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## THE IMPLEMENTATION OF THE SCHOOL - BASED FEEDING PROGRAM (SBFP) IN THE SCHOOLS DIVISION OF TARLAC PROVINCE

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**Abstract:** The study evaluated the implementation of the School - Based Feeding Program (SBFP) in the Schools Division of Tarlac Province SY- 2015-2016.

The descriptive - comparative method was used in the study. Questionnaire, documentary analysis, interview and observation were used in the data gathering. Documents that were available such as records and data from the Department of Education and Health and Nutrition Unit of the Department of Education – Tarlac Province were used as sources of data. Appropriate statistical tools were used to analyze and interpret the data.

The study revealed that SBFP implementation as to its coverage is outstanding while the duration and resources (personnel, financial and facilities) is very satisfactory and the financial allocation and facilities are adequate.

In addition, the study also revealed that SBFP's complimentary activities such as "Gulayan sa Paaralan" and the "Essential Health Care Program" were highly implemented. Furthermore, the strategies used by the feeding program implementers are generally very satisfactory.

The study also shows that after the 100 to 120 feeding days, there was a very high attainment of the SBFP goals particularly 78.29% of the severely wasted and those who were categorized as "wasted" were rehabilitated to normal nutritional status and attendance improved to at least 98.86%. Attainment of improving the children's health and nutrition values and behavior is also generally high.

The study also revealed that there is a significant difference in the nutritional status of the beneficiaries during prefeeding and postfeeding activities. There were problems encountered in the implementation of the SBFP namely: delayed release of budget for feeding, inability of parents to attend regularly in the preparation of foods for SBFP, additional work in buying commodities with receipts, dislike of pupil beneficiaries of vegetables and indifference of the pupil beneficiaries to the feeding program. Thus, a proposed action plan was formulated.

Based on the foregoing findings and conclusions, the researcher recommends the continuation of the school - based feeding program (SBFP) and strengthening of the Gulayan sa Paaralan and Essential Health Care Program. Constant and strict monitoring and evaluation of the program should also be conducted. Linkages with parents and local government units and other stakeholders should also be encouraged. Accountability of school heads and other school personnel on the implementation of the SBFP should be strengthened.

**Keywords:** School Based Feeding Program; Gulayan sa Paaralan; Essential Health Care Program, Program Administrators, Implementers and Beneficiaries.

## 1. Introduction

The Malnutrition is a worldwide health concern. Government and non-government organization (GO and NGO's) geared their efforts in various interventions that could lessen and alleviate children's suffering from malnutrition.

There are 795 million undernourished people in the world today. That means one in nine people do not get enough food to be healthy and lead an active life. Hunger and malnutrition are in fact the number one risk to health worldwide — greater than AIDS, malaria and tuberculosis combined. The good news is that hunger is entirely solvable. There is enough food in the world to feed everyone and no scientific breakthroughs are needed. Today's knowledge, tools and policies, combined with political will, can solve the problem (United Nations World Food Programme, 2016).

In Global Nutrition Report 2016 of International Food Policy Research Institute in Washington DC, it states that malnutrition creates a cascade of individual and societal challenges—and opportunities. Malnutrition and poor diets constitute the number-one driver of the global burden of disease. We already know that the annual GDP losses from low weight, poor child growth, and micronutrient deficiencies average 11 percent in Asia and Africa—greater than the loss experienced during the 2008–2010 financial crisis. This report presents new data on the cost of malnutrition to both societies and individuals. In the United States, for example, when one person in a household is obese, the household faces additional annual health care costs equivalent to 8 percent of its annual income. In China, a diagnosis of diabetes results in an annual 16.3 percent loss of income for those with the disease. All of these figures mean that the burden of malnutrition falls heavily on all of us, whether directly suffering or not. But these costs also represent large opportunities for human and economy betterment, and this report provides many examples of countries that have seized these opportunities to improve the lives of their people and the health of their societies by addressing malnutrition.

Malnutrition, in every form, presents significant threats to human health. Today the world faces a double burden of malnutrition that includes both undernutrition and overweight, especially in developing countries. Hunger and inadequate nutrition contribute to early deaths for mothers, infants and young children, and impaired physical and brain development in the young. At the same time, growing rates of overweight and obesity worldwide are linked to a rise in chronic diseases such as cancer, cardiovascular disease and diabetes - conditions that are life-threatening and very difficult to treat in places with limited resources and already overburdened health systems (World Health Organization, 2016.)

The double burden in malnutrition focuses on the undernutrition and overnutrition. For undernutrition, about 104 million children worldwide (2010) are underweight; undernutrition contributes to about one third of all child deaths. Stunting (an indicator of chronic undernutrition) hinders the development of 171 million children under age 5 according to 2010 figures while 13 million children are born with low birth weight or prematurely due to maternal undernutrition and other factors. Furthermore, a lack of essential vitamins and minerals in the diet affects immunity and healthy development. More than one third of preschool-age children globally are Vitamin A deficient, maternal undernutrition, common in many developing countries, leads to poor fetal development and higher risk of pregnancy complications together, maternal and child undernutrition account for more than 10 percent of the global burden of disease. For the issue in the overnutrition, about 1.5 billion people worldwide are overweight, of whom 500 million are obese, in 2008 figures while about 43 million children under age 5 were overweight in 2010. Growing rates of maternal overweight are leading to higher risks of pregnancy complications, and heavier birth weight and obesity in children worldwide. Furthermore, at least 2.6 million people die each year as a result of being overweight or obese (World Health Organization, 2016.)

In Asia, according to UNICEF Statistics (2016), 50 million children under 5 were wasted and 16 million were severely wasted. This translates into a prevalence of almost 8 percent and just less than 3 percent, respectively.

In the Philippines, malnutrition remains a significant public health concern with a staggering 3.4 million children who are stunted (short for their age) and more than 300,000 children under 5 years who are severely wasted. This continues to be a serious child health problem, with the Philippines being highly disaster-prone. The risk of malnutrition increases in the aftermath of emergencies (UNICEF Philippines, 2015)

A national nutrition survey reveals that, 20 percent of Filipino children aged 0 to 5 are underweight while 30 percent are stunted or too short for their age. The Philippines ranked 9th in the world, with the most number of stunted children according to a UNICEF study.

To address the high burden of Severe Acute Malnutrition (SAM) in the country, the Philippine Nutrition Cluster prioritized the urgent need to support the development of national protocols and policy on the management of SAM for children under five years of age. This was achieved through its community-based management of acute malnutrition (CMAM) working group led by the Department of Health (DOH). The broad objective of this prioritization was to improve the access and availability of life-saving services for children with SAM through the institutionalization of SAM management within the national and local health

systems, in both emergency and non-emergency settings (UNICEF-Philippines, 2016).

Studies were conducted on malnutrition focusing on: strategies for control; effects on the health of individual and its impact on the ability to learn and perform academically in school of school children and students.

On the effect of malnutrition on health, Rice et. al. (2000) conducted a study on the malnutrition as an underlying cause of childhood deaths associated with infectious diseases in developing countries. Methods MEDLINE was searched for suitable review articles and original reports of community-based and hospital-based studies. Findings from cohort studies and case-control studies were reviewed and summarized. The study found out that the strongest and most consistent relation between malnutrition and an increased risk of death was observed for diarrhea and acute respiratory infection. The evidence, although limited, also suggests a potentially increased risk for death from malaria. A less consistent association was observed between nutritional status and death from measles. Although some hospital-based studies and case-control studies reported an increased risk of mortality from measles, few community-based studies reported any association. The risk of malnutrition-related mortality seems to vary for different diseases. These findings have important implications for the evaluation of nutritional intervention programs and child survival programs being implemented in settings with different disease profiles.

On the effects of malnutrition and poor nutrition on the academic performance of students. Chinyoka (2014) conducted a study on the impact of poor nutrition on the academic performance of grade seven learners in case of Zimbabwe. Its main objective is to identify mitigation policies and measures designed to reduce negative effects of poor nutrition on children's academic performance. Malnutrition remains one of the major obstacles to human well-being affecting all areas of a child's growth and development, including performance in the classroom. The study is grounded in Maslow's motivational and needs theory. In this study, a qualitative phenomenological case study design was used with focus group discussions, interviews and observations as data collection instruments to twelve (12) grade seven learners, three (3) headmasters and four (4) teachers, purposively sampled in Masvingo province. Findings revealed that malnutrition affected physical growth, cognitive development and it consequently impacts on academic performance, health and survival of learners. Malnutrition also deepens poverty due to increased health care costs. The study also established that hungry and undernourished grade seven learners were not able to take on physical work and sporting activities seriously, are less able to attend school and if they do, are less able to concentrate and learn. On the way forward, there is need to introduce nutritional gardens at community,

school and at family levels. Addressing the root causes of malnutrition (such as food insecurity, poverty, population growth and socio-economic instability) is imperative for achieving sustained reductions in malnutrition.

