

Socio-Economic Impact of Integrating School Feeding Programmes in National Development

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Abstract

National development is assured via activities that focus on children. Using mainly secondary data by a content analysis of key official documents and other empirical studies on school feeding programmes, various aspects of the socio-economic impacts of integrating the SFPs into national development in Nigeria were appraised. The paper opined that school feeding programme (SFPs) is an ingredient for the nation to achieve related SDGs goals. It is effective in targeting gender objective. It also frees up resources within households and enables improved livelihoods. It is clear that SFPs is an effective safety net to poor families in times of crises. It offers an incentive for households to send their children to school and invest in education, breaking the poverty trap. It increases school enrolment and attendance by reducing drop-out rate. It draws girls to school, maintains their attendance and increases their progress, effectively addressing the gender gap in school; it does not only change the lives of the girls, but also of their future children. This paper recommends that the government should prepare for increase in the enrolment by making additional provision for infrastructure and personnel. Continuity and sustainability of the programme must also be ensured through proper legislation. A proper monitoring and evaluation process must also be put in place for early detection of any malfunction in the running of the programme and also, community participation is equally recommended because the households whose children are benefitting from the programme will not fold hands and watch it derail.

Key words: *School Feeding Programmes, Sustainable Development Goals Nigeria*

Introduction

School feeding programmes is defined by the World Bank as “targeted social safety nets that provide both educational and health benefits to the most vulnerable children, thereby increasing enrollment rates, reducing absenteeism, and improving food security at the household level.” Beyond improvements in access to food, school feeding programs also have a positive impact on nutritional status, gender equity, and educational status, each of which contributes to improving overall levels of country and human development. Development activities that target children are tools for eradicating chronic hunger and lifting developing countries out of the poverty trap. By investing in the health and nutrition of school-age children, a country can increase the human capital of its younger generations and achieve sustainable economic growth and human development. School feeding is described as a powerful and effective intervention that can help fight chronic hunger while reducing poverty and inequality.

Food and Agriculture Organization’s (FAO, 2007), estimated that 923 million people in the world were chronically hungry, which was an increase of about 75 million people from the 2003-05 estimates (FAO 2008). Many of these are children, and a vast majority of them are in developing countries. These numbers suggest that the Millennium Development Goals (MDGs) related to hunger and malnutrition could not be met by 2015 as planned. The persistence of hunger, malnutrition, and micronutrient deficiencies can have long lasting effects on the health status and productivity of people and their nations. Early malnutrition can adversely affect physical, mental, and social aspects of child health, which in turn leads to underweight, stunted growth, lowered immunity, and mortality. Research has shown that the physical effects of malnutrition as measured by indicators such as body mass index (BMI), have a significant impact on an individual’s productivity and wages (Broca and Stamoulis 2003). Jomaa, McDonnel., and Probart, (2011), state that “childhood under-nutrition imposes significant economic costs on individuals and nations, and that improving children’s diets and nutrition can have positive effects on their academic performance and behaviors at school as well as their long-term productivity as adults.” Alderman, Hoddinott, and Kinsley (2006) found that malnutrition led to delayed entry to school, less overall schooling, smaller stature, and 14% lower earnings as adults.

The need for school feeding programme in Africa and indeed Nigeria is underscored by the fact that appropriate nutrition remains unmet for a vast number of children; the trend of malnutrition in Sub-Saharan Africa is mind boggling. For the region as a whole, there has been no progress made in reducing the prevalence of child malnutrition over the past 15 years, and there are some indications that the situation has worsened. Ethiopia and Nigeria are countries in the Sub Saharan Africa with very high rates of malnutrition (Getahun et al., 2001; Adewara and Visser, 2011). Unfortunately the diets commonly offered to young children are of low quality and often lack variety, which is the key to specific nutrient adequacy. They are usually of low energy and nutrient density and as a result, multiple nutrient deficiencies are common in this age group (Ogbimi and Ogunba, 2011). Malnutrition has continued to be a public health problem in Nigeria where the poor socio economic condition has continued to work in synergy with malnutrition (Olusanya, 2010).

