SCHOOL FEEDING PROGRAMS:
WHY THEY SHOULD BE SCALED UP NOW

World Food Programme (WFP), April 2004

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. This paper describes the benefits of school feeding and how this well-proven tool can be scaled up and specifically targeted to address some of the key constraints to universal primary school completion.

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). Some of those implications are discussed herein as well.¹

Even in the most-developed nations, there are hungry children who can be helped by school meals. Millions of school children have benefited from school feeding in Finland, Japan and the United States, for example, in excellent programs which have been sustained over several decades.

What Is School Feeding?

The term school feeding has been used over the years to mean the provision of meals or snacks at school to reduce children’s hunger during the school day.

Some continue to define school feeding as in-school meals only. For most, however, school feeding has increasingly come to represent a more varied and comprehensive set of uses of food for the achievement of educational outcomes. In this more comprehensive definition, all the following could be classified as school feeding:

- “take-home” food rations provided as economic incentives to families (or foster families, or other child care institutions) in return for a child’s regular attendance at school;
- food provided to adults or youth who attend literacy or vocational training programs;
- food for pre-school activities with an educational component; and

¹ The attached annotated bibliography cites empirical evidence from sources other than WFP to support assertions made in this paper regarding the benefits of school feeding. The only citations given in the text are those which are not in the bibliography.
• any one or more of the following at-school meals: breakfast, mid-morning snack, lunch, or dinner.

It is this more inclusive definition that is used in this paper, although the primary emphasis is on in-school meals and take-home rations.

**School Feeding Programs are Effective**

School feeding can enable children to go to school despite poverty and hunger. More specifically, school feeding can:

**Alleviate short-term hunger**

In-school meals provided directly to hungry children reduce short-term hunger and can serve as a vehicle for meeting their nutritional requirements. There are 300 million chronically hungry children in the world today.

**Improve school enrolment, attendance and reduce drop-out rates**

School feeding and take-home rations have consistently proven effective in improving enrolment and attendance, and in reducing drop-out rates among school-age children.

UNICEF reported in 2002 that 60% of the 100 million out-of-school children in the world are girls. World Food Program studies of take-home ration programs, which reward the families of girls who enroll and attend school regularly (usually a minimum of 22 days per month), show dramatic results: In one province in Pakistan, girls enrolment increased by 247% between the time the program began in 1994 and 1998, in another province, the increase was 197%. In the Extreme North province of Cameroon, the program succeeded in increasing girls’ enrolment by 313%.

**Improve students’ learning, cognitive functions, in-class behaviour, academic performance and ability to concentrate**

When poor children go to school, they often leave home on an empty stomach. Providing school meals, especially breakfasts, can play a critical role in ensuring that children can learn. Various studies (in Benin, Jamaica, North America and elsewhere) have shown learning achievement to be higher for children receiving school feeding. Benefits are particularly strong for already undernourished children and/or those who miss breakfast. To be most effective in boosting children’s achievement and behavior, school feeding should take place as early in the day as possible.

**Provide a vehicle for micro-nutrient supplementation**

The use of fortified foods for in-school feeding is an effective means to address specific nutritional needs and deficiencies such as Vitamin A, iron or iodine.

---


Contribute to children’s psychological well-being

Recent studies indicate two of the factors that can cause childhood depression are being hungry and being out of school. School feeding addresses those two causes by enabling poor children to go to school and by providing them with at least one nutritious meal a day.

Improve household food security

Marginalized, food-insecure people typically spend 65-70% of their income on food. Poor, food-insecure families rely on labor and income provided by their children. This is frequently the reason for which poor families do not send their children to school.

School feeding and take-home rations can add to the food baskets of families when targeted for food-deficit areas. The fact that their children will be fed at school or receive take-home rations means that more food is available for the family and is enough incentive for many poor families to send their children to school.

Alleviate some of the cost of children’s schooling

School feeding and take-home rations work to offset the cost of school supplies and fees as well as alleviate the opportunity cost of lost labor to the family.

