, manpower, or logistical support, which hinders their ability to fully implement the program. Therefore, targeted interventions and support systems should be provided to primary schools to bridge the gap and ensure that all learners benefit equally from the program. These results align with the study of [27] who found that the extent of School-Based Feeding Program (SBFP) implementation significantly influenced learning outcomes and academic performance, with schools demonstrating higher implementation fidelity—typically complete schools—achieving better nutritional and educational impacts. This supports the current finding that complete schools are able to implement the SBFP more effectively than primary schools, highlighting disparities in capacity and resource availability.

***Table 10.*** ***Comparison of the Extent of Implementation of the School-Based Feeding Program Based on Number of Teachers***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Mean** | **Standard Deviation** | **f-value** | **p-value** | **Decision at** |
| Banan ES, Taracay PS, and Paco Valley ES | 2.01 | 0.56 | 4.16 | 0.003 | Reject Ho |
| Kalliat IS | 2.53 | 0.97 |
| Lenneng ES and Guimitan PS | 2.67 | 0.23 |
| Badduat ES, Mallag PS and Culilimtao ES | 2.15 | 1.01 |
| Binuan ES and Dangla ES | 2.81 | 0.34 |
| Magabta ES and Waga ES | 2.34 | 0.56 |

Table 10 presents the comparison of the extent of implementation of the School-Based Feeding Program (SBFP) across schools based on the number of teachers, revealing a significant variation in implementation levels. The computed f-value is 4.16 with a corresponding p-value of 0.003, leading to the rejection of the null hypothesis at a significance level of 0.05. This indicates that the extent of implementation significantly differs among schools with varying numbers of teaching staff. Notably, Binuan Elementary School and Dangla Elementary School obtained the highest mean of 2.81, suggesting a higher level of implementation, possibly due to better staffing and resource management. In contrast, Banan Elementary School, Taracay Primary School, and Paco Valley Elementary School reported the lowest mean of 2.01, implying challenges in implementing the program effectively, potentially due to limited personnel or support. The implication of this finding highlights the critical role that teacher availability and involvement play in the successful implementation of the SBFP, emphasizing the need for adequate teacher support and training in schools with fewer staff to ensure program effectiveness and sustainability. These results aligned in the study of [25], who assessed the extent of School-Based Feeding Program implementation in relation to students’ learning outcomes and academic performance. [25] findings revealed that differences in the level of implementation among schools were influenced by institutional capacities such as the availability of teachers, logistical support, and program management strategies. Similar to the current study, it was found that schools with more engaged personnel and better staffing conditions exhibited more effective SBFP implementation, resulting in improved outcomes among beneficiaries. This alignment underscores the pivotal role of human resources in ensuring program success and calls for targeted support in under-resourced schools.

***Table 11.*** ***Comparison of the Extent of Implementation of the School-Based Feeding Program Based on Number of School Heads***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Mean** | **Standard Deviation** | **f-value** | **p-value** | **Decision at** |
| Banan ES, Taracay PS, and Paco Valley ES | 2.56 | 0.56 | 1.04 | 0.346 | Accept Ho |
| Kalliat IS | 2.61 | 0.38 |
| Lenneng ES and Guimitan PS | 2.76 | 0.39 |
| Badduat ES, Mallag PS and Culilimtao ES | 2.52 | 0.54 |
| Binuan ES and Dangla ES | 2.64 | 0.47 |
| Magabta ES and Waga ES | 2.59 | 0.51 |

Table 11 presents the comparison of the extent of implementation of the School-Based Feeding Program based on the number of school heads revealed no significant difference among the various groups of schools, as indicated by an f-value of 1.04 and a p-value of 0.346, which is greater than the significance level of 0.05. This suggests that the number of school heads overseeing the program does not have a statistically significant effect on how the program is implemented across schools. The mean scores, which ranged from 2.52 to 2.76, show a relatively consistent moderate level of implementation among the different schools. These findings imply that regardless of leadership size, schools generally maintain a uniform approach to implementing the feeding program. Therefore, improvements in program effectiveness need to focus more on other factors such as resource availability, stakeholder participation, and operational support rather than the number of administrators involved. These results aligned with the study of [26] who investigated the extent of School-Based Feeding Program (SBFP) implementation and found that differences in administrative oversight, such as the number of school heads, did not significantly impact the consistency of program delivery. This supports the current study’s findings that leadership size does not statistically influence the implementation level of SBFP, suggesting that uniform practices and systemic guidelines are likely to contribute to the consistent application across schools.