The school feeding programme is not new in Nigeria, the former President Olusegun Obasanjo in 2005 launched a home-grown school feeding programme which was aimed at improving the nutritional intake of at least 25 million children of school age. A total of 2.5 million children or 10% of the total population of primary school children were expected to take part in the pilot phase of the programme aimed at providing one meal per school day for every child in Nigerian public primary schools.

Literature Review

Children in poor health start school later in life or not at all. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Moock and Leslie, 1986). In Ghana malnourished children entered school at a later age and completed fewer years of school than better nourished children (Glewwe and Jacoby, 1994). The number of days that a child attends school is related to cognition and performance (Ceci, 1995; Jacoby, Cueto and Pollitt, n.d). SFPs can have a positive effect on rates of enrollment and attendance.

A recent evaluation of an on-going school feeding program in Burkina Faso found that the availability of school canteens were associated with increased school enrollment, regular attendance, consistently lower repeater rates, lower dropout rates in disadvantaged provinces, and higher success rates on national exams, especially among girls (Moore, 1994). A small pilot school feeding program in Malawi was evaluated for its effect on enrollment and attendance. Over a three month period there was a 5% increase in enrollment and up to 36% improvement in attendance/absenteeism compared to control schools over the same period (WFP, 1996a). Niger has one of the five lowest school enrollment rates in the world; the school feeding program is intended to enhance attendance of nomad and transhumant families, particularly of girls.

Beneficiaries receive the equivalent of the total daily recommended food intake (2,079kcal) in three meals per day. In addition, as an incentive for girls' participation in schools, some families receive an additional take-home ration. Evidence from past experience with the SFP shows that it contributes to its objectives: whenever canteens have been closed, even provisionally, immediate and high absenteeism follows and children are withdrawn from school. In areas with nomadic and transhumant populations, the school year cannot commence until food stocks arrive (WFP, 1995; 1996). Although not a school feeding program in the traditional sense, school-based food distribution has also been used successfully to improve enrollment and attendance among school-age children, particularly girls.

In Bangladesh a program of school-based food distribution increased enrollment by 20% versus a 2% decline in non-participating schools (Ahmed and Billah, 1994). Also in Pakistan, the program provides an income transfer in the form of one or two tins of oil per families whose girls attend school for 20 days per month. In its pilot phase the oil incentive program demonstrated that it could make a significant contribution to full attendance. Participating schools enrollment improved by 76% compared to 14% in the province overall. Attendance increased from 73% to 95% among participants. The program also claimed to put additional food into the hands of mothers and to serve as a contact between mothers and teachers on distribution days (WFP, 1995; 1996).

While school meals are provided by the governments of most high and middle-income countries around the globe, the children who benefit most from school feeding programs are in low-income countries that do not have government-provided school meals. School feeding in low-income countries often starts through funding by international organisations such as the United Nations World Food Programme, the World Bank, the countries' governments programs such as the McGovern-Dole International Food for Education and Child Nutrition Program. However, some governments started school-feeding programmes and then requested the help of these organizations and programmes. Additionally, many countries have "graduated" from their dependency on foreign assistance by reshaping their school feeding programmes to be country-led and self-supported. While there are school feeding programs in a number of countries, each programme varies widely from country to country in design, implementation, and evaluation. Thus, literature reviewed and studies often focus on a small number of countries, as school feeding is not a uniform unit of intervention and cannot be compared or assessed on an international scale.

According to the United Nations World Food Programme, 66 million primary school age children go hungry every day, with 23 million hungry children in Africa alone. Furthermore, 80% of these 66 million children are concentrated within just 20 countries. Additionally, 75 million school-age children (55% girls) do not attend school, with 47% of them living in sub-Saharan Africa. Thus, the need to reduce hunger while increasing school enrollment in these children is evident, and school feeding programs have been developed to target this multifaceted problem.

Schools have become a natural and convenient setting for the implementation of health and education interventions. School feeding is just one facet of school health initiatives, as other programmes may include de-worming, HIV/AIDS prevention and education, with life and health skills education. Overall, school feeding programmes have been shown to directly increase the educational and nutritional status of recipient children, and indirectly impact the economic and social lives of themselves and their family. Additionally, direct school feeding program as envisaged by the Millennium Development Goals (MDGs) of reducing hunger by one-half, achieving universal primary education, and achieving gender parity in education by 2015 could be achieved.