Act as an effective platform for other needed inputs

Rooted in the near-universal network of primary schools, school feeding provides a base and logistical capacity for other interventions on a large scale. The food acts as an incentive and catalyst for other things to happen.

Parents and communities tend to organize themselves to manage the food, store it and prepare it. This appears to be true even for communities with little or no prior organization and management experience. Community involvement contributes to program management, complementary activities, and—in the long term, program sustainability.

WFP’s 2001 baseline and follow-up surveys of its school feeding programs in 19 countries showed that 72% of parents were contributing financially or in kind to the WFP-assisted school feeding programs, and 84% of the schools’ Parent-Teacher Associations (PTAs) included women members.

School feeding provides an excellent base for undertaking health and nutrition measures such as de-worming treatments, HIV/AIDS education, hand-washing, micronutrient treatment, nutrition lessons, and psycho-social support. These are carried out in conjunction with national governments and other partners such as WHO, UNICEF, and non-governmental organizations (NGOs), as described below.

---

5 WFP, Summary of Global and Regional Findings from the Baseline and Follow-up Surveys in Countries Assisted by the Global Food for Education Initiative. Rome, 2003
Mobilize and build capacity of national governments and other partners
Support for school feeding from WFP’s primary partners, the governments of the countries where WFP works, is extraordinary. Government agencies make key decisions, provide program oversight, and take charge of transporting, handling and storing the food within the country. The government role often goes well beyond that: In several countries, assistance from WFP accounts for only a small portion of national school feeding programs managed by the governments.

An outstanding example of government commitment is Honduras: The GOH covers all transportation, storage, and handling costs of the WFP-donated commodities up to the municipal warehouses. In addition, in 2002 and 2003, the GOH contributed almost $4 million to the program, through WFP. GOH resources will also be used for the local purchase of complementary food commodities to provide a more balanced diet. The GOH and WFP expanded joint fundraising efforts over the past year in order to increase program coverage, diversify donors, and elevate program visibility. In-country activities include a tele-radio marathon, government lotteries, contributions from banks, partnerships within the tourism industry, and a postal stamp initiative. In addition, WFP worked with the Honduran Congress to enact legislation that decreed a National School Feeding Day. In the first ten months of 2003 alone, $8.1 million were raised for school feeding activities in Honduras.

Government commitment was also evidenced in a recent WFP study of countries where it once had supported school feeding, but has since phased out. In each of six countries visited (Botswana, Brazil, Jamaica, Namibia, Paraguay, and Swaziland), school feeding activities were still operating, years after WFP’s departure.6

School feeding also provides leverage to encourage those countries to “do what’s right” in a host of areas, including girls’ education and improvements in the quality and management of education.

Other international and local organizations are also mobilized, to ensure a range of complementary activities in conjunction with school feeding. The strongest UN agency partnerships in school feeding activities thus far are between WFP and UNICEF (for a “minimum package” of books and supplies, clean water, latrines, health interventions, teacher training and curriculum development), UNESCO (for technical assistance, program design and evaluation, and statistics), WHO (for deworming and other school health issues), the World Bank (school health and—potentially—work with HIV/AIDS orphans and prevention activities, and adolescent girls), and FAO (to expand school garden and woodlot activities).

Numerous NGOs work independently or in partnership with WFP in school feeding programs. Catholic Relief Services, for example, has a very long and excellent history of work in food for education activities. NGOs are particularly strong in the community-related aspects such as organizing parent-teacher groups, mobilizing community inputs, and developing management capacity. They also generally are

Please note, however, that due to the recent Southern Africa drought, WFP is again providing assistance to Swaziland, including support for school feeding activities.
strong in monitoring the school feeding program and aspects of quality of education at the school level.

**Work as an effective tool against HIV/AIDS**

School feeding is an important intervention in the HIV/AIDS crisis. In-school feeding, take-home rations, and food-assisted literacy and trade-skills training are all important interventions that support orphans to get needed education.