***Table 12 Comparison of the Extent of Implementation of the School-Based Feeding Program Based on Number of PTA Officials***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Mean** | **Standard Deviation** | **f-value** | **p-value** | **Decision at** |
| Banan ES, Taracay PS, and Paco Valley ES | 2.61 | 0.71 | 1.87 | 0.379 | Accept Ho |
| Kalliat IS | 2.82 | 0.69 |
| Lenneng ES and Guimitan PS | 2.64 | 0.84 |
| Badduat ES, Mallag PS and Culilimtao ES | 2.83 | 0.68 |
| Binuan ES and Dangla ES | 2.79 | 0.70 |
| Magabta ES and Waga ES | 2.78 | 0.83 |

Table 12 shows the comparison of the extent of implementation of the School-Based Feeding Program based on the number of PTA officials among the different schools reveals that Kalliat Integrated School obtained the highest mean of 2.82, followed closely by Badduat Elementary School, Mallag Primary School, and Culilimtao Elementary School with a mean of 2.83. Meanwhile, Banan Elementary School, Taracay Primary School, and Paco Valley Elementary School recorded the lowest mean of 2.61. Despite these variations, the computed f-value of 1.87 and p-value of 0.379 indicate no statistically significant difference at the 0.05 level of significance, leading to the acceptance of the null hypothesis. This implies that the number of PTA officials does not have a significant impact on the extent of implementation of the program. Consequently, efforts to enhance SBFP implementation should focus more on other factors such as program management, funding efficiency, and stakeholder involvement rather than the number of PTA officers alone. These results found that variations in implementation of the School-Based Feeding Program (SBFP) across schools were not significantly influenced by parental organizational structures such as the number of PTA officials. Instead, the study emphasized that effective implementation was more closely tied to program planning, resource allocation, and school-level management practices.

**6.** **NUTRITIONAL STATUS OF THE BENEFICIARIES BEFORE AND AFTER THE IMPLEMENTATION OF THE SBFP**

**Table 13: Nutritional Status of Beneficiaries Before the Implementation of the School-Based Feeding Program (SBFP)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of school** | **Number of Severely Wasted + Wasted**  **KABUGAO DISTRICT 2**  **SY 2022-2023** | | | | | | | |
| **Kinder** | **Grade 1** | **Grade 2** | **Grade 3** | **Grade 4** | **Grade 5** | **Grade 6** | **TOTAL** |
| Banan E/S | 2 | 5 | 0 | 0 | 0 | 0 | 0 | **7** |
| Taracay P/S | 0 | 5 | 5 | 3 | 0 | 0 | 0 | **13** |
| Paco Valley P/S | 1 | 0 | 1 | 0 | 0 | 1 | 0 | **3** |
| Kalliat Is | 2 | 0 | 1 | 0 | 0 | 2 | 0 | **5** |
| Lenneng E/S | 2 | 5 | 0 | 5 | 3 | 1 | 3 | **18** |
| Guimitan P/S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Badduat E/S | 2 | 1 | 1 | 1 | 1 | 3 | 1 | **10** |
| Mallag PS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **1** |
| Culilimtao E/S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Binuan E/S | 1 | 0 | 1 | 0 | 1 | 0 | 0 | **3** |
| Dangla E/S | 4 | 0 | 1 | 0 | 1 | 0 | 0 | **6** |
| Magabta E/S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Waga E/S | 5 | 0 | 0 | 0 | 0 | 0 | 0 | **5** |
| **TOTAL** | | | | | | | | **71** |

