



State of School Feeding Worldwide

2013



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Foreword

In our efforts to create a world where the opportunities of economic growth reach the hungry poor, schools play a very significant role. Schools are where we shape future political leaders, scientists, economists, artists and thinkers. Schools are where we nurture dreams and aspirations. Schools are where we lay the foundation for future economic growth.

A meal at school acts as a magnet to get children into the classroom. Continuing to provide a daily meal to children as they grow helps keep them in school and is a powerful support to achieving educational goals. Ensuring that the meals provide the nutrition that children need to learn and grow is an investment in a child's future. School meals assure that where quality education is available children are prepared to take advantage of learning opportunities.

But school meals programmes are also a catalyst for development. They function as safety nets to help vulnerable households and communities weather economic crises or other shocks without compromising their nutrition and food security. If linked to local agricultural production, they can also help increase the incomes of small-scale farmers and boost rural economies.

From the information gathered in this report, we know that almost every high- and middle-income country implements school feeding. These countries have learned that it is an important investment. The challenge is to support low-income countries to enjoy the same benefits of these programmes.

This report is an attempt to share and learn from each other what works best in school feeding programmes around the world so that governments may explore their life-changing potential to nourish young bodies and minds in classrooms everywhere, particularly in the world's poorest and most challenged communities.



Ertharin Cousin

Executive Director, World Food Programme



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Executive Summary

In 2009, the World Bank (WB) and the World Food Programme (WFP), in collaboration with the Partnership for Child Development (PCD), published an analysis called *Rethinking School Feeding*. The analysis was undertaken to better understand the growing demand from countries for school feeding programmes that was sparked by the food, fuel, and financial crises of 2008.

This report seeks to build on the 2009 analysis and begin a systematic process to better understand the strengths and challenges of school feeding programmes globally. It is a work in progress, and presents the current status of our understanding of school feeding. Information was drawn from a global survey conducted by WFP in early 2012 and a series of case studies and peer-reviewed technical working papers undertaken in collaboration with partners. The analysis led to the identification of new areas that require more focused attention. The report highlights these areas and outlines the current research agenda on which WFP and its partners are currently collaborating.

This analysis is the first of a series of three linked publications and begins a process of developing a stronger evidence-base for school feeding. The second publication will be a collection of case studies exploring current country experiences with school feeding operations. The third will present the lessons learned by countries that have transitioned from external aid to national ownership.

The following sections highlight the main conclusions from this report:

School feeding is present in almost every country in the world, but not always efficient

Almost every country in the world for which we have information seeks to feed its schoolchildren. Based on a sample of 169 countries, we estimate that at least 368 million children are fed daily when they are at school. Given current estimates of the per capita cost of school feeding, this translates into a potential annual investment of between US\$47 billion and US\$75 billion, with most of this money coming from government budgets. These numbers illustrate the near-universal recognition of the importance of school feeding. So for this report, and for governments and others analysing school feeding, the key question is not whether countries should implement school feeding programmes, but how they can improve the effectiveness and efficiency of the programmes they are already implementing.

There is increasing political support and demand for evidence-based guidance on school feeding. *Rethinking School Feeding* was conceived originally as providing guidance to low-income countries, but following its publication in 2009 there has been sustained demand for guidance from better-off countries, including China and the Russian Federation, that are seeking to provide social support to their citizens. As another indicator of the

demand for knowledge in this area, the original report has been translated by commercial publishers into Arabic, French and Spanish. The search for knowledge about school feeding is also indicated by growing participation in the Global Child Nutrition Forum, which has emerged as the largest annual gathering of government and civil-society school feeding practitioners, with increasing representation at the highest political levels. Despite facing financial constraints, at least eight low-income countries have started national school feeding programmes since 2000. For those countries that have existing programmes, there is a clear emphasis on scaling up as well as on improving their quality and efficiency.

The coverage and quality of school feeding programmes varies with national income

The coverage of school feeding programmes is lowest in countries where the need is the greatest. In high- and upper-middle income countries, generally all children have access to food through schools, and the most vulnerable children typically are entitled to subsidized or free meals. In low-middle and low-income countries, by contrast, programmes are generally only available to some children in certain geographical areas chosen according to vulnerability factors. Current estimates on coverage suggest that while 49 percent of schoolchildren receive free meals in middle-income countries, the figure for low-income countries is 18 percent. This suggests that where the need is greatest in terms of hunger, poverty and poor social indicators, the coverage continues to be the lowest.

Governments in low-income countries prioritize school feeding programmes for development assistance. From a global perspective, external development assistance is a minor contributor to overall school feeding costs, accounting for less than 2 percent of the total. In low-income countries, however, donor investment accounts for 83 percent of the resources allocated to school feeding programmes. This shows both the scale of need in poor countries as well as the priority given to this activity by their governments.

The income level of a country is associated with not only the scale of the programmes but also with the extent to which the programmes are consolidated in national policy frameworks. Programmes in high- and upper-middle-income countries are generally more established, meaning that they have consolidated regulatory frameworks and tend to have stronger institutionalization. For example, these countries often have mechanisms for recovering costs from better-off families and using this income to support the cost of feeding those from vulnerable backgrounds. Programmes in low-income countries, by contrast, have less consolidation in national policy frameworks and usually have not introduced the element of cost recovery. This suggests a role for development partners in supporting low-income countries through a transition towards programme frameworks that are more effective and more sustainable.

An analysis of school feeding costs reveals opportunities for increased efficiency

Overall, countries are remarkably consistent in their relative investment in school feeding. This analysis updated the 2009 estimates of school feeding costs and found considerable variation, ranging from less than US\$20 to over US\$1,500 per child per year. When

compared with other public investments in this age group, however, the proportion invested is remarkably consistent across national income levels. In this report, we express public school feeding costs per child as a proportion of the amount that countries choose to invest in the education of the same children. In rich and poor countries alike, this proportion is in the range of 15 to 20 percent.

There is a trend for school feeding costs to become a much smaller proportion of education costs as income levels rise. These analyses suggest that the main reason for this is an increased investment per child in primary education as gross domestic product (GDP) rises, but a fairly stable investment in food. The overall trend is that school feeding represents, on average, 68 percent of education costs in low-income countries, 24 percent in lower-middle-income countries, and 11 percent in high- and upper-middle-income countries.

The greatest opportunities for cost containment are in low-income countries. The trend in costs is exaggerated in low-income countries by the very wide range of costs. While proportional school feeding costs are similar in many low-income countries to those in rich and middle-income countries, there are some low-income countries where school feeding per child costs more than education. This undesirable asymmetry is especially common where a country fails to maintain oversight and is reliant on external support to fund and manage the school feeding programme. Helping these countries to implement policies to bring their costs in-line with more prudent neighbours presents a key opportunity for efficiency savings.

School feeding programmes achieve much more than feeding children

School feeding contributes to having healthy and well-educated children but its impact depends on whether quality education is available. School feeding supports families in securing education for their children, especially girls who are often differentially excluded from education. This promotes human capital development in the long run and helps break intergenerational cycles of poverty and hunger. School feeding contributes to a child's readiness to learn and ability to participate in his or her own educational process, and the benefits are particularly strong for girls. However, school feeding can only help if the other major elements that are prerequisites for learning – such as teachers, textbooks, curriculum and an environment conducive to learning – are also in place. Additionally, care should be taken to avoid using teachers or education staff to prepare food, since this merely taxes the system that school feeding programmes aim to enhance.

School feeding commonly works as part of social protection systems to support the most vulnerable families and children. In the short term, as a social safety net, it provides direct support to the poor by transferring income to families. Many of the most successful and widely emulated conditional cash transfer and social protection programmes (e.g. in Brazil and Mexico) include school feeding as a key element. The challenge in low-income countries is how to ensure similar institutionalization, sustainability and efficiency of these programmes given limited resources and capacities. School feeding is only part of the entire social protection system that supports vulnerable families, and so ensuring that it complements, and does not duplicate, the efforts of other programmes is vital. In high- and middle-income countries,

school feeding is often integrated in broader social welfare systems.

School feeding programmes can be scaled up in response to crises, serving as a rapidly deployable safety net. The survey of 77 countries shows that 38 of them have scaled up their programmes in response to social shocks such as armed conflict, natural disasters and food and financial crises. An analysis of a subset of 33 countries shows that, on average, programmes have doubled in scale since 2008, and this increase is mostly driven by the scale up of programmes in middle-income countries. This may argue for more support to low-income countries to help them achieve the same.

Investing in nutrition during the first 1,000 days of life – from conception to two years of age – is a priority, and addressing the nutrition needs of school-aged children can help ensure that the early development gains are not jeopardized by later failures. The nutritional status of school-aged children impacts their physical development, health, learning and cognitive potential, and subsequently their school attendance and educational achievement. School feeding programmes can provide fortified meals to support nutrition issues. For example, micronutrients can tackle important deficiencies among children of primary-school age, such as a lack of Vitamin A or iron, both of which affect children's ability to learn. Good programmes are implemented as part of a wider school health and nutrition package which includes deworming, nutrition education and safe water.

Linking school feeding to agriculture offers economic and health benefits

Linking programmes to the agriculture sector has direct economic benefits and can potentially benefit the entire community as well as the children. The link to local agricultural production can help the sustainability of the programmes and create predictable and structured markets for local produce. This approach has been identified as one of the critical elements in transitioning to sustainable programmes. Several better-off countries (e.g. Brazil, Chile and Scotland) have demonstrated the effectiveness of purchasing school food locally in order to feed children better and stimulate the local economy. A number of low-income countries are now exploring ways to purchase food closer to schools, in particular from smallholder farmers to provide them with a stable market for their products, increase their incomes and reinvest resources into the local economy. They are also empowering school-level committees to purchase food closer to the schools, so that the community is involved in making decisions and managing resources. There is also an opportunity to engage with the private sector at all stages of the supply chain.

The link with local agriculture can help improve the quality of school food. Local procurement can also be an opportunity to provide a greater diversity of foods, including those that are fresh, potentially better quality and unprocessed. This concept is already well-accepted in rich and middle-income countries, and it is being increasingly adopted in low-income countries. One challenge of buying food locally – especially from farmers or markets close to schools – is that the food may not be fortified because this requires capacities that communities normally do not have. This challenge and consequent trade-off between nutrition and local procurement is an important factor to consider at the design stage of the programmes.

Development partners support school feeding, but there is a need to improve coordination

Many international partners are involved in school feeding, and there has been a substantial investment from the social protection, education and agriculture sectors in support of these programmes. In the last few years, there has been an increase in the level of participation and investment of partners at all levels in school feeding activities. This may be because partners are responding to countries' increased demand for support and also because they have recognized the role that school feeding can play to achieve social protection and child development goals in countries.

However, there is no true global coordination mechanism to bring together all the relevant players and countries to disseminate knowledge, coordinate action and facilitate learning. While the multisectoral nature of school feeding has allowed a number of actors from a range of areas to participate, there are no obvious coordination structures as with other interventions that fall squarely within the realm of a specific sector. Finding an effective coordination framework at the global level is a priority to ensure that countries, particularly low-income countries which are transitioning from external support to national ownership, get the right support at the right time.

It is necessary to support countries through the transition to sustainability. In order for school feeding programmes to be sustainable, the education and agriculture sectors must come together in support of them. On the education side, efforts are being made to reinforce the partnerships that support the quality of education and that are vital to ensure an adequate learning environment for children. WFP's renewed partnership with UNICEF and UNESCO, called "Nourishing Bodies, Nourishing Minds", will help to strengthen the quality of support on the education side. On the agriculture side, building platforms of collaboration along the supply chain has proven to be successful in several countries, although a lot more remains to be done, including finding ways to leverage the support of the private sector more efficiently. All of these efforts should be underpinned by a strong learning agenda, which is being supported by several academic institutions and specialized agencies.

There is a need to strengthen the evidence base and share knowledge about school feeding

During the course of this analysis, several research questions have been identified. Information on the per capita costs of school feeding is much more robust than it was five years ago, and now benchmarks are available. However, there is a need to explore the cost drivers of programmes. In other words, we need to understand why costs may be low in one country and very high in another, and produce guidance for countries on how to estimate costs along the supply chain and optimize operations. There is a clear gap in the information available on school feeding in high-income countries. There is also a surprisingly low number of school feeding impact evaluations across all income groups, which is a lost opportunity to improve programme effectiveness. There is a general gap in the evidence on the impact of purchasing food from smallholder farmers. There is a need to study how countries are tackling the issue of food quality standards and nutritional guidance for

school feeding and develop guidance on these issues for countries that wish to strengthen this dimension of their programmes. Despite recent work to document the transition from external support to national ownership, part of which is presented in this report, there is still a gap in knowledge about how countries, particularly low- and middle-income ones, have managed to finance these programmes.

WFP, WB, PCD and partners will continue building on the knowledge base. Key areas of focus will include impact evaluations, case studies and technical working papers. This information will be published as it becomes available, with the general objective of providing useful guidance to countries so they can implement more efficient and sustainable school feeding programmes that reach the most vulnerable children.

A final word

This report shows that school feeding programmes are big business worldwide. Since the financial crisis in 2008, the coverage of and interest in these programmes has grown among both better-off and poor countries. The global investment in these programmes is of the order of US\$75 billion a year, with more than 368 million children receiving meals every day and nearly every country seeking to implement programmes. These programmes have multiple objectives, but they especially serve as social safety nets and promote education and nutrition outcomes. The analyses here show that these programmes have tangible benefits, and that there are potentially important efficiency gains to be made in all countries, but especially in the poorest ones. This report provides new insights into the policy and management of school feeding programmes, and marks the beginning of a systematic analysis of their strengths and challenges. But the report also highlights the weaknesses of the current evidence base and the need for countries and the development community to work together to ensure that existing and new programmes are effective and efficient. The time has come to pay school feeding programmes the attention they need and deserve.

