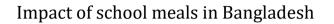


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(RESEARCH ARTICLE)



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Abstract

School meals are an excellent way to provide impoverished kids with essential nutrition. School meals are a critical component of children's nutrition and better health in the long run. Through school meals, children are encouraged to improve their nutrition, make healthy food choices, and develop good eating habits. A child's ability to study is negatively impacted when they arrive at class hungry. A school meal program is a means of giving kids wholesome food while they're in school. Through government-arranged programs, the majority of developing and developed nations allocate a portion of their resources to mealing schoolchildren. Social scientists and nutritionists have long acknowledged a causal relationship between children's learning capacity and their nutritional status. Therefore, the system of offering free or subsidized school meals is seen as essential to the government. Currently, substantial financial resources are being allocated by governments and development partners in both developing and wealthy nations to provide free school meals to underprivileged children. Children gain from school meals because they reduce hunger in the classroom, decrease laziness and sustenance deficiencies, and increase school enrollment and attendance. A vital element promoting both education and health is mealing kids nutritious meals at school. School meals at school have shown to be an investment in children's and their families' future prosperity as well as a potent platform for the growth of entire communities. These programs, when incorporated into all-encompassing school health and nutrition strategies, can offer safety nets that support and maintain social protection, sustainable food systems, gender empowerment, high-quality education, and economic growth.

Keywords: School Meals; Bangladesh; Education; Nutrition; Children

1. Introduction

About 30% of Bangladesh's population is under 24 years old, which contributes to a low dependency ratio. In order to reap the benefits of the demographic dividend, it is imperative that the younger generation acquires the necessary skills to make the most productive contributions to the nation's future. One of the key elements that helps develop these abilities is education. As a result, the government has prioritized high-quality education and uses school lunches to improve it.

The School Meal Program can simultaneously help meet nutritional needs, which benefits children's physical and mental health and, in turn, their productivity and current and future cognitive achievements. This study is intended to offer data to support the government's decision to make the school-based mealing program universal. The government is currently debating the best way to accomplish this.

School meals programs can support local agriculture and markets by improving health, nutrition and education, making communities more resilient. These programs can transform lives and communities and serve as a platform to improve education and food systems around the world. Every day millions of children around the world go to school on an empty

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stomach - hunger affects their ability to concentrate and learn. There are also millions of children - especially girls - who simply do not go to school because their families need them to help in the fields or do household chores. Children in conflict-affected countries are twice as likely to be out of school as their peers in stable countries - 2.5 times more likely for girls.

School meal programs can help address many of these challenges. They are a multidisciplinary game changer that improves children's education, health and nutrition. More broadly, they support the entire community by providing an important safety net and strengthening food systems and economies (Sustain, 2023).

One type of merit good that is strongly tied to the concept of externalities is school meals. These are goods that are deemed to have a significant positive impact on society at large and thus "deserve" to be supplied. Therefore, one could argue that their production and distribution should be subsidized. According to some analysts, "liberal education" is a merit good in democratic nations as well because it promotes critical thinking and attentive reading, both of which are necessary for analyzing ideas in a free society.

There is a case to be made for government intervention to establish a social safety net for the most vulnerable, if not to alter the distribution of income more broadly, since the so-called basic needs usually necessitate a minimum level of income. Both tax and spending policies have the potential to redistribute income, but the majority of experience indicates that government spending makes it simpler to support those with low incomes.

The purpose of this study is to determine the educational outcomes for children by first illustrating the composition of school meals in different countries across the world, with a focus on two developing and one developed nation. In conclusion, this research will aid in comprehending the concept of school meals and ascertaining the actual influence of school meals on students' academic performance.

2. Literature Review

2.1. Concepts of School Meal

A school lunch is a meal that is provided to pupils by the school, typically at the start or end of the school day. The term "lunch" is frequently used to refer to school meals, which can include some morning programs and single-commodity programs like fruit or milk. Almost one-third of a child's daily nutritional needs are met by school lunch. School meal programs are implemented in many countries in an effort to help children develop healthy physical and mental states; these programs are crucial to the implementation of nutritional policies that will have a greater positive impact on public health. Initiatives for school meals differ based on the realities of each nation's food supply, health, and economy. In some developing nations, these programs also offer a significant social and educational benefit.

2.2. Information from the Globe

Since the 1920s, all primary and secondary schools in Western Europe, including Finland, France, Sweden, the United Kingdom, and Scotland, have required to provide a hot lunch every day of the week. In several European countries, such as Austria, Ireland, and Norway, variations of this rudimentary school meals initiative exist, with individual schools deciding whether or not to serve lunch.