There are two main ways to distribute food through school feeding programs: on-site meals and take-home rations. On-site meals are foods that are distributed to children while at school during morning and afternoon meal and snack times, which may include a bowl of porridge or nutrient-fortified crackers. Take-home rations are a collection of basic food items, such as a bag of rice and a bottle of cooking oil, which may be sent home and transferred to the families of girls that regularly attend school.

While the food items needed for school feeding programmes may be imported into the country from anywhere throughout the world, an increasing number of countries and organizations are looking to expand what is called "home-grown school feeding," which requires that provided food is produced and purchased within a country to the greatest extent possible. These programmes provide an opportunity for children to receive improved nutrition and educational opportunities while also allowing smallholder farmers to benefit from access to a market with stable, structured, and predictable demand. The New Partnership for Africa's Development (NEPAD) guided governments in Sub-Saharan Africa to include home-grown school feeding as a critical intervention for the food security facet of the Comprehensive Africa Agriculture

Development Programme (CAADP). Several countries, including Côte d'Ivoire, Ghana, Kenya, Mali and Nigeria are currently taking part in home-grown school feeding programmes.

According to the International Food Policy Research Institute, there are five stages of school feeding. The first stage includes school feeding programmes that rely mostly on external funding and implementation, while the last stage includes school feeding programmes that rely mostly on internal government funding and implementation. Countries that are within the first stage include Afghanistan and Sudan, where country governments are unable to lead school feeding programmes. Countries that are within the fifth stage include Chile and India, which have functional, country-led school feeding programs. For example, the Government of Chile has provided a school feeding programme for over 40 years through the La Junta Nacional de Auxilio Escolar Becas (National Board of School Assistance and Scholarships) through a public-private partnership. This programme involves technology that allows food to be centrally mass-produced and then distributed across the country. Additionally, the Government of India has supported school feeding programmes since 2001, when the country recognized Indians' Constitutional Right to Food. Countries that are in the middle of the stages, such as Kenya and Ecuador may have some but not all of the governmental policies, financial capacities, or institutional capacities to operate school feeding programmes without external funding or implementation.

Advantages of the School Feeding Programme

School Feeding Programmes is one of several interventions that can address some of the nutrition and health problems of school-age children. SFPs, and other school-based nutrition and health programs, can also motivate parents to enroll their children in school and to see that they attend regularly. Experience shows that properly designed and effectively implemented SFPs can:

Alleviate short-term hunger in malnourished or otherwise well-nourished schoolchildren. This helps to increase the attention and concentration of students producing gains in cognitive function and learning.

Motivate parents to enroll their children in school and have them attend regularly.

When programs effectively reduce absenteeism and increase the duration of schooling, educational outcomes (performance, dropout, and repetition) improve.

Address specific micronutrient deficiencies in school-age children.

Most important of these are iodine and iron, which directly affect cognition. Meeting the iron and iodine needs of school-age children can translate into better school performance.

Increase community involvement in schools

This occurs particularly where programmes depend on the community to prepare and serve meals to children. Schools with their communities behind them are more effective than schools with less community involvement.

School Feeding Programme in Nigeria

The first Home-Grown School Feeding Programme (HGSF) in Nigeria was introduced by former president Olusegun Obasanjo which was launched in September, 2005. It aimed at improving the nutritional intake of school age children; but after the initial fanfare and merriment, the programme was abandoned. The government never gave reasons for shutting down the programme but school operators envisaged it could be capital intensive, mismanaged, abused and

left behind a lot of debts. Some states of the Federation on their own introduced the programme but fell along the way leaving only Osun and Kano even though the programme in both states was marred by challenges of funding and inconsistencies. This was revived in 2015 by the President Buhari's administration and was launched by the Vice President, Prof. Yemi Osinbajo. The HGSF programme is part of a funded Social Investment Programme announced by the Buhari administration to tackle poverty and improve the health and education of children and other vulnerable groups.