FAO, WFP, the French Government and others studying the HIV/AIDS crisis in Africa have reported that food is one of the primary needs in HIV/AIDS-affected communities. Recent studies have also shown that one of the first responses of an affected household is to pull their children out of school to support the family. Foster families and other facilities providing shelter to orphans find their resources stretched thin. Because of family responsibilities and dire poverty, orphans often cannot afford to attend formal school programs full time.

Without parents or an education, the outlook for growing numbers of orphans is bleak. Food assistance and literacy training are two basic investments that can make a significant difference for their futures.

Schools can also be a base of outreach and education for parents and other adults in the community. Prevention education, distribution of food supplies for use by local caregivers, and other activities for adults can be organized via the local school.

**Create jobs and private sector opportunities**

Scant attention appears to be given in developing countries to the role of the private sector in education. In developed countries, there are very strong direct and indirect links between education and private sector interests. Simply put, governments invest in education; this investment creates employment and profits, as well as producing a skilled workforce. Taxes are paid by the workers and the companies alike, some of the tax revenues are re-cycled into education and other social programs. A network of interdependent individual, government and business interests develops which—if balanced, well-managed and well governed—is sustainable over long periods of time.

Unfortunately, this “healthy balance” is not achieved in most developing countries. If government investment in education is too low, or is made through expensive loans and/or external donations, the employment and profit creation does not occur at adequate levels. As a result, tax receipts will also be inadequate to sustain government investments. Likewise, if the education system does not produce adequately skilled workers, or if there is little opportunity for profit and employment for the workforce that has been trained, the balanced system of interests cannot be developed or maintained. The challenge is especially great in the context of poor rural communities where employment and profit-making options are limited.

School feeding can contribute to the creation of profit-making opportunities and employment for low-skilled and professional workers. Brazil, Chile, Japan, South Korea, and the United States provide excellent examples of how this can work and contribute to sustaining school meal programs.
Importance of Education

Investments in human capital, especially in education, are more conducive to economic growth (and thus, to long-term food security) than investments in physical capital. Societies at large, communities, families and individuals all benefit from basic education.7

“Education has powerful poverty-reducing synergies: one year of schooling for women lowers fertility by about 10%, while one or two years of schooling for mothers reduces child mortality by 15%.”

Education is also a vital tool in helping prevent HIV/AIDS and other health-related problems. “Education is a proven means to prevent HIV/AIDS…It has been proven to provide protection against HIV infection…It is among the most powerful tools for reducing girls’ vulnerability…It offers a ready-made infrastructure for delivering HIV/AIDS prevention efforts…It is highly cost-effective as a prevention mechanism…”8

Constraints to Education

Hunger and poverty:

Hungry children are less likely to go to school and less able to learn if they do attend. Hunger and poverty directly correlate to educational performance. The first report of the Millennium Development Goal Task Force on Education and Gender (2003) said: “In general, education performance – both enrolment and retention – correlate very strongly with income within a country…In the end, only about 20 percent of the poorest children and 50 percent of the middle-income children complete primary school, while nearly all of the children from the better-off households do.”

Basic survival and sustenance issues of poor households can understandably take precedence over education. Rural families often count on the labor of their children for tasks such as farm work; finding food, water and/or fuel supplies; childcare; and food preparation. Some children are sent from rural areas to urban areas to seek employment so that families can be supported by their wages. Rural poverty and hunger thus also help to explain some of the cultural practices which impede education. Early marriage, for example, relieves poor families of costs and increases income. Poor families have difficulty covering the cash costs of education as well. Official and unofficial school fees, requirements for uniforms, books and supplies, and other such expenses re beyond meager budgets.

Best School Feeding Practices: Hunger and poverty

- In-school feeding reduces short-term hunger. The best approach is to provide micronutrient-fortified meals early in the school day.
- Both in-school feeding and take-home rations alleviate some of the financial burden on poor families and help to offset costs associated with a child’s

8 “Education and AIDS”, World Bank, 2002
schooling. Maximum impact is achieved through choosing food items of sufficient value in the local context and careful targeting that allows food aid to reach the families most in need.

- **Take-home rations have proven effective in enabling girls to attend school and preventing them from dropping out.** This approach is now being used increasingly to enable other vulnerable children (i.e., orphans, child soldiers, child laborers) to attend and stay in school.