Introduction



Context and rationale

In 2009, the World Bank (WB) and the World Food Programme (WFP), in collaboration with the Partnership for Child Development (PCD), published an analysis called *Rethinking School Feeding*.¹ The analysis was undertaken to help better understand countries' growing demand for school feeding programmes which had been sparked by the food, fuel and financial crises of 2008. Governments had clearly understood that these programmes have multiple benefits and are important tools to reach the most vulnerable. They provide income support to families through the provision of food and contribute to learning by increasing children's access to education and maintaining their nutritional status and overall health. This makes them attractive long-term social protection investments as well as safety nets in the short term to children and their families.

At WFP, the findings of *Rethinking School Feeding* led to a changed approach to school feeding, a new WFP policy on the subject and a different way of working with governments and partners. This was done in the context of WFP's broader strategic shift from a food-aid organization, providing food directly to vulnerable households, to a food-assistance organization with a range of modalities for supporting nations, communities and households in increasing their access to food and nutrition security.

With the new policy, WFP committed to moving away from a project-based approach to a more long-term, sustainable approach to school feeding. This includes an emphasis on government ownership and on making programmes more cost efficient. It also highlighted local procurement and the link with smallholder farming and a commitment to better and more nutritious food baskets. The policy established WFP as a provider of time-bound support to governments, with the long-term objective of phasing out its assistance, leaving behind sustainable, cost-effective national school feeding programmes that are embedded within broader national policies and frameworks.

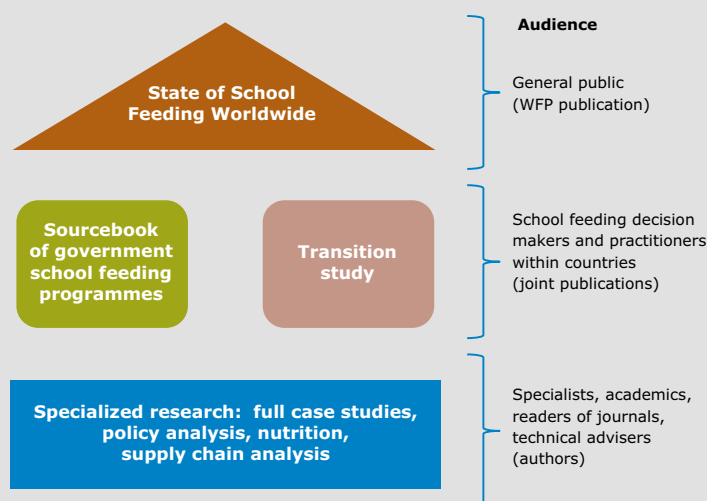
In its role as a global leader in school feeding, and in line with its policy, WFP is committed to working with partners to analyse and share knowledge to better support governments in implementing sustainable national programmes. This publication is part of that effort.

The State of School Feeding Worldwide seeks to build on the 2009 analysis and begin a systematic process to better understand the strengths and challenges of school feeding programmes globally. It is a work in progress, and presents the current status of our understanding of school feeding. Information was drawn from a global survey conducted by WFP in early 2012 and a series of case studies and peer-reviewed technical working papers undertaken in collaboration with partners. The analysis has led to the identification of new areas that require more focused attention. The report highlights these areas and outlines the current research agenda on which WFP and partners are currently collaborating.

¹ Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. (2011). *Rethinking school feeding: Social safety nets, child development and the education sector*. Washington, DC, World Bank.

This analysis is the first of a series of three linked publications, undertaken jointly with governments, the WB, the PCD and other development partners with a technical expertise in school feeding. It begins a process of developing a stronger evidence base for school feeding. The second publication will be a collection of case studies – a sourcebook – exploring current country experiences with school feeding operations. The third will present the lessons learned by countries that have transitioned from external aid to national ownership. These publications are underpinned by a collection of research working papers aimed at specialists, academics, journal readers and technical advisers, which also will be published (see Figure 1 and Annex I).

Figure 1 **Strengthening and sharing knowledge: school feeding publications**



This report is organized as follows. The first chapter presents an analysis of how important school feeding is in practice, including estimates of the size, coverage and investment worldwide. The second highlights the differences in programmes in high-, middle- and low-income countries. The third chapter focuses on school feeding's three main dimensions: its contribution to social protection, child development and the promise of providing farmers with access to a new market. This is followed by a summary of what we know about the costs of school feeding today. The last chapter describes what partners are doing in support of school feeding and how WFP's role is changing. The publication ends with a conclusions section, which presents a more detailed research agenda.

Definitions and data sources

What is school feeding?

School feeding is defined here as the provision of food to schoolchildren. There are as many types of programmes as there are countries, but they can be classified into two main groups based on their modalities: (1) in-school feeding, where children are fed in school; and (2) take-home rations, where families are given food if their children attend school. In-school feeding can, in turn, be divided into two common categories: (1) programmes that provide meals; and (2) programmes that provide high-energy biscuits or snacks.

In some countries, in-school meals are combined with take-home rations for particularly vulnerable students, including girls and children affected by HIV, to generate greater impacts on school enrolment and retention rates and reduce gender or social gaps. While this report includes some information about all modalities, its emphasis is on in-school feeding since governments prefer either meals or snacks for their programmes, with few exceptions. Thus, unless otherwise specified, the term school feeding in this report means meals or snacks provided in school. Additionally, school feeding programmes may cover pre-primary-, primary- and secondary-school children in many countries. Information presented in this publication covers these three categories, with the exception of the indicator for coverage, which is calculated only for primary-school children.

Data sources and terminology

This report draws both on primary and secondary sources for information about school feeding programmes in countries around the world. The design of all research was based on a global vision and conceptual framework for school feeding developed in partnership among WFP, WB and PCD. The conceptual framework is based on five quality standards for school feeding, which were originally presented in *Rethinking School Feeding*: 1) sound national policy frameworks; 2) stable and predictable funding; 3) sufficient institutional capacity for implementation and coordination; 4) sound design and implementation; and 5) community participation.

The primary source for quantitative data is the WFP global school feeding survey fielded in January-March 2012. Additional information for countries that did not participate in the survey was obtained from a comprehensive review of case studies, publications and reports. A specific effort was made to obtain information from high-income countries through direct contact with government focal points. Finally, for countries where the information obtained was insufficient, parameters were estimated using available information from the WB and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Since the WFP global survey had limited data on per capita costs (which are notoriously difficult to calculate and standardize across countries), cost information was obtained from another source. The study presented in Chapter 4 is the most recent and complete source of

data on school feeding costs covering 74 countries, including 12 high-income, 39 middle-income and 23 low-income countries using data from 2008.²

The first chapter of this report presents estimates for the following key indicators: number of school feeding beneficiaries, type of targeting used by countries, coverage of programmes and investment. As programme expenditure figures by country are not universally available for comparison, investment is defined here as the total amount budgeted for school feeding or the estimated budget. Subsequent chapters of this publication present information from the global survey, and complementary information from other sources used is cited. Sample sizes vary per indicator, as information was not available for every country.

Qualitative information presented in this report comes from several sources, the main one being case studies done by WFP, WB and PCD over the 2010-2012 period. Additional information was contributed by government counterparts, WFP country office staff, key partners such as the WB, PCD, the School Food Trust of the United Kingdom (SFT), and the Global Child Nutrition Foundation (GCNF). Qualitative information has gone through an internal review process. Country case studies have been vetted by WFP country office staff.

Box 1 presents definitions of terms used in this publication that are common in school feeding literature.

Box 1 Technical terminology

National school feeding programme: A programme managed by the government either alone or with the support of WFP or other development partners (see below) to provide food on a regular basis to schoolchildren.

Development partners: An umbrella term for stakeholder and donor organizations supporting national development strategies. Development partners include UN organizations (WFP, UNICEF, WHO), international non-governmental organizations (Plan International, Save the Children International, World Vision International, Care International, and Relief International), other international organizations (WB, PCD, International Food Policy Research Institute, the Millennium Villages Project, GCNF) and civil society at the local level.

Beneficiaries: Those who receive the benefits of a particular social programme. In this case, children who receive food from the national school feeding programme.

Targeting: An approach used to concentrate resources of programmes on the poor or vulnerable.^{3,4} There are several ways of targeting, but the ones used in this report common to school feeding programmes are: individual, geographical or universal. *Individually targeted* programmes are those where children are selected according to demographic factors such as age, gender or poverty. For *geographically targeted* programmes, location determines one's eligibility. Certain locations may be selected according to indicators such as poverty, food-security prevalence or low educational achievement. *Universal targeting* is where all

² Gelli, A. and Daryanani, R. (forthcoming). Are school feeding programmes in low-income settings sustainable? Insights on the costs of school feeding compared to investments in primary education. Food and Nutrition Bulletin.

children, regardless of their age, socio-economic status or gender, are eligible to participate in the programme.

Targeting efficiency: Safety net programmes try to concentrate their benefits on the neediest to provide maximum resources to them within a constrained budget. Targeting efficiency refers to the extent to which the benefits of a social programme are actually going to the poor.⁵

Programme modalities: A school feeding programme could provide hot meals, snacks or biscuits, take-home rations or any combination of these three modalities.

Coverage: The proportion of school-attending children who are beneficiaries of the national school feeding programme.

Scale-up: The increase in the number of beneficiaries reached by the national school feeding programme.

Investment: The total budget allocated to school feeding by the government or WFP, or an estimation of that budget. In this publication, these are estimates based on secondary data and not on information from national balance sheets.

Costs: The per-child cost of school feeding is estimated as the total expenditures associated with school feeding activities divided by the number of beneficiaries. The figure reflects costs related to commodity procurement, transportation, storage and handling and personnel. Community contributions are not included.⁶ *Cost recovery* refers to the programme costs being offset by contributions from the beneficiaries or communities.

Fortification: The practice of deliberately increasing the content of essential micronutrients (such as Vitamin A, iron, iodine or zinc) to foods.⁷

Deworming: A treatment to control the intestinal worm infections such as helminths (roundworm, ringworm and hookworm)

and schistosomiasis. The World Health Organization has recommended giving children albendazole or mebendazole to treat helminths and praziquantel to treat schistosomiasis. These drugs are highly effective and inexpensive.^{8,9}

Overweight/obesity: A condition characterized by excessive body mass that may stem from a diet imbalance. Obesity is defined according to body mass index, which is weight in kilograms divided by height in metres squared. The thresholds at which a body mass index classifies a child as overweight or obese are age- and gender-specific and are set by the International Obesity Task Force. The threshold for obesity is higher than the threshold for overweight.¹⁰

Policy framework: A set of legislative and executive instruments that may include statutes, decrees, orders, policies or guidelines relating to a social programme, in this case school feeding. These instruments as a whole articulate 'rights', set out objectives and establish and regulate the institutions and processes for the realization of these rights through government action.¹¹

Social protection: Systems, programmes and policies that help individuals and societies build resilience to risks, achieve equity and avail themselves of opportunities. Social protection instruments include safety nets, pension systems, insurance and labour programmes and policies.¹²

Safety nets: Programmes that provide cash or in-kind benefits that seek to reduce poverty or vulnerability.¹³

Food-based safety nets: Provide direct, regular and predictable food assistance, in cash or in kind, to the most vulnerable people to: (1) prevent them from falling below a minimum level of food security as a result of a shock; (2) to increase their resilience to shocks; and (3) in some cases, to promote their food security.¹⁴ The retail value of a food transfer in the local market is referred to as an *income transfer*.

Transition: The progressive reduction of external support from development partners – including operational support, funding and technical assistance – to a country's national school feeding programme.¹⁵

Smallholder farmers: Semi-subsistence farmers who cultivate fewer than five hectares of land, although most farm two hectares or less. The precise definition may vary by country and region.¹⁶

- ³ Grosh, M., del Ninno, C., Tesliuc, E. and Ouerghi, A. 2008. For protection and promotion: The design and implementation of effective safety nets. Washington DC, World Bank.
- ⁴ Coady, D., Grosh, M., Hoddinott, J. 2004. Targeting of transfers in developing countries. Review of lessons and experiences. Washington DC, World Bank.
- ⁵ Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. 2011. Rethinking school feeding: Social safety nets, child development and the education sector. Washington, DC, World Bank.
- ⁶ Gelli, A and Daryanani, R (forthcoming).
- ⁷ FAO and WHO. 2006. Guidelines on food fortification with micronutrients. Geneva.
- ⁸ WHO, Millennium Development Goals, "The evidence is in: Deworming helps meet the Millennium Development Goals," 2005. http://whqlibdoc.who.int/hq/2005/WHO_CDS_CPE_PVC_2005.12.pdf
- ⁹ WFP School Feeding Policy. 2009. Policy Issues Agenda Item 4.
- ¹⁰ de Onis, M., Onyango, A.W., Borghi, E., Siyam, A., Nishida, C. and Siekmann, J. 2007. Development of a WHO growth reference for school-aged children and adolescents. Bulletin of the World Health Organization. 85: 660-7.
- ¹¹ Singh, S. 2012. School feeding programmes: A review of policy and legal frameworks. Paper commissioned by the Partnership for Child Development and the World Food Programme.
- ¹² World Bank. 2012. Managing risk, promoting growth: Developing systems for social protection in Africa. The World Bank's Africa Social Protection Strategy 2012-2022. Washington DC, World Bank.
- ¹³ Update of WFP's safety nets policy: The role of food assistance in social protection, Policy Issues Agenda item 5, Rome: 2012.
- ¹⁴ Grosh, M., del Ninno, C., Tesliuc, E. and Ouerghi, A. 2008. For protection and promotion: The design and implementation of effective safety nets. Washington DC, World Bank.
- ¹⁵ Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. 2011. Rethinking school feeding: Social safety nets, child development and the education sector. Washington, DC, World Bank.
- ¹⁶ WFP. 2012. P4P Purchase for Progress – A Primer.



1

How prevalent is school feeding?

Chapter 1



Over the past few years, WFP and other development partners have reported an increase in countries' demand for and interest in school feeding. But, how many countries are actually implementing programmes? Are there programmes in countries of all income groups or only in some? Are these large national investments or small donor-driven programmes? These are some of the questions that WFP and its partners have aimed to answer over the past three years. This chapter presents the first estimates of the number of children receiving school meals globally, the size of government investment and the coverage of programmes with the objective of understanding how significant school feeding is in practice.