The intention behind school meal programs was to shield students from malnutrition, both in developed and developing nations. For impoverished families, food comes first and is closely related to family resources, which include almost all of their time and money. Families seem anxious to ensure that their children are eating enough food and that they do not go to school without enough money to purchase wholesome food. This leads to the development of chronic or mild malnutrition, which alters the body and mind and has long-term effects on productivity, physical health, and education.

School meal plans give kids lots of opportunities to eat wholesome, balanced meals. This kind of food encounter is repeated multiple times to give people several opportunities to modify their eating patterns. Nonetheless, dietary, lifestyle, and behavioral patterns are developed during childhood and significantly influence health and overall wellbeing. Pupils insist on eating a healthy meal during class. Poor academic performance can be caused by hunger and inadequate nutrition in schools, which can be a significant learning barrier. Studies indicate that children who are malnourished are more likely to experience behavioral problems like attention deficit disorder, depression, and antagonism, all of which have an impact on academic performance. School lunches can help students focus better, feel less distracted, and satisfy their hunger right away.

Most people agree that school-age children who are undernourished or destitute should receive meals. The purpose of the school meal program is to promote enrollment and help families cover some of the costs (opportunity and out-of-pocket) related to sending their kids to school. Additionally, the political and logistical view is that school lunches are typically provided to all students at a particular school. There are just two benefits to school meals.

First of all, it provides a clear incentive for the child to attend school on a regular basis. Second, timely school meals satisfy children's short-term hunger and may improve their ability to focus and learn (Adelman et al., 2008). Empirical studies have shown a substantial relationship between a child's diet and academic performance, with school meal accessibility playing a major role. Empirical research indicates a strong relationship between school learning and child nutrition, with children's academic achievement—including participation and academic performance—improving when school meal programs, such as school breakfast, are easily accessible.

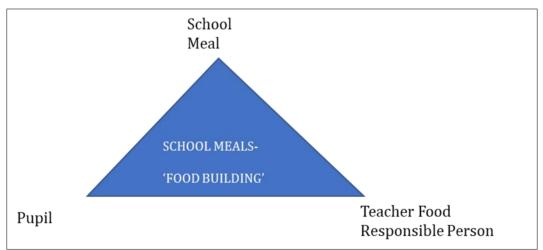
Additionally, school lunches may improve learning outcomes in the following ways. First, by bringing down the cost of education, school meals can encourage parents to send their kids to school regularly. Attending class on a regular basis may improve academic performance. Second, school lunches improve kids' nutritional status, which may have an impact on their long-term mental health. Third, school meals can enhance learning outcomes by raising student engagement and attention spans, particularly when there is a feeling of "classroom hunger" (Afridi et al., 2013).

There are two pillars supporting the idea that school meals improve academic performance through better nutrition.

First, eating at school improves nutrition, and second, improved nutrition raises academic achievement. Participation in school is now thought to be a promising motivating factor for paying for school meals. A child's attendance at school on a school day constitutes her participation in this context. The World Food Program (WFP) has noted that more children are drawn to school by the prospect of free school meals (Vermeersch & Kremer, 2005).

3. Methodology

The descriptive research form the basis of this study, and secondary provenances are used in the analysis process to provide information. The information was gathered from a range of publications, including academic journals, newspapers, research articles, online news, and survey reports from the World Food Programme (WFP), United Nations Children's Education Fund (UNICEF), and Multiple Indicators Cluster Survey (MICS). The collected data was represented and analyzed using the tabular descriptive method.



3.1. Key concepts and Theoretical Basis

Figure 1 The didactic triangle elaborated (Benn, 2012)

Figure 1 illustrates how school meals can serve as teaching opportunities, highlighting the significance of the student-teacher relationship and the food and meal content in creating the learning environment for school meals as "Bildung" (food). The concept of "foodscapes," which is defined as "the places and contexts where children eat and come into contact with food and the meanings and associations connected to them," can be used to understand this institutional relationship (Johansson et al., 2009, p. 30).

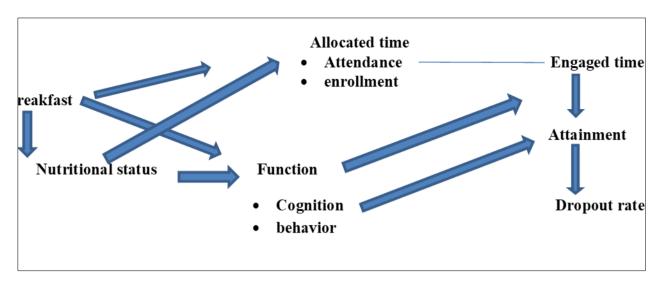


Figure 2 The hypothesized relationships between breakfast and possible outcome variables in School children. Source: (Grantham-McGregor et al., 1998).