Sustainable Development Goals and School Feeding Programme

The Sustainable Development Goals (SDGs) is globally defined goals for over the next 15 years with the desired targets and indicators, where every nation is expected to use this framework to design their socio-economic development for the worldwide sustainable development. Beside SDGs emphasis on socio-economic development, it also does focus on environmental, health, food and other areas with the intention to contribute to the well-being of human development. Compared to the MDGs, the SDGs is more comprehensive with the focus to end extreme poverty worldwide. SDGs is directly linked with the socio-economic welfare, healthy environment and development. It also requires the involvement of wider stakeholders' in achieving the desired targets and it also suggest to the member states to frame their own national indicators in light of the globally adopted indicators.

The Sustainable Development Goals (SDGs), officially known as "Transforming our world": the 2030 Agenda for Sustainable Development is a set of 17 "Global Goals" with 169 targets between them. It is an initiative of the UN through a deliberative process involving its 193 Member States, as well as global civil society. The SDGs goals are built on the Principles agreed upon under Resolution A/RES/66/288, popularly known as 'The Future We Want'. The SDGs is a new, universal set of goals, targets and indicators that UN member states will be expected to use to frame their agendas and political policies over the next 15 years. The SDGs follow and expand on the millennium development goals (MDGs).

The implementation and successful tracking of each target and goal would make the objectives of bridging the social and economic gap and addressing the environmental challenges come true. Moreover, the SDGs do not only indicate where we have to be in next fifteen years to be a sustainable world, but also outline the new opportunities for all the stakeholders all over the world. The SDGs is trusted to be the leading catalysts of transformation worldwide. Over the next 15 years, the SDGs is universally applicable to all the countries to mobilize their efforts, to eliminate all kinds of inequalities, to end poverty, and address the climate change problems by ensuring that no one in the world is left behind.

Goal numbers 1-5 of the SDGs are specifically being addressed by the school feeding programme in Nigeria, These are:

Goal 1: No Poverty:

End poverty in all its forms everywhere

Goal 2: Zero Hunger:

End hunger, achieve food security and improved nutrition and promote sustainable agriculture globally.

Goal 3: Good Health and Well-being:

Ensure healthy lives and promote well-being for all at all ages

Goal 4: Quality Education:

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5: Gender Equality:

Achieve gender equality and empower all women and girls. Providing women and girls with equal access to education, health care, decent work, and representation in political and economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large

Socio-Economic Impacts of School Feeding Programmes

Impact on Health

Nutritional and health status are powerful influences on a child's learning and on how well a child performs in school. Children who lack certain nutrients in their diet (particularly iron and iodine), or who suffer from protein-energy malnutrition, hunger, parasitic infections or other diseases, do not have the same potential for learning as healthy and well-nourished children. Weak health and poor nutrition among school-age children diminish their cognitive development either through physiological changes or by reducing their ability to participate in learning experiences - or both. Contrary to conventional wisdom, nutritional status does not improve with age. The extra demands on school-age children (to perform chores, for example, or walk long distances to school) create a need for energy that is much greater than that of younger children. Indeed, available data indicate high levels of protein-energy malnutrition and short-term hunger among school-age children. Moreover, deficiencies of critical nutrients such as iodine, vitamin A and iron among the school aged are pervasive (Partnership for Child Development, 1998b). It is estimated that 60 million school-age children suffer from iodine deficiency disorders and that another 85 million are at risk for acute respiratory disease and other infections because they are deficient in vitamin A. The number suffering from iron deficiency anemia is greater still - 210 million (Jamison, Henry, Anthony, and Jose, (1993).

Parasitic worms that infect the intestines or the blood are a major source of disease and malnutrition in school-age children. An estimated 320 million school-age children are infected with roundworm, 233 million with whipworm, and 239 million with hookworm (Partnership for Child Development, 1997a). Schistosomiasis affects an estimated 200 million people throughout the world, approximately 88 million of whom are under 15 years old (Montresor, Crompton, Bundy, Hall and Savioli. (1998). Poor nutrition and health among school children contributes to the inefficiency of the educational system. Children with diminished cognitive abilities and sensory impairments naturally perform less well and are more likely to repeat grades and to drop out of school than children who are not impaired; they also enroll in school at a later age, if at all, and finish fewer years of schooling. The irregular school attendance of malnourished and unhealthy children is one of the key factors in poor performance. Even temporary hunger, common in children who are not fed before going to school, can have an

adverse effect on learning. Children who are hungry have more difficulty concentrating and performing complex tasks, even if otherwise well nourished. Research and programme experience shows that improving nutrition and health can lead to better performance, fewer repeated grades and reduced drop out.