The Institute of Nutrition of Central America and Panama (INCAP) (2010) has made major contributions to the study of the effects of malnutrition on learning. This report summarizes work on the relationship of nutrition to children's learning and development from the 1960's through 1998. The Oriente Longitudinal study examined the effects of two types of supplementation for mothers and young children on their growth and development (an energy-only drink compared with a protein-energy drink) using a quasi-experimental design. Both drinks were supplemented with micronutrients, and were offered daily. As a result of the research on malnutrition and mental development, researchers could conclude by 1993 that supplementary feeding of infants and young children resulted in significant increases cognitive development and school performance through adolescence. The research also suggested that the pathways that link malnutrition with later development are not only through the neurological system but also operate through changes in child behavior which affect the kinds of care children receive. Other research on learning and development showed that families understood the concept of intelligence, demonstrated the link between micronutrients and cognitive development and documented the amount of wastage or repetition and drop-out that occurs in Guatemalan schools (Food Nutrition Bulletin,2010).

The effects of malnutrition could not be isolated in the health and in the ability to learn and academic performance of the individual. However, studies revealed that malnutrition also affect the social and economic development of a country.

Malnutrition's effect on the economy of a certain country is also evident. On July 19, 2016 at the Conference Room 5 at United Nations Headquarters, New York, US, World Health Organization organized A Side event to the High Level Political Forum entitled the Improving nutrition, improving potential: Leaving no-one behind in the fight against malnutrition in all its forms. As a backgrounder, Improved nutrition is essential for achieving the ambitions of the 2030 Agenda for Sustainable Development and ensuring that no-one is left behind. Malnutrition, in all its forms, represents a significant barrier to equitable and sustainable social and economic development. Variations in nutritional status and access are both a driver and an outcome of inequity. Undernutrition inhibits cognitive development and educational success, both of which are important determinants of labor productivity and economic growth. Overweight and obesity are important risk factors for non-communicable diseases like diabetes and cardiovascular diseases. Malnourished children in the

poorest income groups are most likely to face multiple deficits and require effective intervention coverage for prevention, treatment and care.

Furthermore, a World Bank report on March 2, 2006 warns that malnutrition is costing poor countries up to 3 percent of their yearly GDP, while malnourished children are at risk of losing more than 10 percent of their lifetime earnings potential. The report also says malnutrition may increase the risks of HIV infection, while reducing the numbers of children and mothers who survive malaria. According to the new report—*Repositioning Nutrition as Central to Development*—malnutrition has long been known to undermine economic growth and perpetuate poverty, and yet, over previous decades, the international community and most governments in developing countries have failed to tackle malnutrition, even though well-tested approaches for doing so exist. As the report says, “the unequivocal choice now is between continuing to fail, as the global community did with HIV/AIDS for more than a decade, or to finally put nutrition at the center of development so that a wide range of economic and social improvements that depend on nutrition can be realized.” The report says developing countries that invest in better nutrition for their children get high returns on their spending. A group of the world’s leading development economists, including three Nobel Laureates, concluded in a 2004 study known as the Copenhagen Consensus, that nutrition investments were one of the ‘best buys’ that developing countries could make in reducing poverty and improving economic growth.

Given the situations on malnutrition and its wider effects on the individual and the world as well, efforts were directed in fighting and combatting malnutrition in all forms and one option is through feeding programs particularly school feeding programs.

Across the world, school feeding programs (SFP) have been seen both as a social safety net for vulnerable sections of the population and as an educational intervention aimed at ensuring that children go to school and that their learning is improved by elimination of hunger in the class room. The role of SFPs as social safety nets may have been enhanced on the context of the recent and persisting global food, fuel and financial crises and high rates of food inflation in most parts of the world. In this context, the experience of a large and populous developing country like India with respect to SFPs becomes relevant for other countries seeking to initiate or to strengthen and expand such programs (M S Swaminathan Research Foundation, 2011).

School feeding program as a social safety net has been popular in developing countries as an instrument for achieving the Millennium Development Goals. There are many studies that have evaluated the impacts of school feeding

School feeding is a tool which today effectively enables hundreds of millions of poor children worldwide to attend school—in developed and developing countries alike. One of the advantages of school feeding is that, in addition to enabling education, it has positive direct and indirect benefits relating to a number of other development goals (namely for gender equity, poverty and hunger reduction, partnerships and cooperation, HIV/AIDS care and prevention, and improvements in health and other social indicators. (UNEP, 2016).;

School feeding contributes to the education and well-being of children. A hungry child does not grow, cannot learn as well and faces many health risks in the future. School feeding can bring children into school and out of hunger. It is far more than food-giving. They are an investment in the world’s poorest children. They are an investment in our common future and global stability. School feeding can bring children into school and out of hunger. Strong partnerships can increase factors that pull children to school. It is a springboard for many positive outcomes for poor children and their families. School feeding programs engage parents and communities in the promotion of public health, education and the creation of an independent future. Few safety-net programs provide so many multi-sector benefits—education—gender equality, food security, poverty alleviation, nutrition and health—in one single intervention (WFP, 2016).

Due to the above mentioned advantage and importance of school feeding programs, came the evolution of the school feeding programs in various countries and one of those is in India. India was home to 57 million - or more than a third of the world's 146 million undernourished children (NFHS 3, 2007). where more than a third of the world’s undernourished children.

India’s evolution of School Feeding Program (SFP) were due to two key problems relating to children in India were the large numbers of children out of school and the considerable extent of under-nourishment among children. In 2004, around 15 per cent of children in the age group of 6-14 years were out of school (Right to Food Campaign, 2006).

Along with the implementation of the School Feeding Programs were the development of a tool and implementing guidelines to successfully implement the school feeding program.

Various organization had developed a tool that will serve as guidelines to develop and implement school feeding programs that will benefit the beneficiaries thereby improving their academic performance and education. The Health and Human Development Programs at Education Development Center, Inc. from the The Partnership for Child Development (1999) developed the School Feeding Programs: Improving effectiveness

and increasing the benefit to education. A Guide for Program Managers which was adopted by the UNESCO. The designed tool was based on a ten-year review of School Feeding Programs (SFP) research and literature. This guide has been drawn up to assist those engaged in designing new SFPs, or seeking to improve the effectiveness ones that already exist. The guidelines include sections on a rationale for addressing nutrition and health issues for schoolchildren, the potential benefits of SFPs for education, and recommendations for building up effective SFPs as an integral part of a package of nutrition and health interventions for school-age children. (Partners for Child Development, 1999).

The Department of Education of the Philippines issued DepED Order No. 54, s. 2013-Guidelines on the Implementation of School Feeding Programs. The DepED Order was issued in support of the Philippine Plan of Action for Nutrition (PPAN) as approved by the National Nutrition Council Governing Board through NNC-GB Resolution No. 1, s. 2012, the Department of Education (DepED) has advocated school feeding programs for the past years to improve the nutritional status of the undernourished pupils and students. This Order is being issued to guide the regional, division, and school officials in implementing school-initiated and/or sponsored feeding programs, thereby ensuring that the objectives of the program are achieved. The DepED implements the School Feeding Programs (SFPs) to address the undernutrition problem among the learners in order to improve school attendance and to reduce dropout in schools. The SFPs may be school-initiated or sponsored by individuals, non-government organizations (NGOs) and private companies.

Studies were conducted on the implementation of the school feeding programs in various countries.

Chepkwony et.al (2013) conducted a study on School Feeding Program and Its Impact on Academic Achievement in ECDE in Roret Division, Bureti District in Kenya. The purpose of this study is to establish the relationship, if any, between type of school and success of school feeding program, and to determine the relationship, if any, between school feeding program and academic achievement among ECD children. The target population was Head teachers in Roret Division, Bureti District. The schools were first placed in two strata of public and private category then schools were randomly selected comprising of 24 Head teachers. Data was collected through questionnaires administered to the Head teachers in the ECD centres. Observation and checklist was used by the researcher to verify what had been said by respondents and validate what was reported through questionnaire. The data collected was presented analyzed and reported in terms of percentages, frequencies, means, chi-square and F-test. The results obtained indicate that schools providing SFP showed high academic achievement among ECD children. The study is

significant as it provides DICECE officers, teachers, Parents, QASO and policy makers to establish functional and sustainable SFP in all ECD centres with a view to improving health and academic performance in both public and private schools in Kenya.