Table 13 shows the nutritional status of beneficiaries at Kabugao District 2, SY 2022-2023. A total of 71 students from Kindergarten to Grade 6 were identified as either severely wasted or wasted before the implementation of the School-Based Feeding Program (SBFP), with the highest cases found in Lenneng Elementary School (18), Taracay Primary School (13), and Badduat Elementary School (10). This indicates a significant number of nutritionally at-risk learners in the district, highlighting the urgent need for targeted feeding interventions. The implication of this finding stresses the importance of properly implementing and sustaining the SBFP to address undernutrition, improve students' health, and support their academic performance and overall well-being. The findings from Kabugao District 2 closely align with those of Gahite LC, who assessed the extent of School-Based Feeding Program (SBFP) implementation and its influence on students’ learning outcomes and academic performance. Gahite’s 2024 study highlighted that targeted feeding interventions significantly contributed to improving the nutritional status of undernourished students, thereby enhancing their classroom participation, attentiveness, and overall academic progress [23]. These parallel underscores the critical importance of properly implementing and sustaining the SBFP in nutritionally vulnerable school populations such as those in Kabugao District 2.

**Table 14:** **Nutritional Status of Beneficiaries After the Implementation of the School-Based Feeding Program (SBFP)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of school** | **Number of Severely Wasted + Wasted**  **KABUGAO DISTRICT 2**  **SY 2023-2024** | | | | | | | |
| **Kinder** | **Grade 1** | **Grade 2** | **Grade 3** | **Grade 4** | **Grade 5** | **Grade 6** | **TOTAL** |
| Banan E/S | 2 | 0 | 1 | 1 | 1 | 0 | 0 | **5** |
| Taracay P/S | 0 | 3 | 0 | 0 | 0 | 0 | 0 | **3** |
| Paco Valley P/S | 2 | 1 | 0 | 0 | 0 | 0 | 0 | **3** |
| Kalliat Is | 3 | 1 | 1 | 0 | 0 | 0 | 0 | **5** |
| Lenneng E/S | 1 | 0 | 0 | 1 | 0 | 2 | 3 | **12** |
| Guimitan P/S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Badduat E/S | 3 | 2 | 0 | 0 | 1 | 0 | 1 | **7** |
| Mallag PS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | **1** |
| Culilimtao E/S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Binuan E/S | 1 | 0 | 0 | 2 | 0 | 0 | 0 | **3** |
| Dangla E/S | 3 | 1 | 0 | 0 | 0 | 0 | 0 | **4** |
| Magabta E/S | 0 | 0 | 0 | 0 | 1 | 0 | 0 | **1** |
| Waga E/S | 0 | 1 | 0 | 0 | 4 | 0 | 0 | **5** |
| **TOTAL** | | | | | | | | **49** |

Table 14 shows the nutritional status of beneficiaries at Kabugao District 2, SY 2023-2024. a total of 49 learners across various grade levels in Kabugao District 2 were still classified as either wasted or severely wasted after the implementation of the School-Based Feeding Program (SBFP) for the school year 2023–2024. While some schools like Guimitan P/S and Culilimtao ES showed a marked improvement with zero malnourished students’ post-implementation, others such as Badduat E/S and Lenneng E/S still had higher counts of affected pupils, suggesting varying degrees of program impact. This indicates that while the SBFP has made progress, its implementation may need to be strengthened, sustained, or better tailored to address specific school needs more effectively to ensure consistent improvement in nutritional outcomes. These results align with the study by Gahite (2024), which assessed the extent of School-Based Feeding Program (SBFP) implementation and its influence on students’ learning outcomes and academic performance. The study revealed that while some schools effectively utilized the program—resulting in significant improvements in student health and academic engagement—others showed minimal progress due to inconsistent implementation, lack of resources, or contextual challenges [23]. This supports the findings in Kabugao District 2, where varied nutritional outcomes among schools suggest a need for more targeted and consistent program execution to ensure equitable benefits across all learner groups.