The results presented in this book confirm the initial findings of *Rethinking School Feeding*. First, the sheer size and level of investment in school feeding is impressive. Almost every country in the world, for which we have information, seeks to feed its schoolchildren. This well-established programme is perhaps the largest safety net in the world. So, for this report and for governments and others analysing school feeding, the key question is not whether countries should implement school feeding programmes, but how they can improve the effectiveness and efficiency of the programmes they are already implementing.

Second, the coverage of school feeding programmes is lowest in countries where the need is the greatest. The coverage of school feeding programmes varies greatly among high-, middle- and low-income countries. In high- and upper-middle-income countries, generally all children have access to food through schools, and the most vulnerable children typically are entitled to subsidized or free meals. In low-middle- and low-income countries, by contrast, programmes are generally only available to some children in certain geographic areas chosen according to vulnerability factors. Estimates presented in this chapter suggest that coverage continues to be the lowest where the need is the greatest in terms of hunger, poverty and poor social indicators.

And third, governments in low-income countries prioritize school feeding programmes for development assistance. From a global perspective, external development assistance is a minor contributor to overall school feeding costs, accounting for less than 2 percent of the total. In low-income countries, however, donor investment accounts for 83 percent of the resources allocated to school feeding programmes. These figures demonstrate the scale of need in poor countries as well as the priority given to this activity by governments.

Box 2 Income classification of countries

This report follows the WB classification of countries by income groups.¹⁷ For countries with a population of 30,000 or greater, the 2011 US\$ gross national income per capita is calculated using the WB's Atlas method. Countries are then classified as follows: low income, \$1,025 or less; lower-middle income, \$1,026–4,035; upper-middle income, \$4,036–12,475; and high income, \$12,476

or more. These thresholds were set on July 2012, and are valid until July 2013. In this report, the upper-middle- and high-income country groups were combined as the characteristics of school feeding programmes in these two groups are similar. Consequently the two other income groups refer to lower-middle-income and low-income countries.

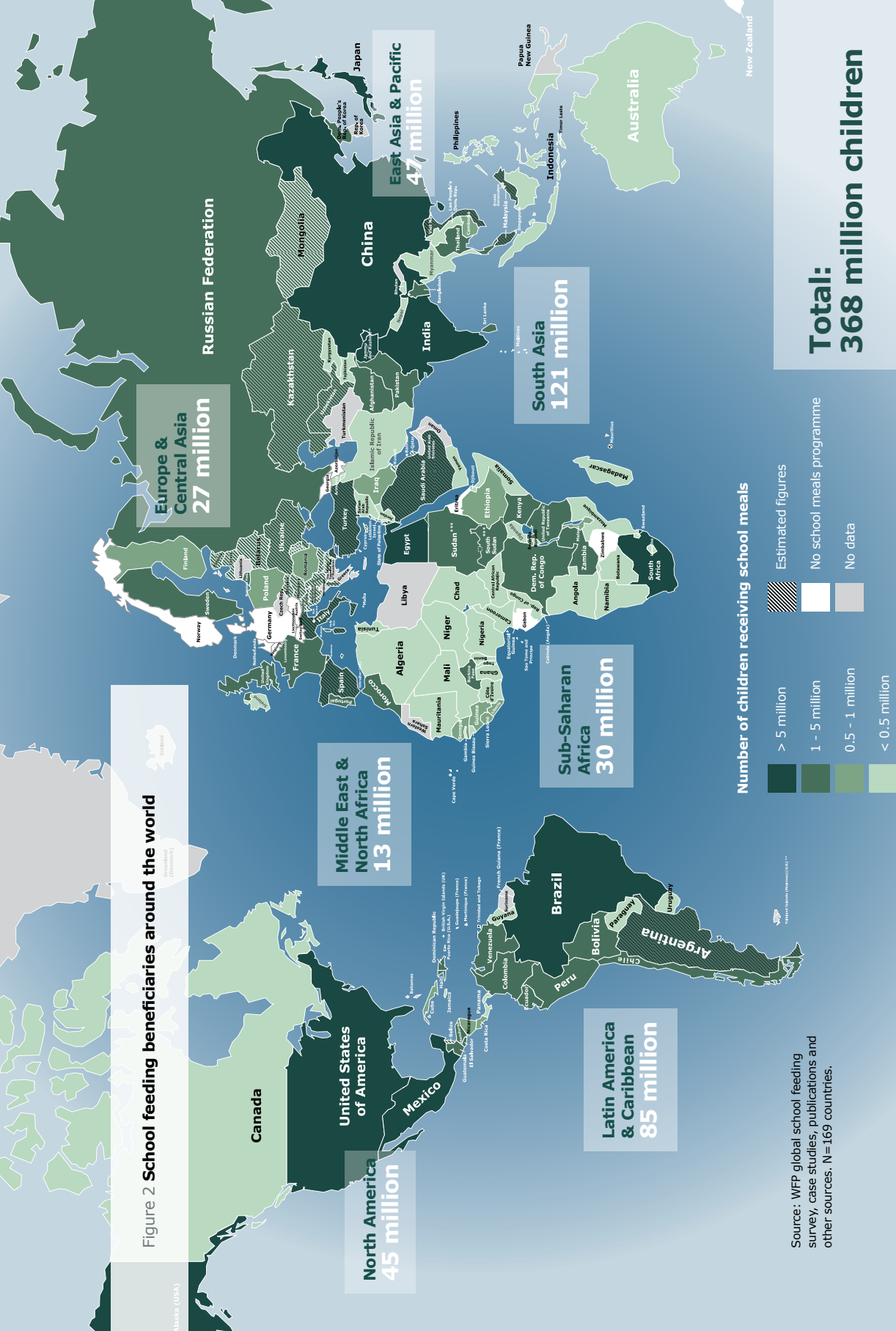
¹⁷ <http://data.worldbank.org/about/country-classifications>

1.1 The size of school feeding efforts

There are at least 368 million pre-primary-, primary- and secondary-school children receiving food through schools around the world. These numbers are based on a sample of 169 countries (see Figure 2).¹⁸ The biggest programmes are in India (114 million), Brazil (47 million), the United States (45 million) and China (26 million). There are at least 43 countries with programmes of more than one million children. The region with the largest number of beneficiaries is South Asia, followed by Latin America and the Caribbean (for more information on specific country data, see Annex II). The global number of children receiving schools meals includes those in WFP-supported programmes.

¹⁸ Beneficiary estimates are for all schoolchildren beneficiaries of national school feeding programmes (including those reached by WFP) in 169 countries, except for estimated figures which are primary-school children only. The calculations for the estimated figures are described in greater detail in Annex III.

Figure 2 School feeding beneficiaries around the world



Global estimates of school feeding beneficiaries were obtained from several sources (see Table 1). The WFP global school feeding survey includes information from 99 countries and had a response rate of 92 percent. Other sources were consulted for additional countries. The first source was case studies, web searches and existing publications; information was found for 15 countries. The second source was correspondence with government focal points in high-income countries. Out of 11 countries contacted, six provided information about their school feeding programmes. As a last step, beneficiary information for 49 countries was estimated using information on coverage and school-age population. For more information on beneficiary estimates, see Annex III.

While information from the survey and other sources includes children of all ages (pre-primary, primary and secondary), the estimates for 49 countries are only for primary-school children because of a lack of data on coverage for the remaining age groups. Thus, the totals presented here are underestimated, but not by much because primary school-aged children account for 92 percent of the survey sample (see also Table 4 for coverage by school age).

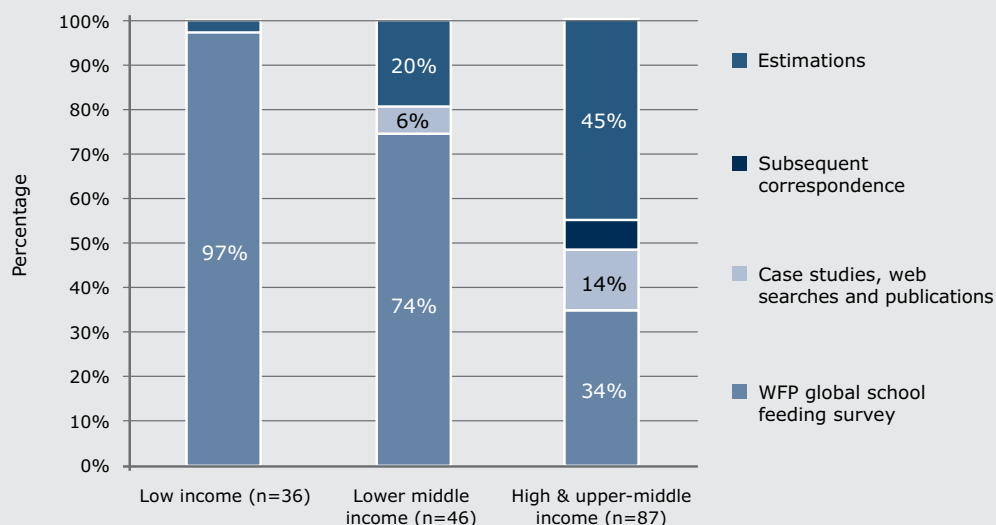
Table 1 Information sources, sample size and response rate for school feeding beneficiary estimates

	Target sample	Final sample	Response rate
WFP global school feeding survey	108	99	92%
Other sources:			
Case studies, web searches and publications	Not applicable	15	Not applicable
Subsequent correspondence with high- & upper- middle-income countries	11	6	55%
Estimations	Not applicable	49	Not applicable
Total	Not applicable	169	Not applicable

Source: WFP global school feeding survey, case studies, publications and other sources.

One of the findings of this effort is that the availability of national data on school feeding in high-income countries is limited and very often less comprehensive than comparable data available in low- and middle-income countries (see Box 3). The response rate in correspondence with high-income countries was especially low. As a consequence, data were estimated for 45 percent of high- and upper-middle-income countries (see Figure 3 for countries in the sample by income group).

Figure 3 Breakdown of sample by source and income level



Source: WFP global school feeding survey, case studies, publications and other sources. N=169 countries.

Box 3 Why is there limited information on school feeding in high-income countries?¹⁹

While the difficulty in obtaining information about school feeding in high-income countries was surprising, there are a couple of possible explanations. First, in many countries, the complexity of school feeding programmes (e.g. multiple dining spaces, voucher systems and alternative outlets like vending machines) makes it difficult to collect comprehensive measures of food availability and costs.

Second, individual schools or state authorities are often responsible for managing and funding the programmes. Only where central government provides free or subsidized meals is information on costs collated. Programmes in high-income countries typically have multiple funding streams (e.g. meals paid for by parents or partial or total subsidies from

central and local government or individual schools), and data may be therefore difficult to identify and disentangle. The very complexity of the service means that robust information may not be collated at the national level.

In some countries where school feeding programmes are being reassessed (e.g. Japan, the United Kingdom and the United States), the quality of national data collection has improved in order to assess the impact and effectiveness of changes in government policy. This renewed interest is not universal across all countries or in all governments, however, and the collection of information remains uneven.

¹⁹ Contributed by Dr Michael Nelson, Director of Research and Nutrition at the School Food Trust, United Kingdom

1.2 The amount invested in school feeding every year

Based on the information available about the number of children receiving school meals and the per capita cost of school feeding, it can be estimated that the global annual investment in school feeding is between US\$47 billion and US\$75 billion – most of which is from government budgets.

Information on actual national expenditures on school feeding is not available for most countries. Estimates in this report were made based on secondary data and not information from country balance sheets. In this section, we present estimates of investments which are defined as the amount that is budgeted by national governments for school feeding (as reported by the countries in the WFP global school feeding survey) and/or an estimation of the national budget based on per capita costs and the number of programme beneficiaries.

Global aggregate investment figures were estimated by applying two different sets of investment values on two different beneficiary samples. The four resulting estimates provide a range of plausible values.

Table 2 presents the derivation of the two beneficiary samples. Beneficiary sample 1 begins with the total number of countries which responded to the survey, and then is limited to those countries that reported beneficiaries and national school feeding budgets. Beneficiary sample 2 begins with the full sample of 169 countries (including information from other sources and estimations) and is then similarly reduced to 154 countries.

Table 2 **Calculation of beneficiary samples**

				Final sample:	
	Original sample	School feeding programme beneficiaries reported	National school feeding budget or per capita cost reported or known	Number of countries	Number of beneficiaries
Beneficiary sample 1:	99 countries that responded to the survey	7 countries did not report beneficiaries	3 countries reported beneficiaries but did not report investment data	89 countries	325 million
Beneficiary sample 2:	169 countries from survey, other sources and communication with countries	14 countries did not report beneficiaries	1 country did report beneficiaries but not average cost or investment data	154 countries	368 million

Source: WFP global school feeding survey, case studies, publications and other sources. N=169 countries.

The two sets of investment values are the national budget allocated to school feeding (as reported by each country in the global survey) and the average per capita cost of school feeding by income group. The average cost estimation uses cost values obtained from other sources.²⁰ Rather than being calculated at the country level, these estimates are for income groups of countries.²¹ Values for the national budget are in 2011 US\$, and values for average cost are in 2008 US\$. For more information on the investment estimates, see Annex III.

Table 3 indicates the four methods used to estimate the annual global investment in school feeding. The lowest estimate was US\$30 billion and the highest one was US\$75 billion, using 2008 cost data and 2011 beneficiary data. Of the two samples, the more comprehensive one is the second, and thus it is considered to be the most accurate assessment of investment. Therefore, the resulting range is between US\$47 billion and US\$75 billion.

Table 3 Four methods of estimating the total yearly investment in school feeding

Sample	Number of countries	Number of beneficiaries	Investment value	Estimated global investment (US\$)
Beneficiary sample 1	89	325 million	Budget allocated	30 billion
	89	325 million	Average cost per income group	58 billion
Beneficiary sample 2	154	368 million	Budget allocated for 89 countries which have data; average cost per income group for remaining 64 countries	47 billion
	154	368 million	Average cost per income group	75 billion

Source: WFP global school feeding survey, case studies, publications, World Bank, UNESCO and Gelli A. and Daryanani R. (forthcoming).