Botswana Institute of Development Policy Analysis (2013) conducted a case study on the Botswana National Primary School Feeding Program. A study was commissioned by the African Union/New Partnership for Africa's Development (AU/NEPAD) and the Partnership for Child Development (PCD). Part of on-going program of research jointly developed by the World Bank, the World Food Program (WFP) and PCD. The aims of the study were: (a) to provide an overview of the Botswana school feeding program (b) to provide a profile of intervention nuggets across the HGFSF supply chain that led to the success of the Botswana SFP. The case study was conducted following the overall HGFSF case study approach developed by PCD and Institute of Development Studies (Devereaux, 2010), to enable comparability with other countries. The analytical framework of the study followed the five set of standards namely: design and implementation, policy frameworks, institutional capacity and coordination, financial capacity (funding) and community participation (Rethinking School Feeding, Bundy et al, 2009). The study methods were a combination of both secondary and primary data collection methods. Secondary data was inclusive of a comprehensive literature review on SFP globally, regionally and locally. Several government reports, policy documents and proposals were reviewed on SFPs, education, agriculture, health, environment and food security and nutrition. Primary data used qualitative methods which included key informant interviews and Focus Group Discussions (FGDs) methods with a range of stakeholders. A detailed interview guide was used for the country profile analysis. A total of 18 key informants and 10 FGDs were carried out. Visits were also made to the four primary schools selected, namely; St Gabriel and Makolojane, both urban schools in Serowe (Central District), and Kgaphamadi and D'kar primary schools in Ghanzi District. D'kar PS is in D'kar village, a remote area in Ghanzi district. Site visits were also made to storage facilities. The study participants included teachers, students, parents and key informants in relevant government offices. Initial findings were validated at a workshop including officers from the Ministry of Local Government, Ministry of Agriculture and Ministry of Health. Thereafter, a national workshop was held in Gaborone to validate these results. The findings of the study are: Botswana has successfully managed to operate a school feeding program that provides one meal a day and reaches a total of 330,000 children in all government primary schools in the country. As a result, casual observations and reporting from stakeholders indicate that there have been increases in school attendance, enrolment rates and also transition rates. The program also ensures that children do not feel

hungry during school days and most importantly contributes to the children's daily nutritional requirements. Although Botswana experiences unfavorable climatic conditions for farming they have managed to produce some of the commodities for the SFP such as beef and sorghum. In recent years the local procurement of agricultural produce has gone some way in meeting the SFP's demand for food but also created a market, albeit seasonal, for the small holder farmers. The SFP has empowered school communities through the provision of employment. For a universally targeted program in Africa, the Botswana program has done well and offers useful lessons for other African countries. On the whole, the children in schools and the parents visited showed appreciation for the program. However, there is no school feeding policy to guide implementation. The case study uncovered a number of areas that require further study. One of these is the benefits of the SFP on nutritional status of children. There has been no impact evaluation and therefore some of the outcomes implied in the objectives could not be verified. There was very little quantitative data found on the school feeding outcomes and processes during the case study analysis.

Justin Ellis of Turning Points Consultancy (2012) conducted a study on Namibian School Feeding Program. This study is the first step of a longer term engagement between the World Food Program country office and the government of Namibia to improve the school feeding program in the country. It is an operational review of the current school feeding program with a focus on design and implementation of the program, its policy frameworks, institutional set up, funding and planning arrangements and community participation. The objectives of the study are: to strengthen the evidence base on school feeding in Namibia; analyze the school feeding program as it is today using the five standards for and provide recommendations to government on the way forward data for this case study was collected mainly through qualitative methods. An inception workshop was held at the beginning of the process to discuss the methodology. A validation workshop was held at the end of the study to validate the findings. Key informants in the education system, and in other relevant agencies, were interviewed. Focus group discussions were held with school managers, cooks, learners and parents. Fifteen schools in six of Namibia's thirteen regions<sup>9</sup> were visited during the first two weeks of June 2012 to gain a detailed understanding of the NSFP at the local level. It was felt that the regions selected would cover both rich and poor communities, while including northern, central and southern parts of the country. The Caprivi Region was of particular interest as it is the only region where small-scale maize producers are to be found. All hostel officers who are responsible both for the NSFP and school hostels at regional level completed and returned the questionnaire about most aspects of the NSFP. In addition, data from the Education Management Information System (EMIS) and other sources were analyzed. The standards for school

feeding programs suggested by Bundy et al (2009) were used to assess the NSFP and this resulted in a number of findings and recommendations for consideration by the Ministry of Education. On the whole it would seem that parents and community members have done what could reasonably be expected of them to support the NSFP, in that they have at least provided firewood, shelters for the cooks, and the cooks themselves. However, parents and caregivers have not been able to provide cooking or eating utensils, or soap and pot scourers, or adequate storage space. This is a flaw in the design of the program, in that the capacity of communities was over-estimated. The shortcoming should have been detected and corrected some time ago. The negotiation with communities needs to be re-opened and a new agreement arrived at.

McEwan (2012) conducted a study on the impact of Chile's school feeding program on education outcomes Chile operates one of the oldest and largest school feeding programs in Latin America, targeting higher-calorie meals to relatively poorer schools. This study evaluates the impact of higher-calorie meals on the education outcomes of public, rural schools and their students. It applies a regression-discontinuity design to administrative data, including school enrollment and attendance, first-grade enrollment age and grade repetition, and fourth grade test scores. There is no evidence, across a range of specifications and samples, that additional calories affect these variables. The study suggests that the focus of Chilean policy should further shift to the nutritional composition of school meals, rather than the caloric content.

Buttenheim et al (2011) conducted a study on the impact evaluation of school feeding programs in Lao PDR financially supported by the World Food Program and the World Bank Research Committee. This study evaluates school feeding programs in three northern districts of the Lao People's Democratic Republic (Lao PDR). Feeding modalities included on-site feeding, take-home rations, and a combination. District-level implementation of the intervention sites and selective take-up present considerable evaluation challenges. To address these limitations, the authors use difference-in-difference estimators with propensity-score weighting to construct two plausible counterfactuals. They find minimal evidence that the school feeding schemes increased enrollment or improved children's nutritional status. Several robustness checks and possible explanations for null findings are presented.

The above mentioned studies were also the focus of this study, to determine its implementation, however the difference lies in the effect of the program particularly in its goals such as: Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding days; Ensuring 85% to 100% classroom attendance of

beneficiaries and improving the children's health and nutrition values and behavior.

Studies in School Feeding Programs and its impact to educational achievement, role in forming eating habits and or improving the physical and psychosocial health of disadvantaged were also conducted.

Tabunda et al (2016) on the impact evaluation study on DepED's SBFP found out that except for inaccurate measurement of nutritional status variable and improper documentation of the program in all its three phases (prefeeding, feeding and post-feeding) the program was generally implemented well by the beneficiary schools and welcomed not only by the program beneficiaries and their parent.

Mancuso et al. (2013) conducted a study on the School Feeding Program's role in forming eating habits to identify teaching managers' perceptions regarding the relationship of school feeding and the promotion of healthy eating habits among students. A descriptive study with a qualitative approach was developed in the city of Guarulhos (Southeast Brazil). Key informants from municipal public schools were interviewed. Public schools were selected (n=13) and classified as to the level of social exclusion, size and economic activity of the region where the school was located. Pedagogic coordinators and school principals were individually interviewed with semi-structured questions. The results of the study were from school principals and pedagogical coordinators' perceptions, three categories were identified: Food in the school context; School feeding program's role and the Concept of food and nutrition security, which indicate that they considered meals as part of school routine in order to attain physiological needs of energy and nutrients. Their answers also indicated that they did not consider school meals as a pedagogical action related to their specific responsibilities.

The link between malnutrition and poor health among elementary school children and absenteeism, early dropout and poor classroom performance as well as the effectiveness of school-based nutrition and health interventions in improving school performance are well-established in the literature. Thus the Department of Education has been conducting conditional food transfer programs since 1997. Its current program, the School-Based Feeding Program, as implemented in school year (SY) 2013-2014, fed 40,361 severely wasted pupils enrolled in Kindergarten to Grade Six in 814 public elementary schools in the country (Tabunda, et. all., 2016).

The Department of Education (DepED) through the Health and Nutrition Center (HNC) relaunched the Breakfast Feeding Program in SY 2010-11 to address the problem of under nutrition problem and short-term hunger among public school children. A Pilot implementation for the undernourished Kinder to Grade 3

in selected schools was conducted in SY 2011-12 and 2012-13. Results indicated that 73% of the beneficiaries converted to Normal Nutritional Status at the end of 120 feeding days. School Attendance was also noted at 98%. Furthermore, the children were observed to have better class participation and developed good health habits such as washing of hands and good grooming (2015 SBFP Implementing Guidelines).

Thus by addressing the inadequacies of the programs in the past, the DepED feeding program has evolved to the current form of the SBFP. In its current form, the SBFP has retained the main features of the BFP namely, the 100-120 feeding day duration; the use of standardized recipes with *malunggay* and the 20-day cycle menu, with each meal providing the child with at least 300 additional calories; the establishment of a school-based feeding core group; involvement of volunteer parents in the preparation of meals and the feeding of children; devolved procurement and financial reporting procedures; and the prescribed complementary activities consisting of deworming of the beneficiaries prior to the start of the feeding program; waste segregation, management and composting; integration of the Essential Health Care Program in the implementation of the SBFP; and the Gulayan sa Paaralan Project (Tabunda et al., 2016) 2016 Results on an Impact Evaluation Study on DepED's School-Based Feeding Program ).