The relationships between breakfast consumption and various outcome factors in school-aged children are hypothesized, as shown in Figure 2. "Allotted time" is time that the teacher has set aside, and "engaged time" is time that the students spend concentrating on their assignments. Another thing to think about is that it is possible to improve the nutritional status of the undernourished population if school meals are provided for an extended period of time. There is tenable evidence that children who receive better nutrition perform cognitively more coherently than children who do not. Therefore, by improving the nutritional status of undernourished children, school meals may indirectly improve cognitive performance.

3.2. Impact of School Meals on Nutrition and Health of School-Aged Children

The school meal program greatly improves the diets of the kids who take part. The energy (calories) consumed while arranging biscuits at school is nearly entirely (97%) added to a child's daily intake. In addition, the child's family does not give them less food at home so they can eat school-arranged biscuits. These findings were primarily based on a carefully planned study and an econometric model that looked at how school meals affected kids' caloric intake. For program participants, biscuits are the main source of vitamin A in their diets. After rice, they are the primary source of iron, vigor, and protein. The average energy consumption of participating students is 19% and 11% higher in urban and rural slum areas, respectively, than in related control areas (Ahmed & Babu , 2009).

Students received a package of enriched wheat biscuits, which contained 300 calories and 75% of the daily recommended intake of vitamins and minerals, as a mid-morning snack for every day they attended school. Participants' average energy intakes in the urban and rural slum regions were 19% and 11% higher, respectively, than those of ageand sex-matched students in control schools that did not participate in the SF program. As a result, the SF arrangement increased the participating children's net food consumption, and the extra energy from the biscuits was not offset by a decrease in mealing at home. The energy intake from biscuits was 97% more than the child's regular diet. Researchers discovered that a significant percentage of students receiving SF shared enriched biscuits with other members of their households either daily or occasionally based on the results of household food consumption questionnaires. When the siblings of the participants (ages 2–5) were exposed to SF biscuits, their overall calorie intake increased by an average of 7% (Jomaa , McDonnell & Probart , 2011).

The WFP noted that the majority of elementary school-aged children in the program areas did not consume enough iron, energy, or vitamins A, B1, and B2. The study also found that the school biscuits' high protein, calorie, and micronutrient content greatly enhanced the participants' nutritional status who were students. Mothers in the Northwest, school management committees, and schools all agree that biscuits satisfy kids' hunger during school hours. Parents believe that their children's ability to learn is enhanced by the biscuits' ability to reduce hunger, lower the prevalence of skin disorders, and relieve weakness and vertigo in schoolchildren. They noticed that learning quality increases in children who are happy and focused. Both parents and educators believed the biscuits were healthy and helpful for their kids, and some even praised them as a helpful replacement for the meat and fish that they were unable to provide for their kids (Bangladesh School Mealing Impact Evaluation, 2011).

3.3. Key concepts and theoretical basis

3.3.1. Impact of School Meals on Education and Learning

Studies on the beneficial effects of nutrition demonstrate the necessity and benefits of giving schoolchildren school meals and/or snacks in order to improve academic performance and certain cognitive tasks, especially for undernourished students. School lunches improve academic achievement by reducing the dropout rate. This is especially true for take-home rations and school mealings when both options are provided simultaneously at the school, with girls benefiting more.

The International Food Policy Research Institute (IFPRI)finds that the school meal program reduces dropout rates and significantly increases enrollment and attendance. It has improved school attendance by 1.3 days per month and raised enrollment by 14.2 percent. The probability of quitting has dropped by 7.5 percent. On the other hand, a lot of moms claim that the school meal program benefits kids in different ways. According to their reports, children are now more eager to learn and attend school, are more active and happy than they were previously, and their rates of illness have dropped (Ahmed & Babu, 2009).

4. Discussion of Success and Failure Cases in develop and developing countries:

4.1. Success Cases

4.1.1. India

A midday meal program has been in place in India since 1995, mealing 125 million children between the ages of 6 and 14. It costs the government \$2.8 billion, but it guarantees that all children can get a hot meal without any questions asked. It's the biggest school food for all program in the world, with goals including lowering child hunger, raising enrollment, and improving attendance. It has been discovered to have an intergenerational effect, resulting in fewer shorter children born to women who had benefited from the school food program, which is a common indicator of malnutrition. It also improves nutritional health and educational outcomes.