Note: The investment calculations are described in greater detail in Annex III.

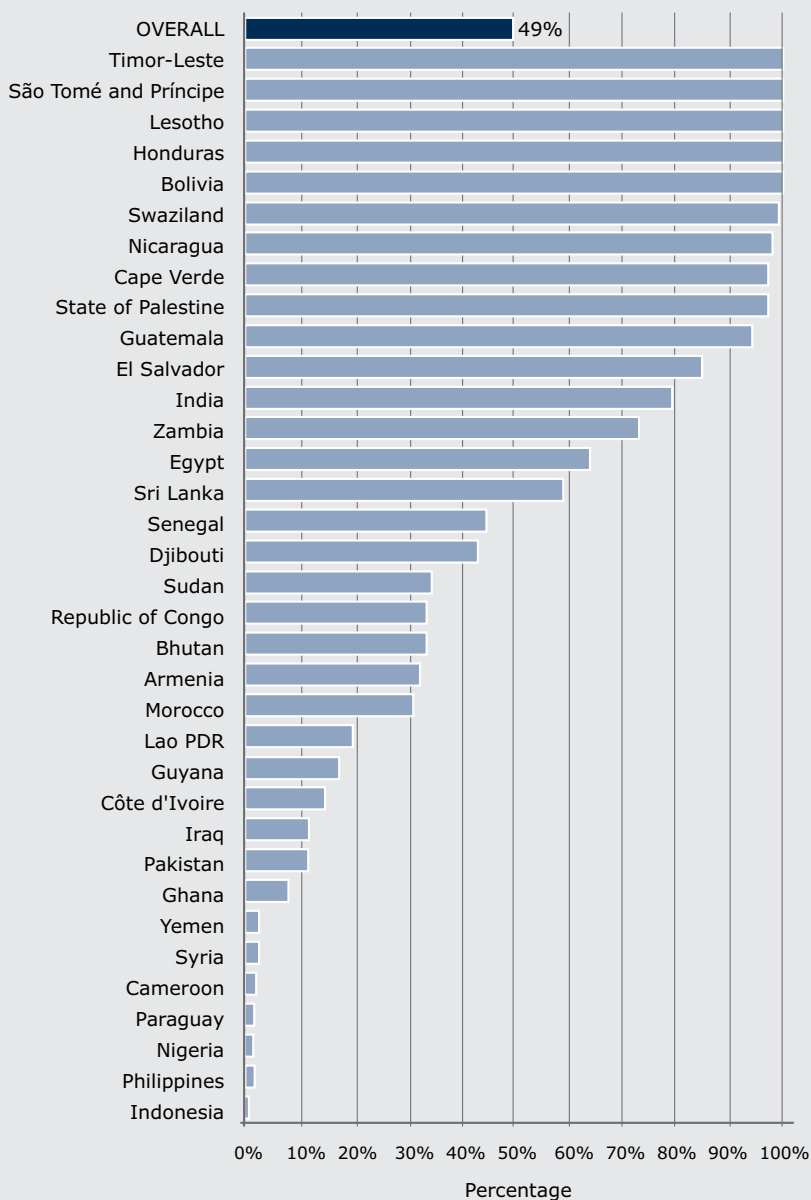
1.3 The coverage of school feeding programmes

Coverage is defined as the proportion of school-attending children who are beneficiaries of the national school feeding programme. While this publication presents findings for all age groups, the analysis of coverage is limited to primary-school students only due to limited information about the breakdown of school feeding beneficiaries by age group. In lower-middle-income countries, 49 percent of primary-school children have access to school feeding, while in low-income countries, this figure is 18 percent (see Figures 4 and 5).

²⁰ Gelli, A. and Daryanani, R. (forthcoming). Are school feeding programmes in low-income settings sustainable? Insights on the costs of school feeding compared to investments in primary education. Food and Nutrition Bulletin.

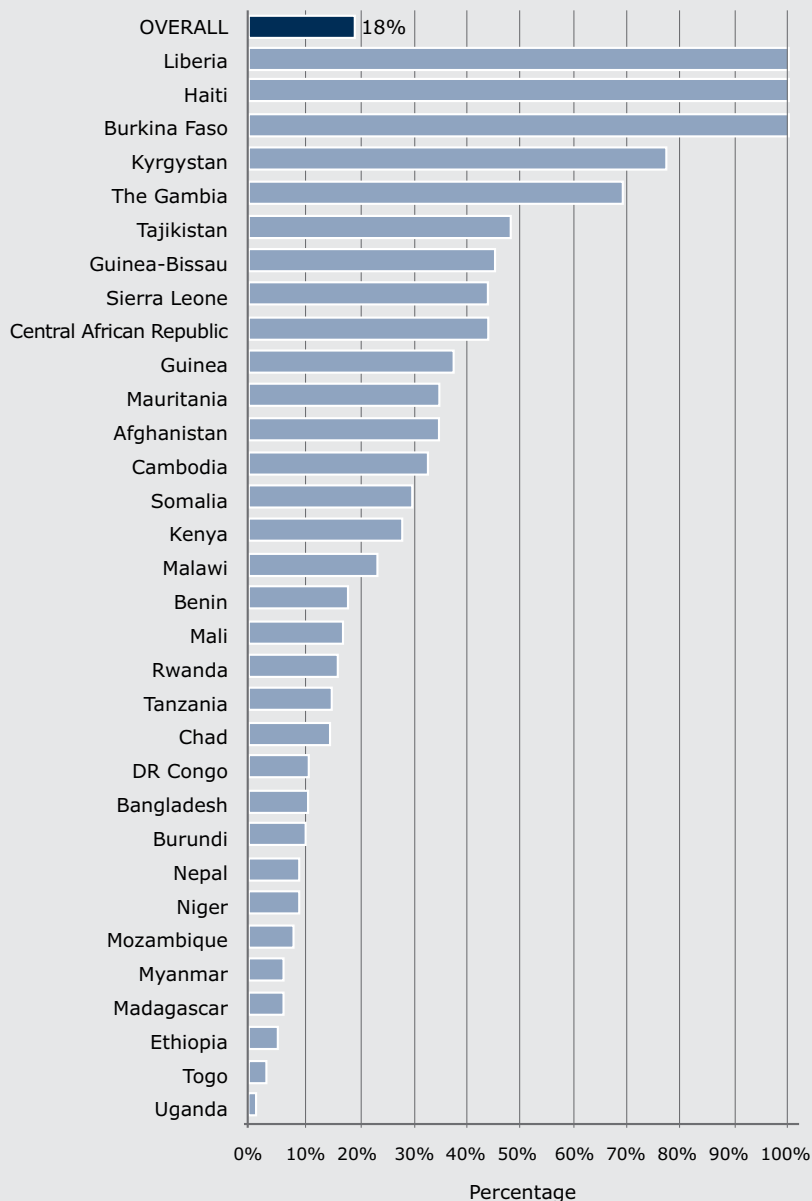
²¹ The income groups were defined as follows: low income, \$1,025 or less; lower-middle income, \$1,026 - \$4,035; upper- middle income, \$4,036 - \$12,475; and high income, \$12,476 or more.

Figure 4 **Coverage of school feeding programmes in lower-middle-income countries**



Source: WFP global school feeding survey, case studies, publications, World Bank and UNESCO. N=35 countries. More information about these calculations is provided in Annex III.

Figure 5 Coverage of school feeding programmes in low-income countries



Source: WFP global school feeding survey, case studies, publications, World Bank and UNESCO. N=32 countries. More information about these calculations is provided in Annex III.

Despite these low overall figures among low-income countries, there are three countries which cover nearly all primary-school students – Burkina Faso, Haiti and Liberia. Coverage for high- and upper-middle-income countries is not presented in this section because the number of countries in this income group for which data were available is limited.

Coverage in each country was estimated as the number of school feeding beneficiaries from the WFP global school feeding survey divided by the number of pupils in primary school as reported by the WB (2010).²² In several cases where data were missing from the WB, we estimated the number of pupils in primary school by multiplying enrolment rate by the school-age population. Both of these variables were available from UNESCO (2011).²³ As the numerator encompasses all schoolchildren (pre-primary, primary and secondary) and the denominator represents only primary-school children, the estimates of coverage are biased upwards. Our survey data suggest that 92 percent of school feeding beneficiaries are in primary school, which implies that this bias is not substantial.

Coverage was calculated for each country as well as by income group, the latter being weighted by the number of primary-school children enrolled in school. More information on the calculations is provided in Annex III. Targeting within countries is discussed in the following chapter.

Information from the survey allows us to know the school level of children targeted by the programmes. Of the 108 countries which received a school feeding survey, 105 countries reported the school level. As shown in Table 4, all countries report targeting primary-school children. Nearly half cover primary-school children exclusively, while 40 percent cover a combination of pre-primary- and primary- or primary- and secondary-school children. The remaining 11 percent of the countries cover children from all three school levels.

Table 4 **Countries providing school meals by school level**

School level			Countries	
Pre-Primary	Primary	Secondary	Number	Percent
	✓		51	49%
✓	✓		30	29%
	✓	✓	12	11%
✓	✓	✓	12	11%

Source: WFP global school feeding survey, case studies, publications and other sources. N= 105 countries.

²² World Bank Development Indicators (2010).

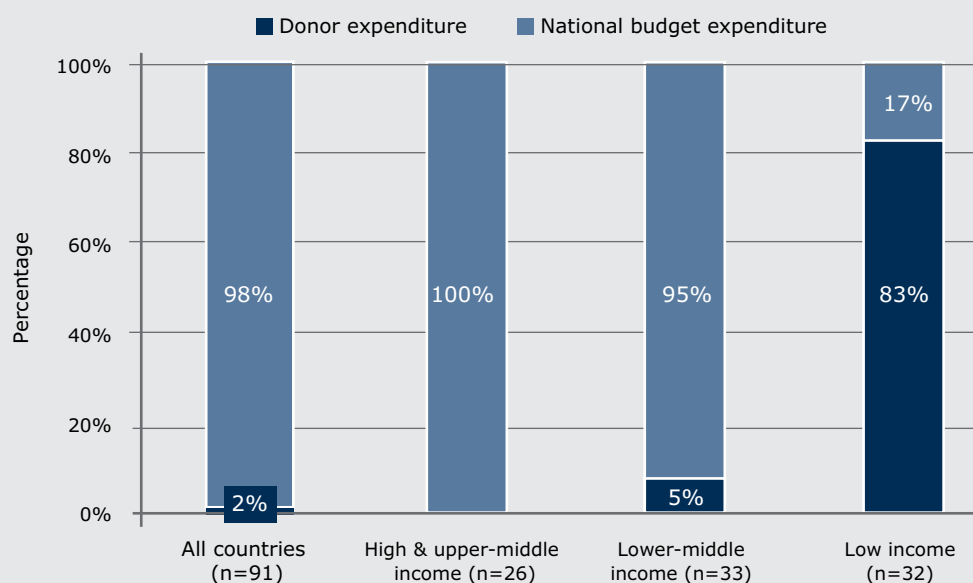
²³ UNESCO Institute for Statistics (2011).

1.4 Sources of programme funding

From a global perspective, external development assistance is a minor contributor to overall school feeding costs, accounting for less than 2 percent of the total. However, while programmes in high- and middle-income countries are almost exclusively financed by internal revenues (taxes and other sources), programmes in low-income countries rely on donor support (see Figure 6). In these countries, external sources of funding cover about 83 percent of programme needs.

Information on funding was calculated from the WFP global school feeding survey. Survey respondents reported the national budgets for school feeding and the sources of funding for those budgets. The estimates for low-income countries include donor funds channeled through WFP. Funds from donors which are channeled through non-governmental organizations (NGOs) or community-based organizations are not taken into consideration in this calculation. Thus, the proportion of donor funding as compared with internal funding is underestimated.

Figure 6 Breakdown of aggregate public expenditure by sources of funding



Source: WFP global school feeding survey, case studies, publications and other sources. N=91 countries.

1.5 The way forward

Calculating school feeding beneficiary numbers, coverage and investment is not easy. Here we present our best current estimates and will track the evolution of these figures in the years to come. Based on this first experience, the following are two main issues to tackle in the future:

- 1. Continue the WFP global school feeding survey.** The survey, which was launched in early 2012 and had a response rate of 92 percent, has proven to be a very successful way of gathering information because it leverages WFP's extensive field presence (i.e. WFP country offices were instrumental in obtaining information from government sources). WFP will now systematically gather information through a global survey, which will allow us to measure trends and improve the accuracy of our estimates.
- 2. Improve data collection efforts for high-income countries.** Efforts to obtain information from other sources (i.e. case studies, web searches and correspondence with government focal points) had mixed results. The response rate from high-income countries was extremely low, which is why figures were estimated for these countries. WFP will join forces with partners to increase the quality of the data from these countries. The objective would be to establish an equivalent and comparable survey in high-income countries.



2

Does the income level of a country matter?

Chapter 2



The scale, investment and coverage estimations presented in the previous chapter suggest that there are important differences between programmes in countries of different income levels, especially in coverage and sources of funding. This chapter explores these differences in more detail, in order to better understand the practical implications of these relationships. In this chapter, as in the rest of the report, income levels are defined according to the WB. High- and upper- middle-income countries, where per capita income is at least US\$4,036, are grouped together because characteristics of school feeding programmes in these two groups are similar. Countries with a per capita income of US\$1,025 or less are classified as low income, and countries with a per capita income between US\$1,026 and US\$4,035 are classified as lower-middle income (see Box 2).

There are two important findings from the analysis. First, the marked differences between programmes in high-, middle- and low-income countries indicate that the income level of a country is associated with both the size and the level of consolidation of these programmes into national policy. Programmes in high- and upper-middle-income countries are generally more established, meaning that they have consolidated regulatory frameworks and stronger institutionalization. For example, these countries often have mechanisms for recovering costs from better-off families and using this income to support the cost of feeding those from vulnerable backgrounds. Programmes in low-income countries, by contrast, have less consolidation in national policy frameworks and usually have not introduced the element of cost recovery. This suggests a role for development partners in supporting low-income countries through a transition towards programme frameworks that are more effective and sustainable.