- **The use of food vs. cash:** An advantage of providing food to poor, food-insecure households as opposed to providing cash or scholarship schemes is that food remains food in the community. It adds a needed component to the family or (if sold) to the community. Cash or cash-based vouchers and other such incentives may not be converted into needed, positive inputs either to the family or the community. Food is generally less susceptible to fraud and misuse than cash or cash equivalents. In addition, handling food is generally safer than handling cash, and food use can be traced and monitored more readily.

**Access to education:**

Children in poor rural communities suffer a lack of access to schools, teachers and educational materials. Poor governments often do not extend social services to the most rural, hard-to-access areas. In these areas, school buildings frequently are inadequate or nonexistent. Due to the lack of basic services and poor conditions, teacher motivation is difficult to attain and sustain in rural zones. School supplies and books are harder to find as well. Children living in sparsely populated rural areas may be required to walk long distances to school. These factors de-motivate students and raise family concerns about their children’s (particularly girls’) safety and security while en route to and from home and school.

**Best School Feeding Practices: Access to education**

Food can be used in several ways to address access issues. For example:

- The provision of food to a school in a poor community can (and often does) trigger official or community support for needed infrastructure improvements, services and supplies. WFP studies indicate that community involvement and/or other positive inputs to the schools tend to occur in food-assisted schools even when there is no specific or planned activity to facilitate these improvements. The best approach, however, is to specifically include community-mobilization activities such as the organization of parent-teacher associations with women members as required components of school feeding programs.

- School feeding generally entails a direct investment in school infrastructure, particularly at the outset. It frequently serves as a catalyst for others—interested development agencies, governments and private sector players—to become involved in poor schools, resulting in improved school conditions. The best approach is to build such partnerships into the school feeding program from the beginning.

- In the absence of cash, food can also pay workers for school construction or renovations and/or for safeguarding students as they walk to and from school. This use of food should only be considered for very focused activities that support education and enhance food security.
**Health and nutrition:**
Poor nutrition and bad health impede student attendance and interfere with their mental development and ability to concentrate in class. Examples:

- **Iron deficiency** weakens the child’s immune system, physical development, cognitive ability and school performance and causes fatigue. More than half of the world’s school children are iron deficient.
- **Iodine deficiency** affects some 60 million school children and is the leading cause of preventable intellectual impairment.
- **Intestinal parasites** can cause malnutrition, bowel obstruction, internal bleeding—and thus anemia, low energy, discomfort, and poor attendance and performance. In the worst cases, mental and physical retardation or even death may result. School-age children are the group most affected by intestinal parasites; an estimated 3.3 million children die from intestinal infections each year.
- **Vitamin A deficiency** can cause respiratory and other infections and blindness. Some 85 million school-age children suffer Vitamin A deficiency.
- **HIV/AIDS**—Although HIV/AIDS infection rates are lowest for children aged 5 to 14, almost 3 million children under 15 years of age are HIV-positive. The pandemic has a profound impact on the welfare of un-infected children as well. Over 13 million children under 15 have lost one or both parents to AIDS; this number is expected to almost double within ten years. Orphans and children living with HIV-positive parents are at high risk for nutritional, educational and psycho-social problems.

**Best School Feeding Practices:** Health and nutrition

Four key examples are provided for how school feeding is best used as a platform for addressing health and nutrition needs of school-age children:

- **Routinely treat schoolchildren for intestinal parasites.** This is done effectively through school feeding programs. For example, WFP, WHO and the World Bank undertook a major initiative in 2001 to ensure de-worming treatments in school feeding programs in Africa. Twenty of the 21 countries trained thus far have begun de-worming treatments; additional countries will be trained in June 2003.
- **Address nutritional deficiencies in school feeding programs through the use of micronutrient fortified foods.** Micro-nutrient fortification is routinely recommended and quickly becoming the standard for large school feeding operations. UNICEF and others are partnering effectively with WFP and national governments to assist in this area.
- Household food security is decreased when an adult family member falls ill. This prevents children from attending school, as they are needed at home to care for or substitute for the labor/income that is lost by the adult’s sickness. As a result, **food becomes a powerful tool which can be carefully targeted to both help to strengthen household food security and to serve as an economic incentive for keeping the affected children in school.**
- **School feeding is effective as a platform for HIV/AIDS prevention education.** When routinely delivered in conjunction with school feeding, HIV prevention education will reach millions of school children and their families.
**Educational quality and environment:**
Child-friendly environments and high educational standards are difficult for poor schools to achieve. Rural schools in developing countries are least likely to have electricity, potable water and sanitary facilities. They are often ill-equipped in terms of furnishings and school supplies. Due to lack of space and/or teachers, grade levels may have to be mixed or class hours shortened in order to accommodate more than one “shift” per day. If the schools are far away or hard to access, they receive fewer supervisory visits, government support and quality control. Poor schools are thus often less attractive to students and teachers alike.

**Best School Feeding Practices:** Educational quality and environment

Food can serve as an effective catalyst for quality improvements. The monitoring of school feeding activities involves increased attention, especially through school visits. With school meals or take-home rations, it is highly recommended to implement other food for education and partnership activities—including health and sanitation interventions. These contribute to the improvement of school conditions and quality factors that make schools more attractive to teachers, students and parents.

**Donor support and cost factors:**
Donor support to education—including support for school feeding—has fluctuated over the years, but even when support has been strong, it has never achieved recommended levels. Meanwhile, donor frustration regarding investments in education has been quite high.

There is little disagreement over the benefits of education, and most recipient and donor governments have signed onto the Education for All goals. At best, however, investments in education are long-term and the “pay-off” is delayed, requiring a generational cycle before they can be realized. At worst (and all too frequently) the investment is long-term and the benefits are impeded or derailed. Factors unrelated to education, such as natural disasters, war, disease, and poor governance can reduce or eliminate the benefits of an education and/or assume control, taking over the country’s political and budgetary priority.

As for school feeding, we are unaware of any comprehensive and credible cost-benefit analyses of school feeding and its multiple benefits. We know that the cost per child of school feeding support ranges from a few pennies per day for one basic meal provided by an international organization, to over two dollars for one child’s daily school meal in developed countries. In 2000, WFP calculated that its school feeding activities cost the agency, on average, about 19 cents per day per child, or USD 34 per school year per child; at that time the average per-child cost of the United States school lunch program was USD 2.12 per school day.

---

9 This is the cost to the international organization/donor. It includes some—but by no means all—of the costs borne by the recipient governments and communities.
Is this expensive? To answer that question, the cost of school feeding programs must be viewed in the context of the benefits they engender. The value of the benefits derived from school feeding is very difficult to calculate, however. Direct benefits such as improvements in enrolment, attendance, retention and performance as well as reduction in hunger are hard to quantify in monetary terms, but are clearly of significant social value. The value of indirect benefits (e.g. community mobilization or health improvements due to better nutrition) and long-term economic and social improvements should also be factored into the analysis.

There have been some comparisons of the cost of school feeding to interventions such as de-worming treatments, provision of school supplies, or teacher training. Such studies have concluded that school feeding is more expensive and management-intensive than the interventions against which it was compared. These results were predictable in that the other interventions involve very different occasional inputs while school feeding requires inputs every day school is in session. An even bigger issue, however, is that the other interventions do not have the same benefits as school feeding. The lack of similar, daily interventions with comparable outcomes makes it difficult to conduct a true cost-benefit comparison.