Impact of School Feeding Programmes on Educational Achievements

The potential impact goal of targeting children through Food for Education programmes is to increase their educational achievement so as to improve their potential future productivity and earnings. However, improvement in educational achievement due to serving food in SFPs is thought to occur through three pathways: it increases school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in formal education. This leads to more time spent in school and more time spent towards learning. The second is through the alleviation of short term hunger which improves children's cognitive functioning and attention span. The third is that it improves nutritional status of children by providing them calories and nutrients in addition to their regular diet. This leads to better health and better resistance to infections, diseases and illnesses that would otherwise keep children from attending school (Buttenheim, Alderman, and Friedman, (2011). Thus, better nutrition indirectly improves educational achievement by increasing school attendance by children.

Impact on Nutritional Status

Although SFPs are promoted for increasing educational achievement, they also play an important role in achieving the nutritional goal (albeit for children that already passed the critical early childhood influencing phase). For families facing poverty, food choices are usually limited, resulting in nutritionally inadequate diets that are often deficient in vital micronutrients (Ash, Tatala, Frongillo, Ndossi, and Latham, 2003). Deficiencies of micronutrients such as iron or vitamin B-12 can result in increased vulnerability to infections, stunted growth and diminished cognitive performance in school-age children (Arsenault, Mora-Plazas, Forero, López-Arana, Marín, Baylin, and Villamor, (2009). The most important period of growth and body composition occurs in the first several years of life, well before enrollment in a SFP would begin. But SFP meals or snacks can be easily fortified to help provide micronutrients that are commonly missing from children's diets. This is especially important for school-age children, as the brain is sensitive to a lack of nutrients in the short term, which may be especially a problem for malnourished children (Pollitt 1995).

Impact on Agricultural Development

School Feeding programmes have been thought of as social safety net interventions to achieve educational and nutritional goals; but recently, these programmes and others that involve food aid have been thought of as a possible tool for agricultural development (Sumberg and Sabates-Wheeler 2011). The manner in which these goals link together can be seen in the proposed Home Grown School Feeding (HGSF) programmes, which are designed to supply food for SFPs from purchases and procurement of locally produced food while enhancing the domestic production and demand for food (Ahmed 2004). Traditionally, the procurement of food for SFPs usually came from foreign food aid. When food aid is distributed, there are distortions to the local markets, which often results in lower prices and provide disincentives to local producers (Barrett 2006). This has led to the development of programs such as the WFP's Purchase for Progress

(P4P) initiative to reverse this trend, and helped lead others to look to HGSF as a tool for agricultural development.

The theory for linking FFE to agricultural development begins with a demand shift as the initial kick to the local economy in a HGSF system, as the food previously supplied to the schools came from donors now must be filled by the local producers. The demand is more predictable for producers, which in turn decreases their risk, allowing for more development of local markets (Sumberg and Sabates-Wheeler 2011). Increased demand for locally produced food was seen in the case of Indonesia's SFP during the 1990's. In a survey conducted after the economic crisis in Indonesia in 1997-98, 72% of surveyed farmers reported having more opportunities to sell their produce as a result of the purchases by the SFP's (Studdert, Mello, and Brennan, (2004), as reported by Sabates-Wheeler, Devereux, and Guenther. (2009).

Impact on Gender, Orphans and other Vulnerable Children

It has been proved that school feeding contributes to improved education for girls, as both in-school meals and take home rations (THRs) are effective in targeting gender objectives. This is particularly useful in boosting girls' enrolment where access to education is limited. Educated girls are more likely to have fewer and healthier children and to head families that are food-secure. School feeding closes the gender gap in schools and helps to empower women. It leads to improved protection from HIV/AIDS and better access to work opportunities for women. It changes the lives of not only girls but also of their future children. Maternal and infant mortality rates decrease and better educated girls make more informed choices. The World Bank estimates that only one additional year of schooling for girls reduces the birth rate by 10%, and that every extra year of schooling provided to 1,000 girls results in 60 fewer infant deaths (Summers and Lawrence, 1992; World Bank, 2007a). An evaluation of India's Mid-Day Meals Programme found that girls in the programme were 30 percent more likely to complete primary school (Dreze and Kingdon, 2001). In Pakistan, a programme that provides girls with a conditional THR of oil once a month has changed the way their parents think and act. Before the programme started, 48% of households did not send any of their daughters to school; afterwards, all households educated at least one daughter (WFP, 2005b).