For the initial implementation of the School Based Feeding Program in the Philippines, the DepED issued DO 37, s. 2014 - Implementation of the Department of Education (DepED) and Department of Social Welfare and Development (DSWD) Funded School-Based Feeding Program (SBFP) for School Year (SY) 2014-2015. The Department of Education (DepED), through the Health and Nutrition Center (HNC), and the Department of Social Welfare and Development (DSWD), shall implement the School-Based Feeding Program (SBFP) for School Year (SY) 2014-2015 to address the undernutrition problem and short-term hunger among public school children. For this school year, the Program will prioritize 562,262 or 100% of the Kindergarten to Grade 6 pupils categorized under severely wasted in all schools based on the nutritional status report as of SY 2011-2012. The Program will also cater to pupils from Kindergarten to Grade 6 categorized under wasted if funds are still available. The 120-day Feeding Program is expected to improve the nutritional status of the children which is expected to result in 85-100% classroom attendance and improve the children's health and nutrition values and behavior. The Program shall also be implemented in partnership with local government units (LGUs), and non-government organizations (NGOs), and civic society organizations (CSOs). The schools' division offices (SDOs) are expected to initiate and orient the LGUs and other partners about the Program and create local alliance in order to cover more school children. In DepED-Tarlac Province, the School Based Feeding

Program had its initial implementation in SY 2014-2015. It was launched at Provincial Capitol of Tarlac Province on May 13, 2016 with 3,809 pupils from various schools of DepED Tarlac Province benefitted. The pupils identified as severely and wasted in their nutritional status was fed for 120 days on a PhP16 per-pupil budget. A PhP7, 313.20 was the fund for the implementation of the program. (2014 Rivera: DepED Link Volume V No, 2)

The Department of Education in its 2<sup>nd</sup> implementation of the School Based Feeding Program for School Year 2015-2016 issued the DepED Order 33, s. 2015. The DepED Order states that the Department of Education (DepED), through the Health and Nutrition Center (HNC), shall implement the School-Based Feeding Program (SBFP) for School Year (SY) 2015-2016 to address undernutrition and short-term hunger among public school children. Primarily, the SBFP will cover 532,752 severely wasted (SW) and 627,403 wasted (W) pupils from Kindergarten to Grade 6 for SY 2015-2016. At least 80% of the beneficiaries are targeted to be rehabilitated to normal nutritional status at the end of 120 feeding days. Secondly, it aims to increase classroom attendance from 85% to 100% and to improve the school children's health and nutrition values and behavior. School heads (SHs) are expected to monitor the feeding activities and program implementation on a daily basis. The Schools Division Technical Working Group (SDTWG) is expected to monitor the schools' compliance with the guidelines, procurement process, health and nutritional assessment, and the conduct of complementary activities, such as deworming, food production, waste segregation and composting, integration of Essential Health Care Program (EHCP), good grooming and personal hygiene, and productivity, life, and values development training. The Regional Technical Working Group (RTWG) is expected to monitor the activities of the schools' division offices (SDOs), including the timely release of funds to the SHs, progress of implementation, liquidation of funds, and submission of reports.

For SY 2015-2016, the DepED Tarlac-Province implemented the SBFP with the budget of P21,319,680.00 and 11,162 severely and wasted pupil beneficiaries.

This research was conceived for the purpose of evaluating the implementation of the program particularly in the achievement of its goal, outcomes of the complimentary activities, difference on the nutritional status of the beneficiaries pre feeding and post feeding, problems encountered on the implementation of the program and proposed action plan to improve the implementation of the program for the succeeding years.

Furthermore, this study aims to propose a project for school feeding which could augment the SBFP implementation and also help in the development and

sustainability of the feeding program in the schools of the Division of Tarlac Province

## Definition of Terms

**Body Mass Index (BMI).** An indicator of nutritional status expressed as body weight in kilograms divided by the square of the height in meters. It provides a measure of body mass, ranging from thinness to obesity (2015 DepED School Based Feeding Guidelines).

**Coverage.** The coverage of the School Based Feeding Program is its beneficiaries such as severely wasted and wasted beneficiaries.

**Duration.** The duration of the program refers to the 120 feeding day duration.

**Essential Health Care Program.** A Program composed of handwashing with soap, toothbrushing with fluoride toothpaste and bi-annual deworming to prevent respiratory tract infections and intestinal parasitism. This was designed as complimentary activity for SBFP to promote good health and nutrition values and behavior.

**Gulayan sa Paaralan.** A program used to promote the planting of vegetables in the schools and used to augment the budget for implementation of the SBFP.

**Malnutrition.** It is the direct result of inadequate dietary intake, the presence of disease, or the interaction of these two factors (WHO, 1995). The risk of dying from a disease is twice as high for mildly malnourished children, five times as high for those moderately malnourished, and eight times greater for children classified as severely malnourished when compared to normal children (UNICEF, 1996)

**Nutritional Assessment.** The appraisal of available information to provide a description of existing nutritional situation or nutritional status.

**Nutritional Status.** The condition of the body resulting from the intake, absorption, and utilization of food. Clinical examinations, biochemical analyses, anthropometric measurements, and dietary studies are used singly or in combination to determine this condition.

**Program Administrators.** They are composed of school heads who oversee the administration of the SBFP in the school beneficiaries.

**Program Beneficiaries.** The main beneficiaries and also the coverage of the program are the Kinder to Grade VI-pupils who are severely wasted and wasted.

**Program Implementers.** They are the teachers who acted as nutrition leaders or feeding coordinators in



the school beneficiaries and also the frontliner and uses the strategies in the implementation of the SBFP.

**School Based Feeding Program.** A feeding program of the Department of Education aims to: rehabilitate at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding days; ensuring 85% to 100% classroom attendance of beneficiaries and improve the childrens' health and nutrition values and behaviors.

**Severely Wasted** A very thin child whose BMI-for-age is below -3 z-score line or Standard Deviation (SD).

**Short-term hunger.** It is a condition experienced by children who do not eat breakfast and walk long distances to reach school.

**Undernutrition.** It is an abnormal state resulting from the consumption of an inadequate quantity of food over an extended period of time. It is manifested by underweight, stunting or growth retardation, and in severe cases, clinical signs of marasmus or kwashiorkor (2015 School Based Feeding Guideline).

**Wasted.** A thin child whose BMI-for-age fall between -2 to -3 z-score line.

**Wasting or Thinness.** A condition where the child's weight is lower than that of a normal child of the same height.

**Weight-for-Age.** The simplest and most common indicator for the assessment of growth. It compares the weight of an individual to a standard or reference **weight-for-age**. This indicator is useful for rapid screening because it combines acute and chronic malnutrition

## Statement of the Problem

This study evaluated the implementation of School Based Feeding Program (SBFP) in the Schools Division of Tarlac Province.

Specifically, the study sought to answer the following questions:

- 1.) How may the SBFP evaluated in terms of:
  - 1.1 coverage
  - 1.2 duration
  - 1.3 resources
    - 1.3.1 Personnel;
    - 1.3.2 Financial;
    - 1.3.3 Facilities;
  - 1.4 complementary activities;
    - 1.4.1 Gulayan sa Paaralan;
    - 1.4.2 Essential Health Care Program;
  - 1.5 process;
    - 1.5.1 strategies used in the implementation

2.) To what extent has the implementation of SBFP attained its goals in terms of:

2.1 Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100 to 120 feeding days;

2.2 Ensuring 85% to 100% classroom attendance of beneficiaries; and

2.3 Improving the children's health and nutrition values and behavior

3. How may the Nutritional Status of the beneficiaries be described in terms of:

3.1 Nutritional Status Assessment before and after feeding

4. Is there significant difference between the nutritional status of beneficiaries during before feeding and after feeding?

5. What are the problems encountered in the implementation of the program?

6. What action plan could be proposed to improve the SBFP's implementation?

## Significance of the Study

This study aimed to evaluate the implementation of the School - Based Feeding Program in the School Division of Tarlac Province so that better feeding program implementation would be rendered in the schools of the division. Furthermore, this study would be very significant in providing updated data in laying out better plans, valuable suggestions and recommendations that could help maximize gains from feeding program implementation.

**For the Department of Education – Tarlac Province,** the findings of this study will provide a framework of reference, guide and bases in all aspects of the feeding program implementation. This can be used to further improve the implementation of feeding programs in the division.

**For the Program Administrators and Program Implementers.** This study will serve as their basis in formulating policies and better plans in successful implementation of feeding in the schools of the division.