Second, there is increasing political support for school feeding programmes and demand for evidence-based guidance on school feeding. Rethinking School Feeding was conceived originally to provide guidance to low-income countries, but following its publication in 2009 there has been sustained demand from better-off countries, including China and the Russian Federation, that are seeking to provide social support to their citizens. As another indicator of the demand for knowledge in this area, the original report has been translated by commercial publishers into Arabic, French and Spanish. The search for knowledge about school feeding is also indicated by growing participation in the Global Child Nutrition Forum, which has emerged as the largest annual gathering of government and civil society school feeding practitioners, with increasing representation at the highest political levels. There is a clear emphasis here not only on scaling up existing programmes, but also on improving their quality and efficiency. Despite overall financial constraints, at least eight low-income countries have started national school feeding programmes since 2000. There is a strong case for donor and partner support to low-income countries to design and implement more efficient, effective and sustainable programmes.

Given this analysis, one pending question is whether there is a minimum level of income that a country needs to reach in order to transition to a national programme. This threshold appears to be between low-income and lower-middle-income status, and the graduation to a higher income group may be an indicator of a country's readiness to manage and finance a national school feeding programme, although more research in this area is needed.

2.1 School feeding in high- and upper-middle-income countries

Current information on school feeding in this income category is largely absent. In this section, we present available data from the WFP global school feeding survey, complemented with information from case studies and observations of partners.

School feeding in high-income countries has been around for a long time, often dating back to the middle of the twentieth century (see Figure 9). Information from the WFP global school feeding survey shows that, on average, school feeding programmes in this income category are 38 years old. This and other key indicators are summarized in Table 5.

According to the SFT, there is renewed interest in school food in many high-income countries, due in part to the need to address problems of overweight and obesity, and in part to a growing understanding of the wider role that food can play in health, academic achievement and health inequalities.²⁴ New standards have been introduced in many countries which aim to limit total energy in meals and to improve the nutritional balance of foods offered, for example, by increasing fruit and vegetable consumption (see Case studies 1 and 2).

Case study 1 **Dealing with child overweight and obesity – the experience of Japan and Mexico**^{25,26}

Japan and Mexico have recently reformed their school feeding programmes to respond to rising levels of overweight in children. Japan's school meals programme is more than 120 years old, while Mexico's school breakfast tradition dates back to 1929. The Japanese programme now covers nearly all primary- and secondary-school children, and the Mexican programme reaches approximately a quarter of the children enrolled in school.

In Japan, the launch of the Dietary Education Basic Act in 2005 prompted a shift in the school feeding programme objectives towards increasing nutrition education and healthy eating habits rather than addressing undernutrition. The School Lunch Act formalized the new focus in which diet and nutrition teachers are key. Children and parents take part in knowledge-based learning and cooking activities and advice sessions. Significant investments have been

made to hire specialized nutrition teachers, who numbered over 4,000 in 2012. In efforts to foster a sense of connection with the community, locally-produced ingredients have been introduced into the school meals. Today, the meals – commonly consisting of milk, vegetables and bread or rice – and nutrition education activities reach over 5 million children.

In Mexico, the school breakfast programme was transformed in 2007 to respond to the double burden of overweight and undernutrition and to better respond to diverse local needs. The realization that the centrally managed programme did not correspond to local preferences and food cultures led to its decentralization in 1997. Also, as the country awoke to the national surge in the overweight population, the high-calorie content of the meals, originally designed to combat undernutrition, became a concern.

²⁴ Harper, C., Wood, L. and Mitchell, C. 2008. The provision of school food in 18 countries. London: The School Food Trust.

The programme objectives were reshaped. New nutrition standards were issued to guide the content of the meals with strict limits placed on sugar and fat content. The use of skimmed milk, whole-grain cereal and fresh fruit and vegetables became a priority and an emphasis was placed on serving traditional foods from the Mexican diet,

known to be rich in important micronutrients. Nutrition education accompanies the meals targeted at both children and their parents (who volunteer in meal preparation). More than five million children now receive a balanced breakfast across all the states of the federation.

²⁵ Oji, M. Promoting dietary education through school lunch programmes in Japanese schools, Director of School Health Education Division, Workshop on School Feeding System in APEC Economies, 28-29 June 2012.

²⁶ Government of Mexico & WFP. 2012. Sistema nacional para el desarrollo integral de la familia (DIF), Estudio de Caso: Programa Desayunos Escolares de Mexico.

Case study 2 Managing change in the United Kingdom – evolution of nutritional standards²⁷

The United Kingdom (UK) is divided into England, Scotland, Wales and Northern Ireland, all of which have well-established school feeding programmes. Coverage varies, but is typically in the order of 35 to 50 percent. Most children pay for their meals, but there are also systems to provide meals for free to children from low-income families who receive social security payments.

Since 2000, all parts of the UK have launched initiatives to improve the quality of school food provision: Hungry for Success (Scotland); Appetite for Life (Wales); School Food: Top Marks (Northern Ireland); and the SFT (England). This has been in response to the obesity epidemic among school children, but also to provide a better nutritional safety net for children from poor families. Voluntary guidelines for caterers were introduced to improve the quality of food provided to children, but these proved ineffective. Subsequently, compulsory standards were introduced, and starting in 2013, school meals in England, Scotland, Wales and Northern Ireland will be subject to compulsory standards.

In Scotland, Wales and Northern Ireland, government offices have made efforts to improve programme quality. In response

to a series of television broadcasts in 2005 by the celebrity chef Jamie Oliver who was critical of the poor quality of school food, the Government of England established the SFT in 2006 with £38 million (US\$61 million) over six years. The Government also provided a ring-fenced subsidy of £480 million (US\$771 million) over six years (US\$0.18 to US\$0.22 per meal) to support the transition to healthier foods as well as monitoring and evaluation at the local level.

The SFT, established as a national change management organization, was unique in the UK. The organization worked with the government to develop standards and draft legislation. It supported caterers, pupils and parents to understand the need for change and provide practical support through guidelines, conferences, marketing and newsletters. Furthermore, it carried out an annual survey of caterers to monitor compliance with the standards and assess changes in school lunch costs, barriers to change and staffing.

An evaluation of the SFT suggests that a national change organization costs relatively little in terms of the overall school food budget and the likely benefits that accrue in terms of child health. For example, in

2010-2011, there were approximately 270,000 more pupils taking a school lunch than in 2007-2008. In relation to the direct funding for the Trust over the entire period of its operation, and taking into account an initial decline in take up, it therefore cost approximately £141 (US\$227) per new school lunch pupil (£38m/270,000). While the long-term impact of taking a school lunch is not known, there is evidence that dietary habits track between childhood and adulthood. Therefore, £141 (US\$227) represents a relatively small cost per person in relation to the potential health, educational, employment and earnings benefits throughout a lifetime that may stem from an introduction to healthier eating in school.

Other calculations are possible. For example, roughly three million children receive school meals each day in England. The cost per child per year to have access to a healthier school

lunch (in relation to the costs of setting up and running the SFT over six years) is £38m (US\$61 million) divided by three million children and six years, which equals £2.11 (US\$3.39). Finally, the cost of supporting the SFT can be expressed in terms of the number of meals served over the period in which the Trust was running. If the annual cost per child is approximately £2.11 (US\$3.39), and there are roughly 190 trading days per school year, then the SFT spends 1.1p (US\$0.018) per school lunch (£2.11/190 days). A penny per meal seems a tiny amount to spend to finance a change management organization that has had a demonstrable impact on the pace and extent of change in school food services over a six-year period. Improvements have taken place in Scotland, Wales and Northern Ireland, but these are generally less well documented, and the costs have not been so clearly defined.

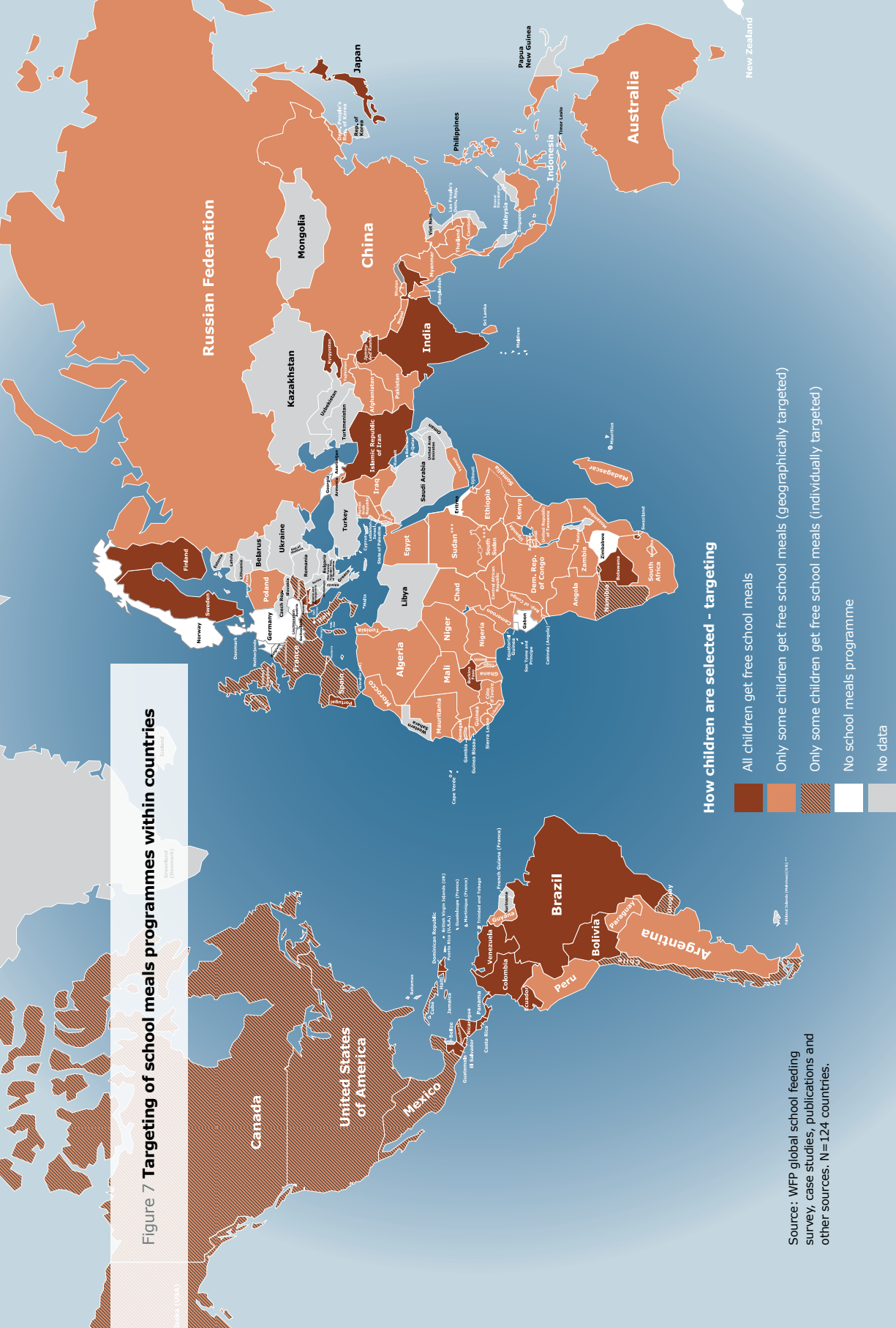
²⁷ Contributed by Dr Michael Nelson, Director of Research and Nutrition at the School Food Trust.

Some upper-middle-income countries have put in place innovations in the supply chain and in procurement and tendering procedures. Chile, for example, reformed its public tendering system for school feeding to allow greater transparency and obtain better quality for the cost of the service provided by private catering companies. Brazil successfully linked school feeding with the food production of family farmers, delivering outcomes both for the children and for the small-scale farming sector and local economies (see Case study 8).

In high-income countries, the school feeding service is generally available to all children. However, some children pay for their lunch while others receive it for free or pay less. Very few provide free school meals to all schoolchildren (i.e. universal school feeding). The notable exceptions are Finland and Sweden.²⁸ Children deemed eligible for free school meals are those living in poor or vulnerable households, using certain criteria (e.g. households having an income below a certain threshold, or children living in households that receive state transfers like income support or child allowance). Because they target specific children and provide them with free meals, these programmes are referred to as individually targeted. Thirty percent of countries in this income category use individual targeting methodologies (see Figure 7 and Table 5).

²⁸ Harper, C., Wood, L. & Mitchell, C. 2008. The provision of school food in 18 countries. School Food Trust.

Figure 7 Targeting of school meals programmes within countries



Experience with other safety nets and social protection instruments in general shows that individually targeted programmes tend to be highly efficient; they increase the probability that the greatest proportion of the resources goes to the poorest children. In the case of school feeding, where the service is available to all children at differing prices, the programmes have an element of cost recovery; some children from better-off families indirectly cover part of the costs of feeding those from more vulnerable families.