Figure 3 Children enjoying their mid-day meal program in India

https://www.sustainweb.org/blogs/mar23-countries-have-universal-free-school-meals/ [Accessed on September 10, 2023]

4.1.2. Brazil

Since the 1940s, Brazil has been offering free school meals to children from low-income families; however, in 2009, the program was expanded to include all children. That amounts to 40 million kids! This action was taken in response to mounting data showing that providing free school meals can combat obesity and improve student nutrition education. Currently, the program designs school meals using a network of 8,000 nutritionists across the country, and it mandates that at least 30% of the food served in these meals come from family farms within the municipality of the schools. The municipality of El Salvador has gone one step further and is serving its 170,000 students plant-based meals.

Brazil provides some hints. Programa Nacional de Alimentação Escolar, or PNAE, is the national student nutrition program of that country, with an annual budget of \$1.3 billion. The program was established in 1954, but over the course

of the last 15 years, it has undergone significant changes as a result of a number of pro-food security reforms. Notably, a 2009 law mandated that at least 30% of the food purchased for the program originate from small family farms.

In 2012, the International Policy Center for Inclusive Growth reported that the PNAE was investing approximately US\$500,000 to support local farmers who provided schools with fresh produce, dairy, fruits, and other goods. While some states are still falling short of the thirty percent threshold, others are already above it.



Figure 4 High school students eat lunch -- rice, beans, stewed beef, salads and fresh strawberries -- at Presidente Costa E Silva high school in Irati, a town in Paraná, Brazil.

Source:https://thetyee.ca/News/2016/05/11/Brazil-School-Meal-Program/ [Accessed on September 10, 2023

4.1.3. Sweden

Along with its neighbor in Scandinavia, Sweden provides 260 million hot meals annually to students between the ages of 7 and 16, with the majority being between 16 and 19. Studies on the Swedish program have shown that kids who eat these meals not only achieve better academic results but also grow up to be healthier adults. With a benefit to cost ratio of 7:1, children from families in the lowest income quartile who received free school meals for nine years increased their lifetime income by 6%. Sweden serves about 260 million school meals a year. Prices include ingredients, labor, and transportation, with an average of 616 EUR per year and 6,600 SEK for a child. An average meal's ingredients cost slightly more than one EUR (SEK 10–14). The 290 municipalities are in charge of providing a wide range of services, such as education and meal preparation for schools. With the assistance of local private service providers, they are also able to offer school meals. Each school receives food that is either prepared on-site or in central kitchens and is either served warm or chilled for later heating. Alternatively, schools may have their own school kitchens. A warm main course, a salad bar, and bread with spreadable cheese are included in the meal.



Figure 5 Swedish school lunch reform, nutrition, and lifetime income

https://cepr.org/voxeu/columns/swedish-school-lunch-reform-nutrition-and-lifetime-income/ [Accessed on September 10, 2023]

A warm main course, a salad bar, bread with spreadable fat, and a beverage (milk or water) make up the meal. There's also usually a vegetarian option available. At the buffets, students are allowed to help themselves. Ideally, teachers

incorporate food and health education into their meals with the students. This widely accepted, albeit unofficial, practice is known as "pedagogic lunch."

4.2. Failure Case

4.2.1. Yemen:

Since 2015, Yemen has been experiencing a protracted conflict that has resulted in a severe humanitarian crisis and food insecurity. Of the 7 million children targeted by the WFP-supported school mealing program, only 1.3 million were reached in 2019 because of funding gaps, insecurity, and access issues. The COVID-19 pandemic in 2020, which prevented the distribution of take-home rations and forced the closure of most schools, had an additional negative impact on the program.

4.2.2. Venezuela:

Since 2014, Venezuela has been undergoing a severe economic and political crisis that has led to many of the following: hyperinflation, food and medicine shortages, social unrest, and mass migration. Inadequate infrastructure, coordination, and resources have had a negative impact on the national school mealing program (PAE). A Caritas Venezuela survey from 2019 found that only 18% of schools said they regularly received PAE food supplies, while 82% said they only occasionally or never received them.

4.2.3. Greece

In Greece, school meal failure is a major problem that has an impact on kids' health and education. Greece has a national school meal program that, according to the [Global Report of School Meal Programs Around the World], has given free breakfast and lunch to all students enrolled in public schools since 1985. Millions of children were left without access to sufficient food in schools in 2011 as a result of the government's decision to halt the program due to the economic crisis that struck the nation in 2010.