**For the Community.** This study provides information, deeper understanding, appreciation and recognition of the efforts exerted by the department in implementing feeding programs to lessen the cases of malnourishment to pupils that could predispose them to

diseases that would have an impact in their learning thus affecting their academic performance

**For the Pupils**, being the recipients of the feeding program, a more improve, systematic and successful implementation of the feeding programs will be expected, where more improved and equipped programs administrators and implementers and sense of dedication and commitment will be showcased in the feeding program implementation in the education populace.

**For the Health and Nutrition Personnel**, the outcome of this study would provide a better perspective of the implementation of the feeding program in the schools of the division. Furthermore, a development of a project that would initiate the development, support and continuity of a feeding programs in the schools of the division that would be beneficial in reducing the malnourishment thereby promoting good health and improve academic performance to pupils.

The findings and conclusions, as well as the suggestions and recommendations would provide learning's that could be useful in the conduct of a similar undertaking and promotes application in other government agencies, thus enriching the Public Health Management and its concern.

### Conceptual Framework

The study is a program evaluation study that utilized the Context- Input- Process and Product (CIPP) Model.

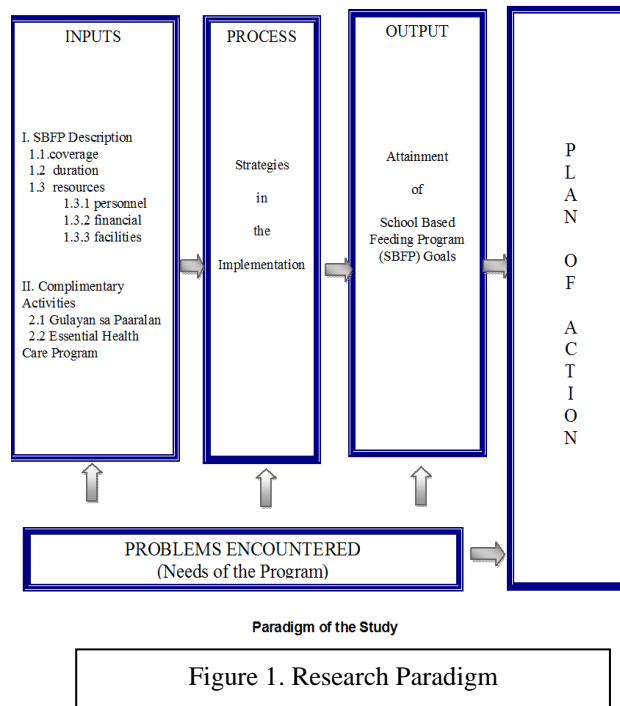
The inputs consist of the description of the program such as coverage, duration, resources and its complimentary activities such as Gulayan sa Paaralan and Essential Health Care Program components.

The process consists of the evaluation of the strategies used in the implementation of the SBFP based on the 2016 School Based Feeding Guidelines such as the nutritional assessment and identification of beneficiaries, creation of the SBFP Core Group, orientation on the program implementers, commodities, procurement and delivery, feeding proper, storage and control system and the integration of the complementary activities such as Gulayan sa Paaralan and Essential Health Care Program.

The output consists of the attainment of the goals of the program such as rehabilitating at least 70% of the severely wasted beneficiaries to normal nutritional status at the end of 100 to 120 feeding days; ensuring 85% to 100% classroom attendance of beneficiaries; and Improving the children's health and nutrition values and behavior.

The context consists of the problems encountered by the respondents in the implementation that needs to be addressed to improve the implementation of the SBFP.

A proposed plan of action was made to improve the implementation of the School Based Feeding Program.



### Methods and Materials

This study employed mix method of research. The study used the descriptive comparative method of research using the questionnaire as instrument of gathering the data needed. The study also used documentary analysis and personal interviews to the respondents to validate the accuracy and reliability of the data gathered. Focus group discussions (FGD) participated by program administrators, program implementers and program beneficiaries was conducted to selected recipient schools in the division to probe into program features or processes that have considerable effect on whether the school attained the programs goal or not.

The survey questionnaire was used as the major data gathering instrument in this study. The total of number of school beneficiaries were 259 school beneficiaries. 48.8% of the population served as the sample of the study. It was composed of 124 School heads as program administrators and 124 School feeding/nutrition coordinators/pupils' advisers.

The questionnaire was structured, pre-tested and validated questionnaire based on the 2015 Implementing Guidelines of SBFP and School Health and Nutrition Service Manual of the Department of Education.

The researcher used a questionnaire in the form of checklist. It contains 5- point Likert type rating scale. One type of questionnaire was used for all the respondents. The questionnaire used the 5 point- scale to determine the implementation of the School Based Feeding Program implementation in the Schools Division of Tarlac Province.

The questionnaire was validated through its face and content. The face validity of the questionnaire was established by two research experts while the content of the questionnaire was validated by three (3) experts in program implementation. For testing of the reliability of the questionnaire, 50 program administrators and program implementers from the DepED-Tarlac City served as the respondents. The results of the reliability test using the Cronbach's Alpha based on Standardized items was .971 with 42 items. This indicates that the questionnaire is highly reliable.

## Data Analysis

In relation to the School Based Feeding Program's (SBFP) implementation, strategies and the performance of the personnel, the researcher used the following scale

Table 1  
Scale for SBFP Implementation, Strategies and Performance of the Personnel

Point Scale	Index Limit	Descriptive Rating
5	4.50 – 5.00	Outstanding
4	3.50 – 4.49	Very Satisfactory
3	2.50 – 3.49	Satisfactory
2	1.50 – 2.49	Fair
1	1.00 – 1.49	Poor

For the resources, financial and facilities, the researcher used the Point Scale.

Table 2  
Scale for SBFP Resources

Point Scale	Index Limit	Descriptive Rating
5	4.50 – 5.00	Very Adequate
4	3.50 – 4.49	Adequate
3	2.50 – 3.49	Moderately Adequate
2	1.50 – 2.49	Inadequate
1	1.00 – 1.49	Very inadequate

For the attainment of program goals questions and implementation of the complimentary activities, the researcher gave the descriptive ratings in the

questionnaires to help the respondents fully understand the questions. A corresponding numerical equivalent for the scale was presented in the questionnaire.

For the mean level of evaluation on the attainment of program goals and level of implementation of the school based feeding, a 5- point scale was used. The mean level was determined by getting the total of the observations divided by the total number of observation. The scale was as follows: 5 – 81 – 100% or very high implementation/fully attained, 4 – 61-80% high implementation/almost fully attained, 3 – 41-60% or moderate implementation/moderately attained, 2 –21-40% or less implementation/slightly attained and 1- 0-20% or least implementation/ poorly attained.

The Sample Mean was computed using the formula:

$$X = \frac{\sum X}{N}$$

Where:

X = the mean, E = summation,

X = the raw score in a set of scores;

N = the total number of scores in a set

The rubric for the scale is as follows:

Table 3  
Scale for SBFP Level of Implementation

Numerical Rating	Interpretation
5	Attained 81% - 100% implementation/ very high implementation or /fully attained
4	Attained 61%–80% implementation/attainment/high implementation/almost fully attained
3	Attained 41%-60% implementation/attainment or/moderate implementation/moderately attained
2	Attained 21%-40% implementation/ attainment or less implementation/slightly attained
1	Attained 0%-20% implementation/.attainment or least implementation/poorly attained

For the problems encountered in the SBFP implementation, the responses of the respondents were summed up and categorized as follows:

Table 4  
Scale for Problems Encountered by the Respondents

Percentage	Descriptive Rating
81-100%	Always a Problem
61-80%	Almost Always a Problem
41-60%	Occasionally a Problem
21-40%	Seldom a Problem
0-20%	Never a Problem

## Results and Discussions

### 1. The Evaluation of the School - Based Feeding Program Implementation:

The School - Based Feeding Program implementation was evaluated according to its coverage, duration and resources (personnel, financial and facilities).

#### 1.1 and 1.2 Coverage and Duration of SBFP

The coverage of the program is the severely wasted and wasted beneficiaries. The weight of the beneficiaries was determined during the baseline nutritional assessment every July of the school year while the duration of the SBFP Implementation is 120 feeding days to achieve the desired goal of the program.

Table 5 shows the Coverage and Duration of the School-Based Feeding Program (SBFP)

Table 5  
Coverage and Duration of SBFP Implementation

SBFP Implementation	$\bar{X}$	Descriptive Rating
Coverage of the feeding (wasted and severely wasted)	4.52	Outstanding
Duration of the program	4.42	Very Satisfactory
GRAND MEAN	4.47	Outstanding

The coverage of the feeding was rated as 4.52 (outstanding). According to the respondents the coverage of the program was properly selected as per nutritional status assessment. Furthermore, according to the respondents, it is a must that the proper selection of coverage and adherence to it must be done to implement the SBFP in the schools properly and successfully.