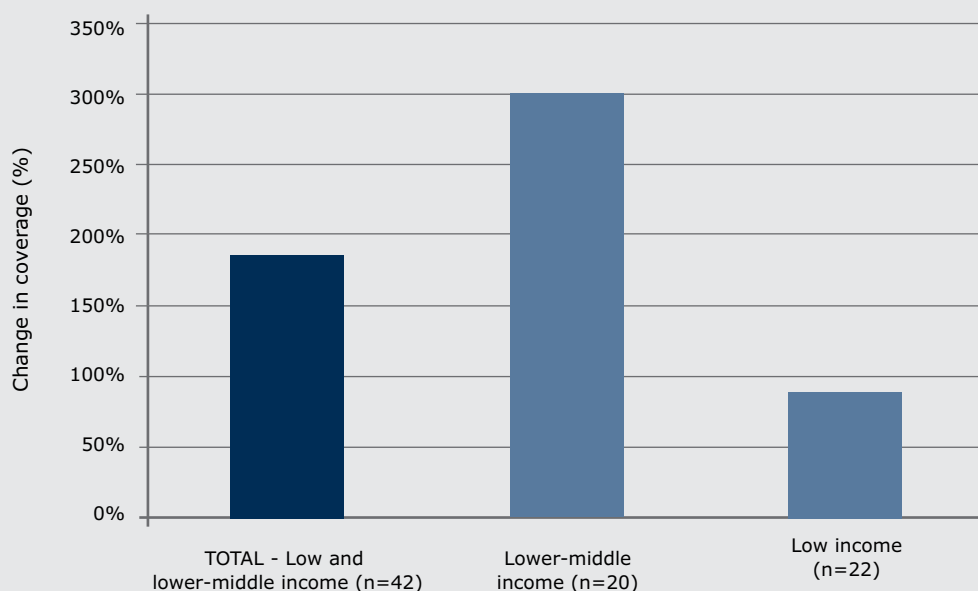
But deciding who is eligible for the programme, enforcing these entitlements and preventing some children from being stigmatized in school for receiving free meals are all very complicated things to do. First, sophisticated systems are required to analyse the poverty and vulnerability levels of children and their families. And second, there needs to be an efficient system to select, register and track beneficiaries to determine whether or not they are getting the benefit. This is why these types of programmes, which select children individually, are most commonly found in high-income countries.

Programmes in high- and upper-middle income countries cost, on average, US\$371 per child per year (more information on costs is presented in Chapter 4).

2.2 School feeding in lower-middle-income countries

On average, school feeding programmes in lower-middle-income countries are 21 years old. Since 2008, several countries have scaled up their national school feeding programmes, indicating an increased demand for these safety nets. An analysis of 20 lower-middle-income and 22 low-income countries using data from the global survey of 2012 and a prior database from 2008 shows that, on average, programmes in these countries doubled in size during this period. This was mainly driven by scaling up in lower-middle-income countries (see Figure 8).

Figure 8 Change in school feeding coverage between 2008 and 2012



Note: Percentage change in the number of children reached by the national school feeding programme between 2008 and 2012. Source: WFP global school feeding survey and Gelli et al. (2011), n=42 countries.

Seventy-four percent of the programmes in this income group are geographically targeted, meaning that certain areas are targeted to receive school meals based on a set of criteria, such as the highest poverty rates or the lowest achievement in education. All the schools in an area, and all the children in those schools, receive free meals. In the rest of the country, however, the school feeding service is generally not available to children, even if they have the capacity to pay. This means that geographically targeted programmes generally do not have a cost recovery component.

Operational experience reveals that geographical targeting is a relatively easy way to select beneficiaries because it does not require complicated selection processes or registration. However, according to social protection literature, the downside of this selection method is that it is not as efficient; that is, non-poor children living in targeted areas receive the same free meal as poorer children. This is not such an issue in countries with high poverty rates and where the programmes are targeted only to the poorest areas, because in those cases most of the benefits will be going to the poor anyway. But as programmes expand to cover more areas in a country, there is a greater chance of providing free meals to children who have the capacity to pay for them.²⁹

²⁹ Grosh, M., del Ninno, C., Tesliuc, E. and Ouerghi, A. 2008. For protection & promotion: The design and implementation of effective safety nets. Washington, DC, World Bank.

Another factor that may affect the extent to which the benefits of the programmes go to the poorest people is that some governments try to ensure that all regions of the country have some coverage of school feeding. This increases the political attractiveness of the programme, but dilutes the efficiency of the targeting. In some cases, there also may be a tendency to prefer covering urban areas to the detriment of rural areas, or schools that already have the infrastructure or are easier to reach than schools which would need additional investment in infrastructure or logistics but which presumably have greater numbers of poorer children. Thus, an important design consideration is ensuring that programmes are indeed prioritizing and reaching the poor. This is an issue for programmes across all income levels, but it is especially important in middle- and low-income settings where there are greater financial constraints.

On average, programmes in lower-middle-income countries reach about 49 percent of the primary-school population and cost about US\$56 per child per year. A study on the efficiency of targeting in Latin America reports that school feeding programmes in four countries are indeed reaching the poorest people.³⁰ According to the study, about 60 percent of the benefits of these programmes go to the poorest two quintiles of the population. Unfortunately, there are no comparable studies about how benefits are distributed among the population in low-income countries. This type of analysis presents an opportunity to increase the quality of programmes, as has been recently illustrated in Ghana (see Case study 13), and it should be done routinely to assess the efficiency of school feeding programmes in different countries.

Some exceptions to the targeted approach are Guatemala and India, which implement universal school meals programmes (see Case study 3). These countries have adopted rights-based approaches in which a law or decree states that all children in the country have the right to receive food in school. This is linked to broader food security and education rights. Universal by law, however, does not necessarily mean universal in practice. Some countries are still dealing with the challenge of enhancing their capacity to provide the same service to all children.

³⁰ Lindert, K., Skoufias, E. and Shapiro, J. 2006. How effectively do public transfers redistribute income in LAC? In *Redistributing income to the poor and to the rich: Public transfers in Latin America and the Caribbean*, Washington DC, World Bank.

Case study 3 The India Mid Day Meal Scheme³¹

India has the largest school feeding programme in the world; in 2011, it reached 113.6 million schoolchildren. The Mid Day Meal Scheme (MDMS), the country's national programme launched in 1995, aims to ensure that all children receive primary education and to boost the nutrition of students in primary-school classes. A pivotal Supreme Court ruling in 2001 – the result of a civil action – declared that school feeding was a right of all primary-school children and mandated the provision of cooked mid-day meals in primary schools. As a consequence, coverage increased nationwide (by more than 10 percent from 2001-2011) although wide regional disparities remain, mainly because of financial constraints at the state level. Nutritional guidelines and food basket quality have improved over time as well.

The MDMS is a good example of a mixed implementation approach with two separate procurement processes: one for food grains, which are subsidized centrally through the government-owned Food Corporation of India, and one for other foods like fresh fruits or vegetables, for which procedures are established at the state level.

Overall responsibility for the programme lies with the Department of School Education and Literacy, while a national steering and monitoring committee monitors the programme. Similar committees also exist at the state, district and local levels.

State governments and union territories are responsible for implementation. At the school level, the programme is administered by

the village education committee, the school management and development committee, the parent-teacher association or, in some cases, NGOs.

In 2010-11, the combined expenditure of the central government and the state governments/union territories on the school meals programme was around US\$3,850 million. In many evaluations since 2001, the programme has been found to have positive impacts on enrolment, elimination of classroom hunger and promotion of gender and social equity.

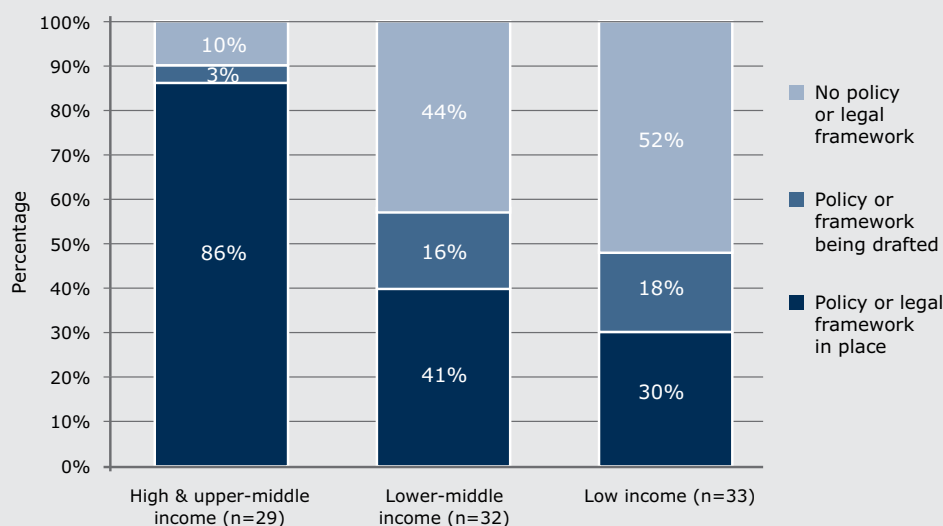
Higher enrolment has been observed, particularly among the Scheduled Castes and Scheduled Tribes children (formerly known as "untouchables"). Data on gross primary enrolment rates from 2001-2002 and 2007-2008 confirms a significant rise among Scheduled Castes (103.1 to 132.3 percent for boys, and 82.3 to 116.7 percent for girls) and Scheduled Tribes (106.9 to 134.4 percent for boys and 85.1 to 124 percent for girls). The nutritional impact, however, has not yet been evaluated, and the links with health and nutrition could be strengthened considerably by better coordination between sectors. Other weaknesses remain, such as the insufficient allocation of budget for food transportation and infrastructure. The late disbursement of government funds to the implementing agencies is reported to have a negative impact in many areas.

³¹ MS Swaminathan Research Foundation of India. 2011. The school feeding programme in India: a country profile case study. London, Partnership for child development.

2.3 School feeding in low-income countries

feeding programme. Out of a sample of 94 countries, 86 percent of high- and upper-middle-income countries had either a policy or a legal document in place which regulated the national school feeding programme, while in low-income countries, 52 percent did not have a policy or legal framework. A significant fraction of lower-middle- and low-income countries (16 percent and 18 percent respectively) noted that a policy was being drafted (see Figure 10).

Figure 10 **Status of policy and legal framework by income level of country**



Source: WFP global school feeding survey. N=94 countries.

Information from an in-depth review of school feeding regulatory frameworks confirms the findings of the WFP global school feeding survey.³² The study analysed 18 countries (eight high-income, three lower-middle-income and seven low-income), and assigned a qualitative score based on the extent and depth of national regulations (e.g. national-level policies and laws, procurement policies, targeting policies and nutrition standards) relevant to school feeding. Using a scale from zero to ten – where zero is no presence of policy frameworks for school feeding and ten is very established and comprehensive policy frameworks – high- and upper-middle-income countries received a score of eight, lower-middle-income countries received a score of 4.6 and low-income countries received a score of 1.7. Overall, the data suggest that low-income countries have less well established policy frameworks for school feeding.

³² Singh, S. 2012. School feeding programmes: A review of policy and legal frameworks. Commissioned by the Partnership for Child Development and the World Food Programme.

Finally, there seems to be an increased demand for evidence-based guidance for school feeding from low-income countries as well as better-off countries. This is illustrated by, for example, the dissemination of *Rethinking School Feeding* following its publication in 2009 (see Box 4). Another indicator is the number and level of participants at the Global Child Nutrition Forum, the largest annual gathering of school feeding practitioners, over the past few years (see Case study 12). Governments, represented by the highest ministerial levels, are stepping up their engagement in policy discussions on school feeding. There is a clear emphasis not only on scaling up, but also on improving the quality and efficiency of the programmes.

School feeding programmes in low-income countries cover, on average, 18 percent of the primary-school population and cost US\$56 per child per year.

Box 4 *Rethinking School Feeding* – An illustration of growing country demand for quantitative analysis of school feeding approaches

The global reception to *Rethinking School Feeding* is a measure of the growing demand for an evidence-based approach to school feeding in countries at all levels of development. Since its publication in English in 2009 as part of the WB's Directions in Development series, the book has been translated and republished by the China People's Publishing House, the Russian Federation and the United Arab Emirates for the Gulf States, as well as by commercial publishers in French and Spanish.

The reception to the book in China is illustrative. In 2009, the China Development Research Foundation (CDRF), an influential nationwide non-profit organization, published a milestone report entitled "Eliminating Poverty through Development in China".³³ This analysis suggested that poverty alleviation strategies should not only focus on the existing poor, but should specifically address the needs of the offspring of the poor, with the aim of preventing poverty from spreading from one generation to the next. The report emphasized the need to help children achieve

their full potential and grow up with enhanced abilities to fully embrace development through improved access to education, health, culture and social protection.

In 2010, CDRF held a high-level symposium in Beijing to explore how to operationalize these child-development policies. The symposium, which included participation from the WB, focused particularly on providing more equitable educational opportunities for poor children through early childhood development programmes and school feeding programmes, among others. To contribute quantitative rigour to the discussion, CDRF translated and published *Rethinking School Feeding*, which was then distributed widely among the provinces seeking to address intergenerational poverty. In 2010, the provinces, with central government support, implemented a pilot school feeding programme reaching 12 million children, which by 2011 had been scaled up and now covers an estimated 38 million children.

³³ China Development Research Foundation. 2009. Eliminating poverty through development in China. Number 30, Routledge Studies on the Chinese Economy; Series Editor Peter Nolan; Oxford and New York, Taylor and Francis. 250 pp.

Table 5 Summary table of characteristics of school feeding programmes by income level

	High- & upper-middle-income countries	Lower-middle-income countries	Low-income countries
Main Characteristics			
Years of operation^a			
Average	38	21	7
Minimum	5	2	1
Maximum	104	82	24
Targeting approach^b			
Universal	38%	26%	9%
Geographic	33%	74%	91%
Individual	30%	0%	0%
Coverage^c			
	----	49%	18%
Average cost per child per year (2008 US\$)^d			
Average	371	56	56
Minimum	24	21	20
Maximum	1,586	136	117
Attitudes towards Policy			
Existence of policy or legal framework^e			
Policy or legal framework in place	86%	41%	30%
Policy or legal framework being drafted	3%	16%	18%
No policy or legal framework	10%	44%	52%
Level of regulatory engagement^f			
	8.0	4.6	1.7
Programme rationale^g			
Education	48%	83%	67%
Social protection	20%	17%	33%
Nutrition	32%	0%	0%

^a WFP global school feeding survey. N=56: 10 low income countries, 20 lower-middle-income countries and 26 high- & upper-middle-income countries.

^b WFP global school feeding survey. Universal targeting: all children in country receive school feeding. Geographical targeting: only certain areas are covered by the school feeding programme. Individual targeting: only certain children in school receive free meals. N=108: 40 high- & upper-middle-income countries, 35 lower-middle-income countries and 33 low-income countries.