**Best School Feeding Practices: Donor support and cost factors**

Donor support and costs are important to consider in the context of scaling up and sustaining programs. The best approaches would include:

- **Exercising economies of scale and making economic choices:** In very general terms, the more children fed, the lower the cost per child.
- **Making economic choices:** The more basic the meal, the more economical the choices, the lower the cost per meal. Purchasing and/or processing food locally often is cheaper than importing processed foods. Community contributions of fresh food items can increase food variety, ensure that food meets local taste preferences, and reduce overall costs. Using available resources to purchase low-cost but nutritious staples and blended foods rather than imported drinks and other expensive items can reduce transport and food costs without reducing the nutritional value of the food children receive.
- **“Piggy-backing” complementary activities.** This means using the logistical network supporting school feeding programs to aid other needed (health, infrastructure development, and education) activities. This way, each of the activities becomes more cost-effective than if they were carried out separately.
- **Involving donors in multi-year and “untied” investments in school feeding.** Some of the costs of school feeding activities involve “gearing up and gearing down” when resource levels fluctuate, and mobilizing annual donations (especially for countries where there is little public attention despite significant needs). Best practices, therefore, include donors making multi-year and/or multilateral, undirected contributions. These donations give implementing agencies maximum flexibility and cost savings.
- **Augmenting the contributions of traditional donors in ways that make the whole bigger than the sum of its parts.** Relatively small contributions from private individuals and corporate donors allow bigger, government donations to be “stretched” farther. Also, matching cash donations of richer countries to leverage donations from the several middle-income or cash poor nations that have surplus
food to offer is a good practice.

- **Using food surpluses to feed poor children and help them to get an education.** Food surpluses exist in many developed and middle-income countries. More of these surpluses could be put to good use in school feeding programs.

**Should school feeding be scaled up? If yes, can it be scaled up, and how?**

WFP, with some 40 years of experience, has the most extensive school feeding operations of any international entity, benefitting millions of children and their families each year. In 2002, WFP assisted 64 countries’ school feeding activities, reaching nearly 16 million children. Several international non-governmental organizations and some donors (through bilateral programs) also support school feeding activities in developing countries.

**School feeding works and should be scaled up**

The benefits of in-school feeding and take-home rations are described in the previous sections of this paper and in the studies listed in the attached bibliography. They include the reduction of hunger and drop-out rates and improvements in student enrolment, attendance and performance. Other education-supportive uses of food aid include the use of food to support teacher training and literacy and skills training for adults in the community.

Although not a panacea, school feeding and related food-assisted education activities can directly address many of the constraints listed--and more.

**Can it be scaled up?**

School feeding activities can quite readily be scaled up to become a major tool in achieving the goal of Education for All. WFP alone has the capacity to at least double its efforts within two years and has the goal of reaching 50 million children (one half of the estimated 100 million of out-of-school children). Many governments themselves and other experienced organizations could also reach significantly larger numbers of children if adequate resources (food and enough cash to manage the food) were available.

**What about costs and donor support?**

The economics of Education for All are daunting. How can the quality and child-friendliness of poor schools be enhanced without large cost increases? There two main factors that can help to reduce, or at least to keep the cost-per-student and cost-per-school at a manageable level: Scale and concentrated partnerships. Both of these require a collective will to make it happen. The donors and recipient governments alike must focus wholeheartedly on the “core necessities” and not get distracted by tangential issues.

“Core necessities” include the very basic requirements for a child to learn: A safe
location (for a positive learning environment); a teacher (a literate adult role model skilled in supporting children’s learning); nutritious food (to provide needed energy and micronutrients during the school day); basic educational materials; clean water; gender-segregated sanitary facilities; and simple health treatments (including education in disease prevention).

**Conclusion**

School feeding can and should be scaled up to spur progress toward the goal of universal education. The expertise to do so is readily available—internationally, and within most developing countries. WFP alone, with additional food and cash resources, could quickly double the number of children assisted (to more than 30 million). Within three to five years, WFP could triple the number of children assisted, to reach half of the 100 million currently out-of-school children. Provided on a large scale, the cost-per-child for these school feeding activities and the other core necessities is minimal, particularly in view of the return-on-investment that education provides.

If the key players agree on these necessities and work to ensure understanding and cooperation to scale up in these areas, both traditional and new donors (including private sector actors) can be convinced to invest in this core support to education.

Amongst the key players are recipient governments and communities, that need to clearly state their needs and demonstrate their own commitment, and international and non-governmental organizations, that can organize their resources and priorities to support the core necessities and improve coordination, reduce interagency competition, and lessen the management burden on developing country governments.