The duration of the program was rated 4.42 (very satisfactory). According to the respondents the 120 feeding days as the duration of the program was sufficient enough for the feeding program to have its impact in the nutritional status of the beneficiaries. However, due to the delayed release of the amount allocated, some started late in the implementation. Furthermore, according to the respondents, the results revealed that the 120 feeding days as the duration of feeding program must be implemented successfully through facilitating the on-time released of the budget for the program.

### 1.3 Resources

In this study, the resources which were subject to evaluation were the personnel, financial and facilities needed for program implementation.

#### 1.3.1 Personnel involved in the SBFP Implementation

Personnel involved in the SBFP Implementation were program administrators, program implementers and program beneficiaries (pupils and parents). They are the frontliners in the program implementation.

Table 6 shows the results of the evaluation on the personnel involved in the SBFP Implementation.

Table 6  
Personnel of SBFP Implementation

PERSONNEL	$\bar{X}$	Descriptive Rating
Programs Administrators	4.30	Very satisfactory
Program Implementers	4.26	Very satisfactory
Program Beneficiaries		
a. Pupils	4.42	Very satisfactory
b. Parents	4.02	Very satisfactory
GRAND MEAN	4.25	Very satisfactory

Table shows that personnel involved in the SBFP implementation were pupils with a mean rating of 4.42 (very satisfactory) while the program administrators obtain a mean rating of 4.30 (very satisfactory), program implementers were rated as 4.26 (very satisfactory) and parents were rated as 4.02 (very satisfactory).

According to the respondents, the pupils were rated as 4.42 (very satisfactory) in their performance in the SBFP implementation because they were cooperative during the SBFP implementation particularly during the conduct of handwashing with soap, feeding proper and toothbrushing with fluoride toothpaste.

In addition, the program administrators were rated as 4.30 (very satisfactory) for their support in the program implementation particularly in the preparation of work plan, liquidation of cash advance. They had hands-on supervision during the SBFP implementation.

Furthermore, the program implementers were rated as 4.26 (very satisfactory) due to patiently implementing the SBFP. According to the program administrators, they are responsible for the preparation of foods and in-charge during feeding proper.

Finally, the parents obtained the lowest mean rating of 4.04 but still very satisfactory. According to the respondents, parents were not able to sustain its support in the implementation of the SBFP particularly in food preparation and cooking during the entire SBFP implementation. Furthermore, according to the respondents, the parents were the lowest in rank because they were not able to give full support particularly in the daily preparation of foods during the entire duration of the program implementation.

### 1.3.2 & 3 Financial Allocation and Facilities

The financial allocation and facilities in the SBFP implementation is a must. The financial allocation for SY 2015-2016 was 16.00 pesos per pupil. The facilities and equipment is imperative in the successful implementation of the SBFP. The facilities and equipment needed in the implementation are: handwashing and toothbrushing facilities, kitchen utensils and cooking area in the school.

Table 7  
Financial Allocation and Facilities in SBFP  
Implementation

Financial Allocation and Facilities	$\bar{X}$	Descriptive Rating
1. Budget Allocation	4.39	Adequate
2. Handwashing and Toothbrushing Facilities	3.99	Adequate
3. Kitchen Utensils	4.21	Adequate
4. Cooking Area in the school	4.08	Adequate
5. Vegetable Garden in Schools	3.95	Adequate
GRAND MEAN	4.13	Adequate

The table shows the results of the evaluation on the financial allocation and facilities/equipment of SBFP implementation. The mean rating for each item are: financial allocation, 4.39 (adequate); kitchen utensils, 4.21 (adequate); and cooking area in the schools, 4.08 (adequate); handwashing and toothbrushing facilities, 3.99 (adequate) and vegetable garden in school, 3.95 (adequate). Overall financial allocation and facilities obtained a rating of 4.13 (adequate).

The financial allocation for the program was rated as 4.39 (very satisfactory). According to the respondents, the P16.00 budget per pupil was enough for feeding program. The innovativeness of the respondents in preparing the cycle menu that are nutritious and low cost was instrumental in the successful budgeting of allocation in the SBFP implementation.

Furthermore, according to the respondents, although the financial/budget allocation was sufficient enough for the SBFP implementation it would be better if extra-budget coming from school initiatives to support the other needs of the program.

The kitchen utensils were rated 4.21 (adequate). According to the respondents, the schools have sufficient kitchen utensils to be used during feeding of pupils.

The cooking areas in the schools were rated 4.08 (adequate). According to the respondents, the cooking areas are part of the Home Economics building and used for cooking especially for feeding of pupils.

The handwashing and toothbrushing facilities were rated as 3.99 (adequate). According to the respondents, there was enough number of handwashing and toothbrushing facilities in the schools which was initially used for the implementation of the Essential Health Care Program (EHCP) for years and as complimentary activities in the SBFP implementation. However, these facilities need to be improved and maintained for succeeding implementation of the program,

The vegetable gardens in schools were rated as 3.95 (adequate) but still the lowest. According to the respondents, although there is vegetable garden in every school it was not enough to support the entire duration of the program. Furthermore, according to the respondents, implementation of the vegetable garden in schools must be intensified to be able to achieve a year round vegetable supply from the school vegetable gardens to the school - based feeding programs.

### 1.4 Complimentary Activities of School Based Feeding Program

The complimentary activities of the SBFP are Gulayan sa Paaralan and Essential Health Program programs which are being implemented for years and it is being tied up to the SBFP to aid its successful implementation.

#### 1.4.1 Gulayan Sa Paaralan

Gulayan sa Paaralan was one of the complimentary activities of the SBFP intended to augment the budget for the SBFP Implementation.

Table 8 shows the evaluation of the Gulayan sa Paaralan.

The utilization of the vegetable for SBFP feeding program was rated as 3.87 (high implementation) while the growing of vegetables in the garden was rated as 3.85 (high implementation) and availability of the vegetable

for SBFP feeding program was rated as 3.83 (high implementation) with the grand mean of 3.85.

Table 8  
Gulayan sa Paaralan

Gulayan sa Paaralan	$\bar{X}$	Descriptive Rating
1 Gulayan sa Paaralan		
a. growing of vegetables in the garden	3.85	High implementation
b. availability of the vegetables for SBFP feeding program	3.83	High implementation
c. utilization of the vegetables for SBFP feeding program	3.87	High implementation
GRAND MEAN	3.85	High implementation

According to the respondents, although there is a high implementation of the Gulayan sa Paaralan as complimentary activities, it was not able to sustain its support to the entire duration of the feeding program. Furthermore, according to them, there is a need to intensify the implementation of the Gulayan sa Paaralan to achieve its full implementation or very high implementation in its support for the feeding program as complimentary activities in succeeding years.

#### 1.4.2 Essential Health Care Program

The Essential Health Program (EHCP) is one of the complimentary activities of the SBFP implementation. The components of EHCP are handwashing with soap, toothbrushing with fluoride toothpaste and bi-annual deworming. The program aims to address the problems on diarrhea, dental carries and intestinal parasitism.

Table 9 shows the evaluation on the Essential Health Care Program (EHCP).

Table 9  
Essential Health Care Program

Essential Health Care Program	$\bar{X}$	Descriptive Rating
1.handwashing with soap	4.29	high implementation
2.toothbrushing with fluoride toothpaste	4.33	high implementation
3.bi-annual deworming	4.72	Very high implementation
GRAND MEAN	4.45	high implementation

The bi-annual deworming component of EHCP was rated as 4.72 (very high implementation) while the handwashing with soap and toothbrushing with fluoride toothpaste was rated 4.29 and 4.33, respectively described as high implementation. The grand mean was 4.45 (high implementation)

According to the respondents, the implementation of EHCP as complimentary activity must be intensified in the school to achieve its very high implementation. Constant supervision by the program administrators and followed-up by the program implementers must be done and linkages and partnership to Local Government Units, stakeholders and parents for the supports on EHCP packages that will facilitate the continuity of program implementation in support to the implementation of the SBFP for the succeeding years.

### 1.5 Processes

#### 1.5.1 Strategies used in the SBFP Implementation

The strategies used in the implementation by the program implementers: the feeding coordinators and nutrition coordinators based from the implementing guidelines of the SBFP. The strategies were: nutritional assessment, identification of the SBFP beneficiaries, creation of the SBGP core group, orientation on the program implementers, commodities, procurement and delivery, feeding proper, storage and control system, integration of Gulayan sa Paaralan, integration of the components of the EHCP, submission of reports and program evaluation.

Table 10 shows the Strategies of the SBFP Implementation.

The table shows the results of the strategies used in the SBFP Implementation. The nutritional assessment, identification of the SBFP beneficiaries, creation of the SBFP core group and feeding proper were rated as outstanding with the mean of 4.58, 4.5, 4.51 and 4.50 respectively. The strategies such as program evaluation, submission of reports, commodities, storage and control system, integration of the components of the EHCP and integration of the Gulayan sa Paaralan and procurement and delivery system were rated as very satisfactory with a mean of 4.48, 4.44, 4.42, 4.35, 4.32, 4.30, 4.24 and 3.75 respectively.