^c The estimate of school feeding beneficiaries for coverage was derived from information in the WFP global school feeding survey, case studies and publications. The estimate of pupils enrolled at school was obtained from UNESCO. N=67: 32 low-income countries and 35 lower-middle-income countries. Coverage not presented for high- & upper-middle-income countries.

^d Figures on average cost of school feeding are from Gelli, A and Daryanani, R (forthcoming). N=74: 23 low-income countries, 24 lower-middle-income countries and 27 high- & upper-middle-income countries.

^e WFP school feeding survey. Policy or legal framework in relation to a national school feeding specific policy as reported in the survey. N=94: 33 low-income countries, 32 middle-income countries and 29 high- & upper-middle-income countries.

^f Singh (2012). Qualitative scoring on a scale of 1-10 of the extent and depth of regulations relevant to school feeding. N=18: 7 low-income countries, 3 lower-middle-income countries and 8 high- & upper-middle income countries.

^g WFP school feeding survey. How school feeding is framed in country as reported in the survey. N=55: 12 low-income countries, 18 lower-middle-income countries and 25 high- & upper-middle-income countries.

2.4 The way forward

This chapter highlighted that there are important differences between high-, middle- and low-income countries in terms of school feeding. In general, low-income countries have programmes that are less well established in policy frameworks and have less coverage than those in high- and upper-middle-income countries. They are also more likely to depend on external aid.

However, in the last few years, a number of low-income countries have started their own programmes, funded and managed by the government as opposed to by an external partner. *Rethinking School Feeding* called this process of transitioning from externally-supported to nationally-managed programmes the “transition to sustainability”. This was different than the concept of “exit strategy” that had been prevalent in the literature on school feeding until then. Data suggested that low-income countries did not seem to seek to exit from the programmes or to stop their implementation, but rather tried to institutionalize them and make them a sustainable part of national policy frameworks. The new information presented in this chapter confirms this finding.

One pending question from this analysis is whether countries need to achieve a certain level of income before they transition away from external funding and management of school feeding programmes. Case studies from countries that have transitioned from externally-supported programmes (nearly all supported initially by WFP) to nationally-owned programmes show that a phase-out of external assistance is more likely to be successful if the country in question is in the lower-middle-income category than if it is a low-income country (see Case study 4).

Analyses regarding the relative cost of school feeding (see Chapter 4) show that, in fact, there seems to be an income threshold after which countries are better able to afford these programmes. The threshold is between US \$1,026 and US \$4,025 per capita, which corresponds to the WB classification of lower-middle-income countries. If this is so, then there is a clear case for donor support in countries that have not arrived at the threshold but that are exploring ways to design effective programmes. There is an opportunity for donors and partners to work with governments of low-income countries to plan for this transition in a systematic and time-bound way.

Case study 4 Lessons from the Cape Verde transition experience³⁴

The Government of Cape Verde started its national school feeding programme in August 2010, after 31 years of WFP support. In 2011, all 86,000 children enrolled in public preschools and primary schools received daily meals. The transition process, however, had its ups and downs and offers valuable lessons on the risks of transitioning too early and on how to plan for a successful transition.

In 1995, WFP and the government signed an agreement to begin a gradual transition over four years. The following year, the government started implementing its own school feeding programme and expected to progressively grow this as WFP scaled down. But the transition failed because of financial and capacity constraints, and the process was stopped after just one year. The government requested WFP to step back in and continue with its support.

A second attempt at transition in 2007 was successful. Factors that may have influenced this are: (1) Cape Verde had increased its income, moving from low-income to middle-income status; and (2) all parties had learned from the previous transition attempt. A recent study of the transition to national ownership found the following lessons from both experiences:

Why the transition did not succeed in 1996

The Ministry of Education did not open a specific budget line for school feeding. As soon as the budget got tight, the allocation for school feeding was cut.

There was a lack of external information and shared experiences on the design and management of the new programme. For example, the strategy specified the number of children to be covered by the government programme, but did not outline a targeting strategy or the ration to distribute. The programme was thus implemented differently across districts in the country.

Furthermore, there was no provision in the budget to assist the growing numbers of children who began coming to school because of the programme, so the resources soon were not sufficient.

Why the transition worked in 2007

To ensure there was a clear plan, a document specifying the activities and responsibilities of both parties was produced. This roadmap guided the transition process from 2007 to 2010.

A multi-sector commission was created to ensure that the activities on the roadmap were on track. This created buy-in from all sectors in the government and ensured that WFP was passing on its knowledge and guidance to relevant actors.

A budget line for the programme was embedded in the Ministry of Education's budget. The budget line protects the programme from cuts.

Currently, the government is working with the UN joint team in Cape Verde to further improve the programme:

- A policy for the school feeding programme has been drafted for Ministry Council approval.
- The programme objectives and design are being revised to ensure it can address current challenges. For example, nutrition education becomes a key objective to tackle and prevent obesity issues.
- Pilots are being carried out to assess the feasibility of procuring locally, to benefit local communities.
- Cost analyses are being carried out to identify cost-containment opportunities.

³⁴ Mirabile, M. 2012. Cape Verde: The transition to a national school feeding programme. Case study commissioned by the Government of Cape Verde, United Nations Joint Programme in Cape Verde and World Food Programme.



3

Why is school feeding important?

Chapter 3



In recent years, a growing body of evidence has helped increase the understanding of school feeding's main benefits. In 2009, *Rethinking School Feeding* concluded that there are two main reasons why countries may choose to implement school feeding programmes: (1) to address social needs and provide a social safety net during crises; and (2) to support child development through improved learning and enhanced nutrition. A third dimension of school feeding programmes, potentially very important but for which there was much less empirical evidence, is the link between school feeding and local agricultural production and its potential related benefits to the local economy and the incomes of farmers.

Since then, new analyses and evaluations have largely confirmed these findings and highlighted the importance of filling the gaps in the evidence base.³⁵ This chapter reviews the practical experience in implementing school feeding in relation to the three categories of benefits mentioned above, and also provides insights into the institutional arrangements for these programmes and the challenges in managing them.

Most of the available information comes from middle- and low-income countries, although many of the issues raised may be relevant for all income groups. Case studies done since 2009 point to the fact that there is a surprisingly low number of school feeding impact evaluations across all income groups, which is a lost opportunity to improve programme effectiveness. Moving forward, there is a clear need to strengthen national monitoring and evaluation systems.

Despite these challenges, there is robust evidence to document school feeding's impact on access to education (i.e. enrolment, attendance), although less so on cognition and achievement.³⁶ When combined with deworming and fortification (i.e. the addition of micronutrients such as iron or vitamin A to foods at the processing stage to enhance their nutritional value), school feeding can strengthen the overall health status of children and reduce micronutrient deficiencies.³⁷ There is particularly robust evidence on the contribution to social protection and safety net outcomes, including the size of the potential transfer of income to vulnerable families, the efficiency of targeting to the poorest and the ease of scale up in times of crisis.³⁸ To further strengthen the knowledge base, particularly in the areas of nutrition and local agricultural production, three impact evaluations are currently underway in Ghana, Kenya and Mali, led by PCD, and a fourth is being undertaken by the Government of Peru with WB and WFP support.

³⁵ Alderman, H. and Bundy, D. 2012. School feeding programmes and development: Are we framing the question correctly? *World Bank Research Observer* 27(2): 204-221; Gordon, A., Ross, D. & Lister, S. 2011. WFP's school feeding policy: A policy evaluation. Annex I Vol 1: Synthesis of school feeding evaluations. Rome, World Food Programme; Bundy, D., Drake, L. and Burbano, C. (in press). School food, politics and child health. *Public Health and Nutrition Journal*; Drake, L., McMahon, B., Burbano, C., Singh, S., Gelli, A., Cirri, G. and Bundy, D. 2012. School feeding: Linking education, health and agriculture development. Presented at the 2012 International Conference on Child Development. These reviews summarize a range of individual academic studies.

³⁶ Adelman, S., Gilligan, D. and Lehrer, K. 2008. How effective are food for education programmes? A critical assessment of the evidence from developing countries. Washington, DC, International Food Policy Research Institute.

³⁷ Idem.

³⁸ Grosh, M., del Ninno, C., Tesliuc, E. and Ouerghi, A. 2008. For protection & promotion: The design and implementation of effective safety nets. Washington, DC, World Bank; The World Bank. 2012. 2012-2022 Social protection and labor strategy report. The World Bank.

Based on current evidence, the most recent reviews – the latest being the 2011 evaluation of the WFP school feeding policy – conclude that school feeding is best seen as a social protection investment which provides important support to families and offers additional benefits related to education, health and, potentially, local agriculture. However, what emerges from most of the reviews is that while these benefits may have been demonstrated in various studies, they are by no means automatic outcomes. The outcomes are dependent on the design features of a programme, and not all benefits may be realized in one programme. Thus, it is important to determine the specific objectives of a programme and to make sure the programme design (in terms of modalities chosen, type of food given to the children and targeting criteria) corresponds to those objectives.

3.1 School feeding as part of national social protection systems

Poor people are disproportionately at risk of losing their homes, their livelihoods and their assets because of unemployment or sickness of a family member. People already living in poverty are less able to bounce back or recover from the effects of a financial crisis, spikes in food and fuel prices, conflict, disasters, droughts or floods. After being hit by these events several times, they become less and less resilient. They also resort to negative coping strategies, such as taking their children out of school, often to have them work. Any gains made in the past are quickly lost to a downward spiral of chronic poverty and vulnerability.

Social protection systems are designed to help households manage risks in the face of these challenges. Unemployment benefits, health insurance, access to social services and social safety nets are all part of the system of policies designed to protect people from destitution and help them invest in their future.³⁹

Rethinking School Feeding reviewed how countries were using school feeding to mitigate the impact of shocks on the most vulnerable during the 2008 financial and fuel crises (see Box 5). It concluded that “school feeding programmes are often used for social protection purposes as much or more than for education goals. The programmes provide an explicit or implicit transfer to households of the value of the food distributed.”⁴⁰

Box 5 Effects of shocks on children’s education

The 1997 economic crisis in Indonesia led to a doubling of the numbers of out-of-school children, while droughts in sub-Saharan Africa have been associated with declines in both schooling and child nutrition. In the 2008

crisis, about half of the households surveyed in Bangladesh had reduced spending on education to cope with rising food prices, with girls particularly at risk.

Source: Bundy, et al. *Rethinking School Feeding*

³⁹ WFP, Update of WFP’s safety nets policy, The role of food assistance in social protection (WFP/EB.A/2012/5-A).

⁴⁰ Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. 2011. *Rethinking school feeding: Social safety nets, child development and the education sector*. Washington, DC, World Bank.

The safety net element was examined further in a paper published by the WB in 2011, which concluded that school feeding is a good candidate for social protection investments.⁴¹ According to the paper, school feeding has two very important functions. As part of a social protection system, it promotes human capital in the long run by supporting families in securing education for their children, and provides direct support to poor households in the short term by transferring income to the families. Additionally, the programmes are relatively easy to scale up in a crisis, especially in fragile or low-capacity contexts (see Box 6).

Like cash transfers or any other type of conditional transfer, school meals represent a transfer of income to a household. If we count the economic value of the meals, they amount, on average, to more than 10 to 15 percent of household expenditures, a significant amount for a poor household.⁴² In the context of a crisis, the transfer element of the programme is particularly useful. Providing income support to vulnerable households through school feeding enhances their ability to withstand a shock.

In high- and middle-income countries, school feeding is often integrated in broader welfare systems. The United States programme is one of the cornerstones of the safety net system (which includes food stamps and nutrition programmes). The challenge in low-income countries is how to ensure similar institutionalization given limited resources and capacities. The following are some issues commonly raised by countries dealing with school feeding programmes in the context of social protection:

1. **Carefully selecting the programme beneficiaries.** Making sure that the poorest children are getting most of the benefits is one way to make the best use out of scarce resources. It also ensures that the programmes are contributing to equity – levelling the playing field for the most disadvantaged. Ghana and Mozambique have recently retargeted their programmes – concentrating them on the poorest districts – with these objectives in mind. Countries can also direct these programmes to a specific group of the population that is more vulnerable or more at risk. Egypt has focused on those children who are harder to reach, the ones exposed to harmful labour practices (see Case study 5).
2. **Benchmarking costs and keeping track of costs.** Recently, a lot of work has been done to document the costs of school feeding programmes in different countries by income group, which has led to more robust global benchmarks (see Chapter 4 for a summary of current knowledge on costs). Some countries are now starting to keep track of costs, comparing them with the available international benchmarks. Through cost analyses, countries can determine how to further streamline operations, make use of economies of scale and reduce administrative costs.
3. **Keeping a systems view.** School feeding is only part of the entire network of programmes that support vulnerable families. Countries are trying to ensure that school feeding is complementing, not duplicating, the efforts of other programmes. They are also linking

⁴¹ Alderman, H. and Bundy, D. 2012. School feeding programmes and development: Are we framing the question correctly? World Bank Research Observer 27(2): 204-221.

⁴² Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. 2011. Rethinking school feeding: Social safety nets, child development and the education sector. Washington, DC, World Bank.