Impact as Value Transfer

During periods of shock and reduced purchasing power, families often resort to negative coping mechanisms, including taking children out of school to save on school fees and related expenses (World Bank, 2009a). School feeding programmes can help to safeguard households' investments in education by defraying some of the costs of schooling and encouraging parents to enroll their children in school and ensure that they attend class regularly throughout the complete cycle. This helps protect children from the risk of both formal and informal child labour and facilitates social integration (Paruzzolo, 2009). School feeding is a well-recognized safety net that transfers significant value to households with children enrolled in school or with school-age children (Bundy, Burbano, Grosh, Gelli, Jukes, and Drake, (2008). The value transfer from school feeding frees up resources within households, allowing families to buy food and invest in productive assets, and ultimately improving their livelihoods, nutrition and education. The value transferred is equivalent to the value of the food transfer delivered to the child at school, the value of the THR, or both. This serves as an incentive for households to send their children to

school and ensure that they continue to attend. The provision of food therefore alleviates short-term hunger, while supporting the longer-term goals of educational attainment and improved nutrition and health.

School feeding value transfers have the potential to increase school enrolment and attendance at times when food-insecure families with low purchasing power may be at risk of resorting to negative coping strategies, including taking children out of school.

Conclusion

It is evident from literature that school feeding programmes is an effective safety net to poor families in times of crises, in post-crisis recovery situations, and in chronic long-term development settings. It increases household income, freeing up resources for productive investments. It offers an incentive for households to send their children to school and invest in education, breaking the poverty trap. It has been established that school feeding programmes have an impact on educational outcomes which proves that school feeding increases school enrolment and attendance by reducing drop-out as it helps to take care of a portion of the hidden cost of education.

The School Feeding Programmes (SFPs) is a tool for the nation in the achievement of the SDGs and more importantly, in the achievement of the objectives of the Universal Basic Education UBE. Goals that relates to poverty eradication, extinction of hunger, good health, provision of quality education and ensuring gender equity can be achieved through the vehicle of the school feeding programme. Long term health and educational problems can also be addressed through the SFPs since development activities that targets children are seen as tools for the eradication of future problems in any nation. When children are assured of a meal, it is easier to study and stay in school to achieve; once in school, such children can identify the benefit of education and be motivated to achieve their life goals. Parents/guardians are also less likely to refuse their children/wards from attending school if they know that one meal will be taken care of. Girls are also able to stay in school; thereby reducing teenage pregnancies and other social ills associated with trying to support the family income by these girls. THRs draw girls to school, maintain their attendance and increase their progress, effectively eliminating the gender gap in school. SFP does change the lives of the girls only; but also the lives of their future children. Maternal and infant mortality rates are reduced, as better educated girls make more informed choices.

Way Forward

1. It has been established that school feeding programmes increased enrolment in the enforcing states, the governments, at the various levels must therefore, prepare for the increase, in terms of space and personnel such that it will not create another problem that is not prepared for.
2. In order not to lose the confidence of both the pupils and their parents, the National Assembly should pass a law that will ensure the continuity of the programme and not allow its demise with each regime. This will go a long way in stabilising the gain so far from the programme; especially as the strategic plan spans only four years.

3. Adequate funds should be made available to avoid epileptic supply of food items and other logistics in order not to discourage the pupils and beneficiaries.
4. Proper monitoring and evaluation strategies with pin point and measurable indicators must be put in place to detect early signals of malfunctioning and to be able to nip it in the bud before it becomes irredeemable.
5. The parents of the benefitting children should be involved to keep an eye on the progress and be able to report problems for early redemption. They will be useful in ensuring almost accurate progress and blocking loopholes if they are allowed to own the programme.

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