The grand mean for the strategies used in the SBFP implementation was rated as 4.36 (very satisfactory). According to the respondents, the strategies used by them was appropriate enough to successfully implement the program as evidenced by the data on the achievement of goals of the SBFP; however, these strategies should be properly implemented for succeeding feeding in the division to attain its very high implementation and would be beneficial for the pupils.

Table 10  
Strategies of the SBFP Implementation

Strategies in SBFP Implementation	$\bar{X}$	Descriptive Rating
1. Nutritional Assessment	4.58	Outstanding
2. Identification of the SBFP beneficiaries	4.55	Outstanding
3. Creation of the SBFP Core Group	4.51	Outstanding
4. Orientation on the Program Implementers	4.30	Very Satisfactory
5. Commodities	4.42	Very Satisfactory
6. Procurement and Delivery	3.75	Very Satisfactory
7. Feeding Proper	4.50	Outstanding
8. Storage and Control System	4.35	Very Satisfactory
9. Integration of Gulayan sa Paaralan	4.24	Very Satisfactory
10. Integration of the components of Essential Health Care Program	4.32	Very Satisfactory
11. Submission of Reports	4.44	Very Satisfactory
12. Program Evaluation	4.48	Very Satisfactory
GRAND MEAN	4.36	Very Satisfactory

## 2. School - Based Feeding Program (SBFP) Goals

The School Based Feeding Program has its three (3) major goals which are rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding days; ensuring 85% to 100% classroom attendance of beneficiaries and improving the children's health and nutrition values and behavior.

### 2.1 ,2.2 & 2.3 The SBFP Goals

The School Based Feeding Program was designed for the following goals: rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding days, ensuring 85% to 100% classroom attendance and improving the children's health and nutrition values and behavior of beneficiaries, there should be a realization of its goals. The most important goal is to rehabilitate the nutritional status of the beneficiaries from severely wasted to wasted and normal.

The table 11 shows the SBFP Goals.

Table 11  
School Based Feeding Program Goals

SCHOOL BASED FEEDING PROGRAM GOALS	$\bar{X}$	Descriptive Rating
1. Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding days.	4.53	Very high attainment
2. Ensuring 85% to 100% classroom attendance of beneficiaries	4.58	Very high attainment
3.Improving the children's health and nutrition values and behavior	4.28	High attainment
a. wearing of clean clothes	4.19	High attainment
b. proper hair cut for boys	4.17	High attainment
c. combed hair for girls	4.21	High attainment
d. keeping nails short and clean	4.33	High attainment
e.Handwashing before and after eating	4.33	High attainment
f Tootbrushing after eating	4.39	High attainment
g. Saying graces/praying before and after meals	4.56	Very High attainment
h. Saying "please and thank you" when requesting for food to be passed	4.39	Very High attainment
i. Not talking when the mouth is full	4.27	High attainment
j. Sitting properly while eating	3.89	High attainment
k. Falling in line while waiting for his/her turn	4.37	High attainment
GRAND MEAN	4.46	High attainment

Table shows that Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding was rated 4.53 (very high attainment) while ensuring 85% to 100% classroom attendance of beneficiaries was rated as 4.58 (very high attainment) and improving the children's

health and nutrition values and behavior was rated as 4.28 with the grand mean of 4.46 (high attainment).

Rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding was rated 4.5 (very high attainment). According to the respondents, the very high attainment of the goal was an outcome of the successful implementation of the SBFP in the division and joint effort of the program administrators, program implementers and program beneficiaries

Furthermore, this very high attainment of goal is consistent with the nutritional status of the beneficiaries before and post feeding nutritional status. The program terminal report of the SBFP for SY 2015-2016 indicates that there was a marked decrease in the severely wasted from 5,485 (49.14%) to 599 (5.37%) while the wasted beneficiaries from 5,677(50.85%) to 1,810 (16.22%) and 8.739 (78.29%) beneficiaries were rehabilitated to normal.

In addition, as shown in the table, the goal of ensuring 85% to 100% classroom attendance of beneficiaries was rated as 4.58 (very highly attainment). According to the respondents, 85-100% attendances of the beneficiaries were ensured during the feeding. In addition, according to them, the required percentage in classroom attendance must be attained for the successful rehabilitation of the nutritional status of the beneficiaries. It is imperative for the program administrators and implementers to constantly follow up and motivate the beneficiaries to go to school everyday and participate in the feeding program.

Table 12 shows the Attendance of the Beneficiaries in Terminal Report

Table12  
Attendance of the Beneficiaries in the SBFP Terminal Report

% Attendance Of Beneficiaries	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Average of Month 1-7
Before the SBFP	95%	98%	89%	100%	98%	99%	97	96.57
After the SBFP	97%	99%	100%	98%	98%	100%	100	98.86

Furthermore, as shown in table 12, the program terminal report of the division upon validation showed that average of attendance of the beneficiaries before the feeding program was 96.57 to for 98.86% during the SBFP implementation.

According to the respondents, the 85 - 100% classroom attendance of the beneficiaries were assured to achieve the successful implementation of the SBFP to

have an impact on the nutritional status of the beneficiaries.

In addition, the School - Based Feeding Program is also concerned with the improvement of the children's health and nutrition values and behavior. Aside from rehabilitating the nutritional status and ensuring the 100% classroom attendance of the beneficiaries, it is also the goal of the SBFP to improve the children's health and nutrition values and behavior. The program administrators and implementers see to it the there is also an integration of the health and nutrition values and behaviors during the program implementation and internalization and carry over of this values and behavior to the home.

In improving the health and nutrition behavior of pupils the following behavior were rated namely: saying graces/praying before and after meals was rated as very high attainment or 4.56 while toothbrushing after eating and saying "please and thank you" when requesting for food to be passed were rated as 4.39 (high attainment) and falling in line was rated as 4.37 (high attainment), keeping nails short and clean and handwashing before and after eating were rated 4.33 (high attainment), not talking when the mouth is full was rated 4.27 or high attainment, combed hair for girls was rated as 4.21 of high attainment, wearing of clean clothes was rated as 4.19 (high attainment) while sitting properly was rated as 3.89 or high implementation. The grand mean for the goal of improving the children's health and nutrition values and behavior was 4.28 or high attainment.

The goal of improving the children's health and nutrition values and behavior was rated 4.28 (high attainment). According to the respondents, the improvement of the children's health and nutrition values and behavior were highly attained because of the improvement noticed in the behavior of the beneficiaries during the program implementation. However, according to the respondents these improvements should be internalized.

### 3. Description of the Nutritional Status

The nutritional status assessment of the beneficiaries was being done by the class advisers and the nutrition leaders. The nutritional assessment of the beneficiaries was done before feeding for the baseline assessment and after feeding for the endline assessment.

#### 3.1 Nutritional Status Assessment Before and After feeding

Nutritional Status Assessment before feeding or baseline assessment is being done to determine the nutritional status of the pupils as to severely wasted, wasted, normal, obese and overweight while the



nutritional status assessment after feeding is being done after the completion of the 120 feeding days.

Table 13 shows the Nutritional Status Assessment Before Feeding (Baseline Assessment) and After Feeding (Endline Assessment).

Table 13

Nutritional Status Assessment Before Feeding (Baseline Assessment) and After Feeding (Endline Assessment)

Nutritional Status	Before Feeding	%	After Feeding	%
Severely Wasted/Underweight (SW/SU)	5,485	49.14	599	5.37
Wasted/Underweight (W/U)	5,677	50.86	1,810	16.22
Normal (N)	0	0	8,739	78.29
Overweight (OW)	0	0	14	0.13
Obese (O)	0	0		
TOTAL	11,162	100	11,162	100%

The table shows the difference between the nutritional status of the beneficiaries before the feeding and after the feeding, there was a marked decrease in the severely wasted from 5,485 (49.14%) to 599 (5.37%) while the wasted beneficiaries from 5,677(50.86%) to 1,810 (16.22%) and 8.739 (78.29%) beneficiaries were rehabilitated to normal.

According to the respondents, the successful rehabilitation of the severely wasted and wasted was a collaborative efforts of the program administrators, program implementers and beneficiaries using the resources, facilities and strategies of the program implementation

#### 4. Significant Difference between Baseline Assessment and Endline Assessment

This study aimed to determine if there is significant difference between the baseline nutritional status assessment and endline nutritional status assessment.

Table 14

Comparison of the Pre-feeding and Post-feeding

	Z	Significance	Decision
Pre-feeding-Post-feeding	-93.552	0.000	Reject H <sub>0</sub>

At an alpha level of 0.05, the computed p-value (0.000) signify that we need to reject the null hypothesis.