Children's wellbeing and academic performance suffered as a result of the school meal program's suspension in Greece. According to a study by the [World Food Programme], 11% of children reported going to school hungry, and the prevalence of food insecurity among schoolchildren rose from 7% in 2008 to 21% in 2013. The study also discovered a link between children's food insecurity and poorer self-esteem, higher absenteeism, and poorer academic performance.

In response to the crisis, a number of programs were started by private donors, local government representatives, and civil society organizations to help meal underprivileged families and schools. For instance, the [Stavros Niarchos Foundation] assisted the [Prolepsis Institute] in 2012 as it carried out the [Food Aid and Promotion of Healthy Nutrition Program] (DIATROFI). The program's objectives were to provide nutritious meals to students in schools situated in low-income communities every day and to encourage children and their families to engage in physical activity and healthy eating practices. More than 110,000 students in more than 700 schools throughout Greece were impacted by the program, which also enhanced their dietary habits, academic performance, and nutritional status.

These efforts, however, fall short of filling the void created by the lack of a national school meal program. A long-term, viable solution is required to guarantee every child in Greece the right to food and education. With sufficient funding and quality standards, and in cooperation with pertinent parties like schools, parents, local communities, and civil society organizations, the government should revive and modify the school meal program. School meal programs are an investment in the future of the nation as well as a social safety net.

4.3. School Meal in Bangladesh

Bangladesh's economy has grown steadily over the previous few decades, and it is predicted to become middle-income soon. With nearly 22 million children in pre-primary and primary school, and enrollment rates exceeding 95%, the government of Bangladesh faces significant challenges in providing high-quality education. Achieving universal primary education coverage, keeping boys and girls in school longer, lowering dropout rates, and reducing social, gender, and regional disparities have all been made possible by the School Mealing Program's success in reducing hunger. In 2001, the World Food Programme (WFP) and the government of Bangladesh started the School Mealing program, which gave children 75g of micronutrients. In 2001, the World Food Programme (WFP) and the government of Bangladesh started the School Mealing program, which gave children 75g of biscuits fortified with micronutrients. Reducing malnutrition in school-age children and enhancing enrollment, attendance, and retention were the goals. To give kids a safety net, Bangladesh established the School Mealing Programme in Poverty Prone Areas (SFPPA) in 2011 under the Directorate of Primary Education (DPE). The government realized that, in place of biscuits, a Home Grown School Mealing (HGSF)

program was necessary after the School Mealing program produced positive results. The Government has recently implemented the HGSF modality, which was first tested in 2013 at the request of the World Food Program. The School Mealing Program is currently moving from being entirely run and funded by the government to being fully owned by the state. By 2030, the goal is to move from micronutrient-fortified biscuits to a Home Grown School Mealing model, which will provide the National School Meal Policy to every primary school student. During a Cabinet meeting on August 19, 2019, the Honorable Prime Minister of Bangladesh approved the NSMP, which is currently being implemented by important government ministries. The WFP will provide technical support as the NSMP is implemented gradually. The nation will be able to offer a safety net for the youth who will be in charge of its future growth and development with the adoption of the NSMP.

In order to prevent hunger and keep students in school longer, school meal programs are essential. A universal mealing program can make a major contribution to the development of a country by helping to eliminate different forms of discrimination, boosting food security, and enhancing learning outcomes in primary education. Bangladesh has pledged to fulfill the Sustainable Development Goals of the United Nations by 2030. Therefore, the school meal program needs to be prioritized. The school meal plan will start by giving coverage priority to areas that are disadvantaged or experiencing poverty.

As an experimental measure, cooked hot meals were served to a number of schools in Bangladesh's two upazilas in October 2013. In order to investigate school meal options and modalities, the Ministry of Primary and Mass Education (MoPME) and the Directorate Primary Education (DPE) partnered to launch this experiment. Table 1 (The Impact of School Mealing in Bangladesh, 2018) presents enrollment figures for students in the school meal program broken down by type of school.

In October 2013, cooked hot meals (In the form of khichuri, which is a locally accepted rice-based dish, consisting of fortified rice, enriched with folic acid, iron, zinc and vitamins A, B1 and B12, fortified oil, pulses and leafy and non-leafy vegetables) have been introduced to some of the schools in two upazilas (Islampur upazila(Jamalpur district) and Bamna Upazila (Barguna district) on a trial basis (Table 1). These schools do not receive fortified biscuits, except on

Table 1 Number of students under the school meal programme per type of school and target upazila On Thursday, they don't receive a hot meal. This pilot was started to investigate opportunities and modalities within school mealing in cooperation with MoPME and DPE. Meals consisted of 80 grams of fortified rice, 25 grams of dal, 25 grams of oil, and vegetables at the beginning of the pilot. The amount of oil was cut to 12 grams and the amount of rice was increased to 90 grams starting in September 2015.