**8. SIGNIFICANT DIFFERENCE**

**Table 15. Comparison of Beneficiaries’ Nutritional Status Before and After the Implementation of the SBFP**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Number of SW+W** | **Mean** | **SD** | **t-value** | **p-value** | **Decision at** |
| Nutritional Status Beneficiaries Before the Implementation of the SBFP | 79 | 5.46 | 5.47 | 1.08 | 0.303 | Accept Ho |
| Nutritional Status Beneficiaries After the Implementation of the SBFP | 41 | 4.23 | 2.77 |

Table 15 shows the comparison of beneficiaries’ nutritional status before and after the implementation of the School-Based Feeding Program (SBFP) revealed a slight decrease in both the mean and standard deviation of the number of Severely Wasted and Wasted (SW+W) pupils, from 5.46 (SD = 5.47) to 4.23 (SD = 2.77). However, with a computed t-value of 1.08 and a p-value of 0.303, the result is not statistically significant at the 0.05 level, leading to the acceptance of the null hypothesis. This implies that while there was a numerical improvement in the nutritional status of the beneficiaries, the change was not sufficient to confirm a significant impact of the SBFP based on the available data, suggesting the need for enhancements in program duration, coverage, or complementary health interventions. These results align with the findings of Gahite, who also observed that while the School-Based Feeding Program (SBFP) exhibited a positive trend in enhancing students’ nutritional status and academic performance, the statistical outcomes were not consistently significant. Gahite emphasized that although improvements were noted among beneficiaries, variability in implementation across schools limited the program’s effectiveness, indicating that its full potential could be realized through improved program design, extended duration, and integration with complementary health and nutrition initiatives to yield more measurable outcomes [23].

**9 . CHALLENGES ENCOUNTERED IN THE IMPLEMENTATION OF THE SCHOOL-BASED FEEDING PROGRAM (SBFP)**

* + - 1. Lack of utensils and dining plates.
      2. Lack of school feeding room/area
      3. The school does not have direct control of the food intake of children.
      4. Monitoring
      5. Limited of human resources
      6. Limited involvement of stakeholders to implement the SBFP
      7. The Feeding Program takes up much of the teachers’ time for classroom activities

The thematic analysis of the challenges encountered in the implementation of the School-Based Feeding Program (SBFP) reveals several interconnected themes that highlight operational, logistical, and systemic issues within the program. A prominent theme is the lack of essential resources and infrastructure, as evidenced by the shortage of utensils and dining plates, and the absence of a designated school feeding room or area. These inadequacies hinder the smooth delivery and consumption of meals, potentially compromising the hygiene and overall effectiveness of the program. Another critical theme is the issue of limited human resources and the resulting burden on existing staff. Teachers, who are primarily responsible for instruction, report that the Feeding Program consumes a significant portion of their time, thereby affecting their ability to focus on core academic responsibilities. This is further exacerbated by insufficient monitoring mechanisms, making it difficult to ensure consistency and effectiveness in implementation. Additionally, schools face the challenge of not having direct control over the actual food intake of the children, raising concerns about whether nutritional goals are truly being met. A recurring issue is the limited engagement and participation of key stakeholders, such as parents, community members, and local agencies, which affects collaborative efforts and sustainability. Overall, the analysis reveals that SBFP, while well-intentioned, struggles with logistical inefficiencies, human resource constraints, and insufficient stakeholder involvement, all of which pose significant barriers to its full and effective implementation.

* Most of the agreement during the SBFP beneficiaries’ parents were not met.
* Most parents are busy when it’s their time to facilitate feeding.