Hence, there is significant difference between the pre-feeding and post-feeding weight readings of the pupils.

The results of the comparison of the baseline and endline assessment were supported by the program terminal report particularly data on the nutritional status before and after feeding. In the report, there was a marked decrease of the severely wasted from 5,485 (49.14%) to 599 (5.37%) while the wasted beneficiaries from 5,677(50.85%) to 1,810 (16.22%) and 8.739 (78.29%) beneficiaries were rehabilitated to normal.

#### 6. Problems encountered in the SBFP Implementation

There were problems encountered by the program administrators and program implementers in the SBFP Implementation.

Table 15 shows the Problems encountered in the SBFP Implementation

Table 15

Problems encountered in the SBFP Implementation

Problems	Frequency	%	Descriptive Rating
1. Delayed release of budget for feeding.	206	83.06%	Always a Problem
2. Inability of parents to attend regularly in the preparation of foods for SBFP.	184	74.19%	Almost a Always a Problem
3. Additional workload for teaching in buying food item/ingredients with receipts	136	54.84%	Almost a Always a Problem
4. Dislike of pupil beneficiaries of vegetables.	135	55.43%	Occasionally a Problem
5. Indifference of pupil beneficiaries to the feeding program (ashamed of being SBFP beneficiaries).	101	40.73%	Occasionally a Problem
6. Recipients did not bring their own plates/spoons.	86	34.68%	Occasionally a Problem
7. Lack of cooking utensils for food preparation for SBFP recipients.	83	33.71%	Seldom a Problem
8. Disciplining of pupils during feeding time.	36	14.52%	Never a Problem
9. No time to communicate with book keeper for compliance in liquidation.	34	13.71%	Never a Problem
10. Some pupils did not eat breakfast at home and rely only for ration of the SBFP	20	8.06%	Never a Problem
11. Having a hard time to comply with the cycle menu.	15	6.05%	Never a Problem

Table shows that there were problems encountered in the implementation of the SBFP namely: delayed release of budget, inability of parents to attend regularly in the preparation of food for SBFP, additional work in buying commodities with receipts, dislike of pupil beneficiaries of vegetable, indifference of pupil beneficiaries to the feeding program, recipients did not bring their own plates and spoon and lack of cooking utensils for food preparation for SBFP recipients.

Among the problems encountered during the SBFP implementation were: delayed released of budget for feeding was delayed was considered by the respondents as always a problem. According to the respondents, there was a delayed release of fund for the SBFP implementation which prompted them to use their own money or lend just to follow the schedule of the implementation of the program.

Inability of parents to attend regularly the preparation of food for SBFP was considered as almost always a problem because some of them were only present and active only during the initial implementation of the feeding and slowly inactive during the middle and final implementation

According to the respondents, dislike of pupil of vegetables; additional work in buying commodities with receipts were considered almost always a problem. According to the respondents, it was a challenge for them to prepare their menu especially when its vegetable because most of the beneficiaries do not eat vegetables and it is an additional work in their part in securing receipts especially if the commodities they are buying is in the market.

Additional work in buying commodities with receipts was also considered as almost always a problem by the respondents. According to the respondents it was an additional work for them since there are requirements in getting the receipts.

Dislike of pupil beneficiaries of vegetable was considered occasionally a problem. According to the respondents, there are some pupils did not eat during the feeding if the menu was vegetable. Furthermore, according to them there is a need to motivate them through lecture on the importance of the vegetables in maintaining the healthy body.

Irregular participation of the pupil beneficiaries in the feeding program because some of them were ashamed to be an SBFP beneficiaries was considered an occasionally a problem. According to the respondents, there were some SBFP beneficiaries who were ashamed to be called as beneficiaries. This is usually exhibited during the call time for feeding.

## Conclusions

The conclusions derived from the findings of the study.

1. The study revealed that the SBFP implementation was outstanding in its coverage while very satisfactory in its personnel performance, adequate in its financial allocation and facilities. In addition, it was also revealed that SBFP's complimentary activities such as Gulayan sa Paaralan and Essential Health Care Program were highly implemented. Furthermore, the strategies used by the program implementers was rated very satisfactory.

- 2 The study further revealed that there was a very high attainment of the SBFP goals particularly in the rehabilitation of at least 70% of the severely wasted beneficiaries to normal nutritional status at the end of 100 to 120 feeding days and for ensuring the 85% to 100% classroom attendance of beneficiaries while high attainment on its goal on improving the children's health and nutrition values and behavior.

3. After 120 feedings days, majority of the beneficiaries were rehabilitated to normal nutritional status and attendance were improved from 96.57% to 98.86%. Attainment of improving the health and nutrition values and behavior is also generally high.

- 4 The study also revealed that there is a significant difference in the nutritional status of the beneficiaries between prefeeding (baseline nutritional status assessment and postfeeding (endline nutritional status assessment) as reflected in the data on the nutritional status assessment of the beneficiaries per schools.

5. There were problems encountered in the implementation of the SBFP namely: delayed release of budget for feeding, irregular attendance of parents during the preparation of meals, additional workload for teachers in buying food items/ingredients with receipt in buying with receipts, pupils did not eat vegetable and some pupils are ashamed being an SBFP beneficiaries,

## Recommendations

Based on the findings of the study, the following recommendations were offered:

1. The program administrators and implementers must continue to implement the SBFP successfully as to: coverage, duration and resources. Improvement on the integration of the Gulayan sa Paaralan and Essential Health Care Program must be done through constant supervision of the program administrators, followed – up of the program implementers and linkages and partnership to the Local Government Units, stakeholders and parents to assure the continuity of the program

implementation and achieve its very high implementation. In addition, the strategies used in the implementation by the program implementers must be intensified to be fully implemented.

2. The very high attainment of the goals of SBFP such as rehabilitating at least 70% of the severely wasted and wasted beneficiaries to normal nutritional status at the end of 100-120 feeding and ensuring 85% to 100 classroom attendance of the beneficiaries must be sustained while the goal of improving the children's health and nutrition values and behavior must be improved from high attainment to very high attainment. The program administrators, implementers and health and nutrition personnel must exert extra efforts in giving health teachings and information on the development and internalization of the health and nutrition values and behaviors.

3. The nutritional status assessment done by the program administrators and implementers to the beneficiaries must be sustained as pre requisites to the successful feeding implementation. There must be a reorientation to the school health and nutrition leaders on the conduct of the baseline and endline nutritional status assessment to assure accuracy on the nutritional status of the pupils prior to selection of the beneficiaries for School Based Feeding Program implementation.

4. A unified cycle menu based on the DepED Standardized Recipes using malunggay for school feeding program must be adopted in the division to facilitate the easier implementation of the program particularly in the monitoring and evaluation and the liquidation of funds.

5. In case of beneficiaries who became obese, they will be under the Project anti-obesity which was proposed by the researcher, adapted and had its initial implementation on SY 2016-2017 in the division through the approved Division Memorandum No. 142, s. 2016

6. An intensified monitoring of the program must be implemented to facilitate the successful and transparent implementation of the program. The program beneficiaries (parents and pupils), district nutrition consultant and health and nutrition personnel must be the signatories in the form as additional attachment for the liquidation.

7. The health and nutrition personnel should intensify the use of the SBFP monitoring form as tool for monitoring and report the progress of weekly monitoring weekly to the School Health Section to aid in the successful and transparent implementation of the program in the division.

8. Additional travel allowance/monitoring allowance for the health and nutrition personnel to support the monitoring of the SBFP and must be specified in the Sub-

Allotment Release Order (SARO) by the DepED Central Office.

9. The problems encountered in the implementation of the SBFP namely: delayed release of budget for SBFP; some parents were not able to attend everytime it is their time to help in preparing foods for SBFP was considered always a problem while some beneficiaries did not eat vegetables; additional work in buying commodities with receipts were considered almost always a problem must be addressed, thus a proposed consultative meeting, conferences and orientation will be conducted by and between the budget officer, accountant, health and nutrition personnel, administrative aids, program administrators (school heads) program implementers (feeding and nutrition coordinators), pupils and parents.

10. Outstanding Implementer of the School Based Feeding Program must be awarded in the central and non-central category.

11. Division Planning and Implementation Review (PIR) must be done at the end of SY implementation and before the succeeding year implementation as one way of evaluating the SBFP implementation and sharing of best practices from the school beneficiaries.

12. Adoption of Project "NUTRIENTS" in the division will help augment the implementation of the SBFP in the elementary level and promotion of feeding program in the secondary level.

13. Studies of similar undertaking are encouraged by the researcher giving emphasis on the: feedback from the parents of the program beneficiaries and the SBFP monitoring team that will facilitate a comprehensive evaluation of the program; effective carry-over of the health and nutrition values and behavior learned in the school to the home and community and determine the impact of the program on the academic performance of the SBFP beneficiaries.

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