Type of School	Jamalpur	Barguna	Total
Government Primary School (GPS)	6027	10094	16121
NGO/BRAC schools	395	255	651
Madrasah	175	78	253
Total	6598	10427	17025

4.4. Before the School Meal

According to WHO estimates, 50% of Bangladesh's under-5-year-old children were underweight in 1998, and 50% of the country's population could not afford a healthy diet in 2002. Although there is a dearth of nutrition data on school-age children in Bangladesh, it is certain that the trends observed in the under-5 age group have been transferred to the school-age population. The primary goal of school mealing was to address low primary school enrollment, attendance, and completion rates; better nutrition was considered a secondary concern. UNICEF's Multiple Indicator Cluster Survey (MICS) revealed that by 2012, the percentage of underweight children under five had decreased to 32%. When the statistics on children's underweight, stunting, and wasting started to improve, WFP and the government started looking into the potential of a home. In order to improve diet diversity, micronutrient deficiencies, and the availability of fresh, local produce, WFP started looking into the possibility of a Home Grown School Mealing modality in collaboration with the government as the underweight, stunting, and wasting data on children started to improve (Jeans & Uwameiye, 2019).

4.5. After the School Meal

Over the past 20 years, there has been progress in addressing the prior problems with primary school enrollment, attendance, and completion, though problems still exist. The government's growing concern is primary school graduates' academic performance. A significant cross-sectoral issue that is impeding Bangladesh's future workforce's performance is nutrition. For the full 240-day school year, the School Mealing program offers 75 grams of micronutrient-fortified biscuits six days a week. Under the current school mealing program, 80,000 primary schools have served three million schoolchildren. The government has pledged to serve HGSF hot meals to over 400,000 schoolchildren since the National School Meal Policy was passed. The government hopes that all pupils attending government primary schools will be by 2024, the government wants all pupils attending Government Primary Schools to receive assistance with school lunches. At the moment, the government allots \$75 million USD annually.

4.5.1. Sustainability

The National School Meal Policy's improved legislative and regulatory framework has given government institutions more ability to implement school mealing programs across the country. Furthermore, the policy has improved operational and financial support from the government, allowing WFP to transfer the program to national stakeholders. The school meal program attracted more participation from neighborhood associations and community groups, which will help ensure the program's long-term sustainability.

4.5.2. Cost-effectiveness

School mealing is becoming more widely acknowledged as a significant investment in local economies and human capital, which has accelerated development led by the nation. The current program, which is based on biscuits, costs each child.10 USD per day. The Ministry of Food's Public Food Distribution System provides the rice for the HGSF hot meal program, which is available for.12 USD per child per day. Furthermore, school meals transfers value to households, with an estimated 10 percent of a household's income going toward it. Due to improved health and educational outcomes, school mealing boosts productivity and potential future wages for students, which benefits local markets, the national economy, and human capital.

Mr. Md. Ruhul Amin Khan, Joint Secretary and Project Director, School Mealing Program in Poverty Prone Areas, expressed gratitude to the Prime Minister of Bangladesh for her vision to create a developed nation by 2041 and stated that the government launched the National SchoolMeal Policy (NSMP) in response to this desire, believing that if all children received an education, the country would naturally develop into an educated and economically stable one. The success of school mealing in Bangladesh is the reason the National School Meal Policy (NSMP) is a key component of the government's vision for 2041. Significant increases in student attendance and attentiveness in the classroom were observed when the school mealing program was introduced on a trial basis in several regions of the nation. Significant increases in student attendance, focus in the classroom, enrolment, and a lower dropout rate were observed when the school mealing program was introduced on a pilot basis across the nation. Additionally, the NSMP seeks to meet the nutritional needs of Bangladeshi children, Mr. Khan continued.



Figure 6 In Bangladesh, feeding the future one school meal at a time

Retrieved from , https://docs.wfp.org/api/documents/WFP-0000112387 [Accessed on Accessed on September 10, 2023

4.6. Market Failure of School Meal

When the free market system fails to distribute resources or goods in an efficient manner, it is known as market failure. There are various ways that market failure in the context of school meals can appear:

4.6.1. Under provision of School Meals

In a system that is solely focused on the market, schools might not give their students wholesome meals because there is no direct financial incentive to do so.