The qualitative data reveals significant challenges in the implementation of the School-Based Feeding Program (SBFP). A recurring theme is the lack of parental engagement, as many of the agreed-upon responsibilities were not fulfilled by the parents of beneficiaries. This issue is compounded by the fact that most parents are preoccupied with personal or work-related obligations, limiting their ability to actively participate in the feeding sessions. These findings suggest that the effectiveness of the SBFP is hindered by insufficient stakeholder involvement and logistical complications in food handling.

These results align with the study of [24] titled “Parental involvement in school-based feeding program,” which highlights that limited parental engagement poses a significant challenge in the success of SBFP implementation. Similar to the findings in Kabugao District 2, Flores emphasizes that many parents struggle to fulfill agreed-upon roles in the program due to time constraints and competing responsibilities, leading to operational inefficiencies and reduced program effectiveness. This underscores the critical role of stakeholder involvement—particularly from parents—in ensuring the sustainability and impact of school-based feeding initiatives.

**10. RECOMMENDATIONS TO ENHANCE THE IMPLEMENTATION OF THE SCHOOL-BASED FEEDING PROGRAM (SBFP)**

1. Provide milk in school daily
2. SBFP fund allotment should be handled by the SBFP coordinator
3. There should be more budget to procure condiments for the said program
4. SBFP coordinators should be in pair.
5. The BHW should participate in the implementation of the SBFP to monitor beneficiaries.
6. A joint resolution should be made by PTA officials and RHU personnel to be submitted to the LGU for funding malnourished children.

The consistent provision of milk in schools emerged as a vital theme focused on enhancing the nutritional impact of the SBFP. Participants emphasized that daily milk intake would significantly contribute to the physical development and cognitive functioning of undernourished students. This theme reflects a broader understanding of the need for a more holistic feeding approach that does not only address hunger but also promotes balanced nutrition. Providing milk daily ensures the inclusion of essential nutrients such as calcium and protein, which are often lacking in students' regular diets.

A recurring theme in the assessment is the need for financial autonomy and streamlined fund management. It was suggested that the SBFP coordinator should directly manage the budget to avoid bureaucratic delays and inefficiencies. This theme reflects a call for accountability and operational efficiency, as coordinators are more aware of the real-time needs of the program. Empowering the coordinator financially could lead to more timely procurement of food items and better response to the immediate needs of the beneficiaries.

The theme of resource adequacy is evident in the recommendation to increase the budget for condiments. Respondents noted that flavor and food appeal are important for encouraging students to eat the meals provided. Without sufficient condiments, meals may lack palatability, leading to food waste and low participation. This highlights a practical concern that beyond nutritional value, the taste and appeal of the food are crucial for the program’s success.

Another key theme revolves around workload distribution and support. Having two coordinators working together was seen as a strategy to enhance program efficiency and reduce the burden on a single individual. This theme reflects a need for collaborative management, where shared responsibilities can lead to better planning, monitoring, and execution of tasks. It also allows for continuity in case of absences, ensuring the uninterrupted implementation of the program.

The involvement of Barangay Health Workers (BHW) introduces the theme of community collaboration and health monitoring. Their participation is viewed as essential in ensuring that beneficiaries are consistently monitored for health improvements and attendance. This theme reinforces the idea that a multi-stakeholder approach, involving both school and local health personnel, can lead to a more comprehensive and effective implementation of the SBFP.

These results aligned in the study of [23], titled “Extent of School-Based Feeding Program Implementation on Students’ Learning Outcomes and Academic Performance.” Gahite’s findings similarly emphasized the importance of strong program management, adequate funding, and stakeholder involvement to enhance the impact of the School-Based Feeding Program. The study highlighted that direct coordinator oversight, sufficient budgeting for food quality—including condiments—and collaborative implementation contributed significantly to improved nutritional outcomes and academic performance among beneficiaries.

4. Conclusion

The implementation of the School-Based Feeding Program (SBFP) in Kabugao District II reveals a commendable level of commitment, with most schools achieving full implementation.

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**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

I acknowledge that I have not used ChatGPT or Copilot for refining some of the sections in the document.

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