Low-income families may find it difficult to provide their kids with wholesome meals, which could impede their academic progress and cause health inequalities.

4.6.2. Externalities and Positive Spillover Effects

The benefits of mealing students at school extend beyond the individual student. Students who eat well are more likely to focus in class, achieve better academically, and make valuable contributions to society.

Nevertheless, the market fails to fully realize these advantages, which results in underfunding of school meal programs.

4.6.3. Information Asymmetry

It's possible that parents and students are unaware of all the nutritional details of school meals.

Parents are unable to make educated decisions in the absence of transparency and accurate information, and schools might not prioritize serving healthy meals.

4.6.4. Inequitable Access

Market forces might not be sufficient to guarantee fair access to school meals.

Students from underprivileged homes may encounter obstacles to getting school lunches, such as lack of awareness, stigma, or transportation.

4.6.5. Public Goods and Free Riders

School meals are a public good because they enhance health and education, which benefits the community as a whole.

But, by depending on school lunches without contributing to their cost, some families might be freeloading.

Governments frequently step in to solve these market failures by offering free or heavily subsidized school meal programs. Regardless of their financial situation, these initiatives seek to guarantee that all students receive wholesome meals. They consequently advance public health as well as educational outcomes.

4.7. Implementing School Meals: Difficulties

Certainly, implementing school meal programs can be a complex endeavor, and various challenges arise during the process. Here are some common difficulties:

4.7.1. Funding Constraints

Budget constraints frequently compromise school meal programs' reach and quality. Sufficient funding is necessary to reliably deliver wholesome meals.

Program sustainability may be impacted by funding fluctuations resulting from a reliance on government allocations.

4.7.2. Logistics and Infrastructure

Logistics of distribution and storage in transportation are vital. It can be difficult to make sure that meals arrive at schools on time and in acceptable condition, particularly in isolated places.

Meal preparation can be impeded by inadequate kitchen facilities. Schools must have functional kitchens with all the appliances they need.

4.7.3. Nutritional Balance

It's difficult to strike a balance between cost and nutritional value. Some programs cut corners on nutrition in order to save money.

Variety in diet is important, but preparing different meals every day can be difficult.

4.7.4. Cultural Preferences and Dietary Restrictions

Food preferences are influenced by cultural differences. It can be challenging to create menus that satisfy a variety of palates.

Careful planning is necessary to accommodate students with special needs, religious dietary restrictions, or allergies.

4.7.5. Quality Control and Safety

Food safety must be ensured. Children's health can be harmed by contaminated food.

Sustaining uniform standards requires the implementation of quality control measures.

4.7.6. Community Engagement

It is essential to involve local communities, educators, and parents. Program success is ensured by their support.

Implementation may be hampered by resistance or a lack of community awareness.

4.7.7. Stigma and Social Perception

Free meals could make some students feel like outcasts. It's critical to dispel this misconception.

It is imperative to normalize school lunches and encourage inclusivity.

4.7.8. Data Collection and Monitoring:

Comprehensive data collection is necessary for tracking program impact. It's critical to keep an eye on students' academic progress, diet, and attendance.

Identifying areas for improvement is aided by assessment.

4.7.9. Sustainability and Long-Term Commitment:

Programs for school meals ought to be long-term initiatives. Stakeholders and governments must make a sustained commitment.

Programming continuity may be impacted by political shifts.

4.7.10. Scaling Up:

It's difficult to expand effective programs to include all schools.

Planning, resources, and coordination are needed.

School meal programs are still essential for children's health, education, and prospects for the future despite these difficulties. To overcome these obstacles, cooperation, creativity, and a dedication to developing young minds are needed.

4.8. Change The World Economy and the Bangladesh

WFP congratulates the Government of Bangladesh on joining the Global School Meals Coalition. DHAKA – The United Nations World Food Programme (WFP) congratulates the Government of Bangladesh on joining the Global School Meals Coalition and promoting child education and nutrition in the country. The announcement was made yesterday by H.E. Dr. A. K. Abdul Momen, Foreign Minister of Bangladesh and Mr. Farid Ahmed, Secretary, Ministry of Primary and Mass Education, on the opening day of the UN Food Systems Summit +2 Stocktaking Moment in Rome.

Since 2010, the Government of Bangladesh has been investing in the national school mealing programme, with WFP as a key partner. By 2022, more than 3 million children in 104 sub-districts had been reached with fortified biscuits, and in some locations, hot meals. A study conducted by WFP in 2018 shows that the programme resulted in a 4.2 percent increase in school enrolment and a 7.5 percent reduction in dropouts.

"School mealing is more than food to the children. It is a systemic solution to combat child hunger and nutrition, but also supports the local economy through improving opportunities for smallholder farmers and local entrepreneurs," said H.E. Dr. A. K. Abdul Momen, Foreign Minister of Bangladesh at the UN Food Systems Summit +2 Stocktaking Moment.

Building on the success of the past programmes which ended in June 2022, the new school mealing programme aims to reach 3.5 million students of 20,000 government primary schools over the next three years.

"In the next programme we are planning to shift from fortified biscuits only to a diversified food menu. It will include seasonal fruits, egg, bun and milk during the week. We will pilot hot meals in some poorer districts. Diversification will help us to achieve nutritional outcomes," added Minister Momen on the Government's plan for the new national school mealing programme.

"WFP is fully committed to continuing supporting the Government of Bangladesh to make school meals available to all targeted children, particularly those from poor and remote areas," said Domenico Scalpelli, WFP Representative and Country Director in Bangladesh. "We congratulate the Government for joining the Global School Meals Coalition and investing in school meals to secure a brighter future for the children of Bangladesh."

The School Meals Coalition is an emerging initiative of governments and a wide range of partners to drive actions that can urgently re-establish, improve and scale up food and education systems, support pandemic recovery, and drive actions to achieve the Sustainable Development Goals (SDGs). Currently, more than 80 countries are members of the coalition.

5. Conclusion and Recommendation

School meals are seen as the morally right way to give malnourished kids the vital nutrition they need. Consuming enough nutrient-dense meals encourages a more secure and healthy aging process. The school meal program assists underprivileged families in developing countries that are unable to provide a sufficient meal. The program's creators anticipated that the school meal program would significantly alter children's diets, improving their health and cognitive abilities, as fugitive hunger in classrooms is likely to have a negative impact on education. By expanding this program throughout the nation, the rate of malnutrition can be reduced. Providing school-aged children with wholesome, home-cooked meals that are fresh from the garden is a crucial first step towards ensuring a prosperous future for all. The sustainability of school meal programs is still threatened by a number of factors, even in light of the discussion and research mentioned above. The components that influence the development, sustainability, realization and/or failure of the school meal program, including management and liability, must be investigated in order to enhance the nutritional status of schoolchildren and maintain improved academic performance for impoverished, malnourished children.

Policies, tasks, features, budgets, attempts at implementation, and stakeholder efforts pertaining to school meal initiatives differ among continents, regions, and nations. In Bangladesh, it is crucial to carry out the following actions in order to improve the planning and execution of school meal programs:

- Target areas for the school meal program should be those with high dropout rates, low enrollment and attendance rates, and significant malnutrition.
- The school lunch must be made entirely in accordance with the nutrition chart and using ingredients that are produced locally.
- Mealtimes should be used as educational opportunities for kids to learn about nutrition and food, as well as to help them develop better eating habits.
- Meal the elementary school students using a holistic approach to nutrition, with targeted objectives for different age groups (e.g., pre-primary, primary, and older students in classes 4 and 5).
- Establishing a bottom-up, cooperative approach to harmony building is necessary to guarantee high-quality education.

- Including the commitment of all educational bodies, such as the School Management Committee (SMC) and the School-Parents Committee, as well as the planners of education policies, including the Ministry of Primary and Mass Education and the school administration.
- Adopting sensible policies and objectives that prioritize the development, delivery, and support of school meal programs and effectively address schoolchildren's health and nutrition in addition to their academic performance.
- The school meal, school health, and other pertinent policy and regulatory frameworks should be suitably matched or sufficiently integrated with the school meal programs.
- The new school meal policy must be fully understood and followed by the school administration.
- The arrangement for school lunches needs to be handled responsibly and transparently. Additionally, it must be verified that local special interests won't impede the initiative.
- In addition to primary schools, secondary schools should also be included in the meal program, so the school administration should take the appropriate action.
- Establish an atmosphere that motivates children to complete elementary school and make a smooth transition to secondary education, enabling them to acquire the necessary skills to improve their lives.
- Enhance the competencies of school personnel and those overseeing school meal.

All things considered, the school meal program plays a critical role in enhancing the mental and physical health of students. The school meal program in Bangladesh is the first effort to offer primary school students direct incentives to attend class instead of money or food. Parents will be more excited to send their kids to school as a result of this initiative than to involve them in activities that generate income. To strengthen the activities related to school meals and achieve the desired results within the allotted time, cooperative efforts are required.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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