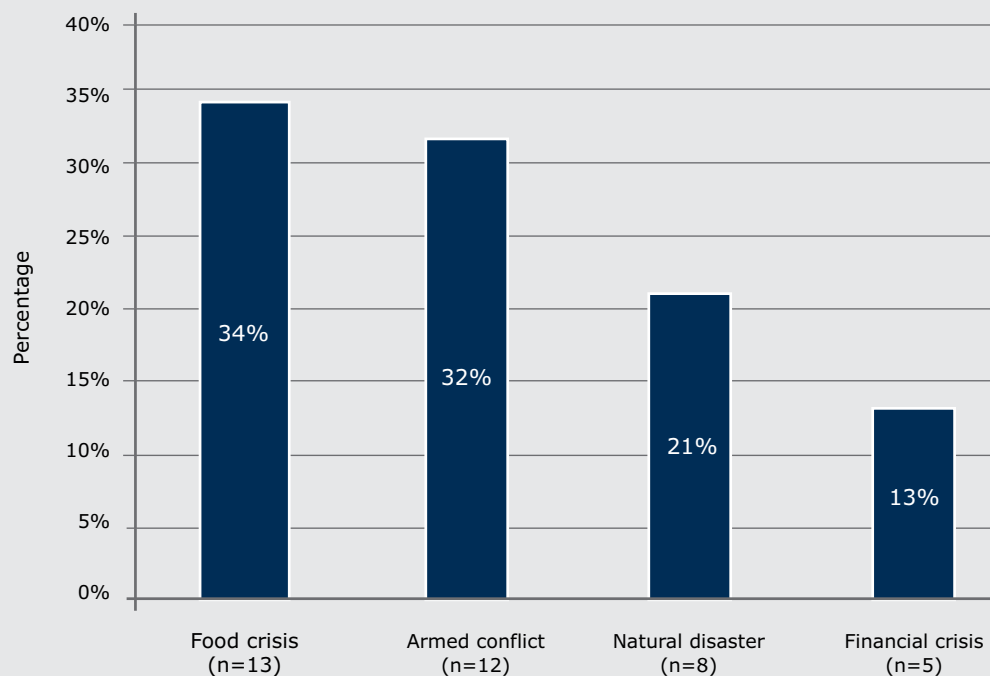
the programme to other interventions that support children in their different stages of development – like ones that reach younger children with nutritional support or adolescents (especially girls) with nutrition messages, supplementation or other types of support like textbooks, uniforms or stipends.

Box 6 School feeding in tough times

School feeding has an important role to play in the event of an emergency, a social shock or conflict. In the WFP global survey 38 out of 77 countries responded that school feeding was associated with the response to a crisis (i.e. a food crisis, armed conflict, natural

disaster or financial crisis). Since 2008, at least 38 countries have scaled up school feeding in response to a crisis, which indicates that school feeding has an important role to play in the event of an emergency, a social shock or conflict.

38 countries scaled-up in response to a crisis



Source: WFP global school feeding survey. N=77 countries.

In addition, two recent papers, presented at the High-level Expert Forum on Protracted Crises in September 2012, analyse the role of safety nets and food assistance in helping to protect vulnerable populations and restore access to essential services in times of

crisis. The first paper reviews WB-supported projects in the context of the food price crisis of 2007-2008,⁴³ and lessons related to school feeding are drawn from projects in Burundi and Liberia. A second paper, commissioned by WFP, focuses on the role of food assistance

in conflict situations in Pakistan, South Sudan and Timor-Leste.⁴⁴ The reviews find that school feeding programmes, implemented as part of a package of response to crises, can increase access to food, reduce hunger and maintain children's access to education. In crises, preventing children from dropping out of school is especially important.

The case studies presented in the papers also demonstrate that the potential benefits from school feeding can only be maximized through complementary investments in the quality of education (e.g. teachers, textbooks, classrooms). Such investments are often lacking in countries undergoing protracted crises.

The following are some of the lessons mentioned in the papers:

1. **Programmes need to have clear objectives and simple designs to be effective.** Complex interventions often don't work in crises because the capacity of local structures and the infrastructure on the ground may be weakened. Simple and to-the-point programmes can reach beneficiaries with much needed support in time.
2. **In some cases, lack of infrastructure at the school level may affect the roll-out or scale up of the programme.** In disasters or even in protracted crises, often the hardest hit areas are the most vulnerable, and the schools are the least equipped. This may affect the criteria for selecting schools, the type of meal or snack that is chosen and the speed at which the programme can be rolled out.
3. **The scale down or exit at the end of the programme needs to be planned at the same time as the scale up.** Issues – such as what kind of support children will have after the programme – need to be taken into consideration. If the programme will be transferred to the government, appropriate arrangements (e.g. funding, implementation capacity) need to be made.
4. **All partners involved in the implementation need to have a clear understanding of their roles, responsibilities and obligations.** If there are three or more parties involved (e.g. the government, the donor and the implementing partner), it is better to have a tripartite agreement. This may delay the response, but can pay off in terms of avoiding confusion and misunderstandings during roll-out.
5. **Programmes may overburden the community.** There must be a careful assessment of the extent to which the programme may empower the community – by, for example, encouraging parents and teachers to participate in implementing or monitoring the programme – or risk placing an excessive burden on already vulnerable populations. In the latter case, resources may be needed to support additional capacity building, training and staff.
6. **Donor support allows the government to respond better to crises by enhancing its financial capacity.** External support (be it from the WB, other multilateral donors or through WFP) can create what is called “fiscal space” during crises, giving governments some breathing room in their budgets to be able to afford these and other programmes in response to the crisis. By making investments in school feeding programmes and basic health services, food assistance agencies can also create an enabling environment within which government can establish broader social protection strategies.
7. **Sometimes school feeding may not be the best measure to include in the package of responses.** The response

should be designed according to the nature of the crisis and how it is affecting the population. If other tools are more

appropriate and available, then school feeding can be used as part of longer-term development programmes down the line.

⁴³ Ambrosio, M., Mizener, J. and Delgado, C. 2012. From emergency response to high food prices to long-run strategic support to rural livelihoods in poor countries subject to protracted crises: Insights from selected World Bank projects, ARD Rural Policy Team, CFS High-level Expert Forum on Addressing Food Insecurity in Protracted Crisis and Food Security.

⁴⁴ Frankenberger, T., Spangler, T., Nelson, S. and Langworthy, M. 2012. Enhancing resilience to food insecurity amid protracted crisis, TANGO International Inc., CFS High-level Expert Forum on Food Insecurity in Protracted Crises, Rome http://www.fao.org/fileadmin/templates/cfs_high_level_forum/documents/Enhancing_Resilience_FoodInsecurity-TANGO.pdf

Case study 5 Protecting children from child labour – the experience in Egypt⁴⁵

A project in Egypt illustrates how school feeding can be integrated into packages of support to simultaneously address other issues affecting vulnerable children.

In 2006, three ministries – Education; Manpower and Migration; and Social Solidarity – joined the National Council for Childhood and Motherhood in starting a project called Combating Exploitative Child Labour through Education. The aim was to increase vulnerable children's access to quality education as a way of reducing the worst forms of child labour. In partnership with WFP, UNICEF and the International Labour Organization, and with the support of NGOs and civil society at the local level, the project also sought to promote sustainable livelihoods for the households of these vulnerable children and increase access to national social protection programmes.

With a fund of US\$5.5 million from the United States Department of Labor, the programme covered approximately 12,000 children in three of the most vulnerable governorates in Egypt – Sohag, Assiut and Beni Suef. WFP provided snacks and take-home rations to all children enrolled in the programme. This gave them an incentive to participate in the project.

In six years, the project noted a number of achievements:

- Around 7,000 students were enrolled in 104 formal schools. Twenty community schools and 77 Girl Education Initiative schools opened, catering to around 2,000 students, as well as 44 kindergarten classes with 700 children.
- Approximately 2,000 apprenticeship contracts were signed and professional development programmes were conducted for teachers and facilitators.
- Remedial classes were established in the three target governorates to support children at risk of dropping out, and awareness-raising events were conducted for all beneficiaries.
- A child-tracking system was created and NGO staff were trained on its use for referral and tracking. To substitute child income, microenterprises and income-generating activities were initiated among families of children at risk.

In 2010, the government started a new project to build on the successes of the first one. It focused on fighting child labour in the agriculture sector and was supported by the same partners. It is expected to provide direct educational services to 16,000 children in five governorates; Sohag, Assiut, Menya, Fayoum and Sharkeya. Funds for the project from the United States Department of Labor amount to US\$9.5 million.

⁴⁵ Combating Exploitative Child Labour through Education Project (CCLP), Egypt Country Office Briefing, 2012.

3.2 School feeding and child development

The link between school feeding and the education and nutrition sectors is quite direct. Put simply, school feeding is an intervention that takes care of the child. It boosts a child's nutritional status and ability to learn and also increases a child's access to education in areas where this is still a problem.

There is a very strong body of evidence that shows how school feeding can act as an incentive to get children into school and help keep them there, enhancing enrolment and reducing absenteeism. The benefits are particularly strong for girls in countries where gender disparities are still a problem. And once children are in school, school feeding programmes can contribute to their education by avoiding hunger, improving their nutritional status and improving children's cognitive abilities. This, however, depends on the quality of the food basket and whether or not it is providing the most important micronutrients that a child needs to develop and learn (see Case study 6).

Investing in nutrition during the first 1,000 days of life – from conception to two years of age – is a priority, and addressing the nutrition needs of school-aged children can help ensure that early development gains are not jeopardized by later failures. The nutritional status of pre-school and primary school-aged children impacts their physical development, health, learning and cognitive potential and, subsequently, their school attendance and educational achievement (see Case study 7).⁴⁶ This implies that to be effective, school feeding programmes must also be designed to support nutrition issues. Micronutrient fortification and biofortification of food, for example, can help tackle important deficiencies that are common among children of primary-school age, like a lack of Vitamin A or iron, both of which also affect the ability to learn. Deworming can help ensure that the programmes feed the child and not the worms.

School feeding programmes also can provide adolescent girls with sufficient amounts of iron and folate, thus reducing their immediate vulnerability and helping ensure that they are better prepared for reproductive age. The crucial first developmental stage in the 1,000 days of early child development is the nine months that children spend in utero. Ensuring that girls are well-prepared to become mothers is a potentially crucial goal for school feeding.

Meals that are fortified or well-diversified can ensure appropriate intakes of micronutrients. Not all programmes, however, include fortified food in their baskets, partly because in some cases the national capacity for fortification is lacking, and also because if the food is being purchased close to schools, there is little chance of it being fortified. This challenge and consequent trade-off between nutrition and local procurement is an important factor to consider at the design stage of the programmes.

School feeding should be provided alongside other interventions (e.g. drinkable water and sanitation; health and nutrition education; and periodic health screenings) that contribute to

⁴⁶ World Food Programme and Partnership for Child Development. (forthcoming). Joint position paper: School feeding and nutrition.

a safe environment that is conducive to learning and protective of children's health.

As part of a wider education system, school feeding can only contribute if the other major elements that have an impact on learning (e.g. the presence and quality of teachers, suitable textbooks, an appropriate curriculum and a general environment that is conducive to learning) are in place. If these elements are missing, the benefits of school feeding on learning will be limited or non-existent. Additionally, care should be taken to avoid using teachers or education staff to prepare food, since this merely taxes the system that one is seeking to enhance.

Case study 6 **Results of a randomized impact evaluation – the case of Guyana**⁴⁷

Guyana's Community-based School Feeding Programme started in 2006. Its main objective is to provide a locally-sourced nutritionally-balanced meal to primary-school students in rural, remote communities. Its intended impact is to increase community participation in schools, raise student enrolment and attendance and improve nutritional status and learning.

The programme is implemented as part of the Guyana Education for All-Fast Track Initiative that is financed by the Global Partnership for Education and administered by the WB. The budget for the school feeding programme is US\$12.7 million per year. About 16,600 children in 93 out of 138 primary hinterland schools receive a nutritional lunch.

Overall responsibility for the programme lies with the Ministry of Education, and implementation follows a decentralized approach. To participate, schools and their associated communities are required to submit a proposal, and undergo training in basic financial bookkeeping, food hygiene and nutritious meal preparation using locally produced foods whenever possible. The trainings include representatives from other ministries such as Health, Agriculture, Local Government and AmerIndian Affairs, in order to provide comprehensive support. Communities must also ensure that cooks are certified in food preparation and that

school kitchens meet the requirements, including supplying safe water.

An impact evaluation was carried out by the government, the WB and Social Development Inc. Three survey rounds took place in 2007, 2008 and 2009 in two of the poorest regions of the country. Results showed a significant positive impact on school attendance, academic performance, classroom behaviour, nutritional status and parent and community participation, especially for the poorest.

Enrolment and attendance increased by 16 and 4.3 percent respectively in the assisted schools between 2007 and 2009. In the same period, children benefitting from the programme grew 0.8 centimetres more than children attending non-assisted schools. The programme contributed to preserving frequency of food consumption and diet diversity, particularly in a period of food price volatility. Before the food price shocks, non-assisted areas in the comparison group had 150 more children at risk of falling into poverty and poor nutrition than did the areas that received school feeding. During and after the food price shocks, 510 more children in these areas were at risk of falling deeper into poverty.

Regarding students' behaviour at school, two-thirds of teachers consistently noted that the behaviour of students changed in a positive way thanks to the programme. This

is reflected in students' test scores in math and English. In math, students receiving school feeding had scores that were, on

average, 8.1 points higher than comparison students and in English, 4.2 points higher.

⁴⁷ Suraya, I., Borja, C., Jarvis, E. and Demas, A. 2012. Guyana's hinterland community-based school feeding programme 2007-2009: Impact evaluation. World Bank.

Case study 7 Reaching children as early as possible – the Djibouti experience⁴⁸

Djibouti has a high adult illiteracy rate and, for the past decade, has been trying to tackle low levels of school attendance by children. There have been improvements in access to education: primary school enrolment has risen from 33 percent in 1999⁴⁹ to 46 percent in 2008, and the 2012 gender ratio is 0.88 (from 0.71 in 1999). The construction of new schools and classrooms, the provision of school supplies and the implementation of a school feeding programme have contributed to these advances.⁵⁰ Yet, still over more than half of the school-age children are not in school, and each year many children repeat a year or drop out.

Younger children fare worse. It is estimated that approximately 8 percent of children drop out in the first grade, a sign that children entering the formal education system are ill-prepared. This is not surprising considering that only 3 percent of 4-5 year old children are enrolled in preschools, and these are mainly from wealthy households. In 2007, there were only 35 preschools in the country, 83 percent of which were privately-owned and located in the capital.⁵¹ The government has set a target of increasing pre-primary enrolment to 20 percent by 2015 by setting up new preschools in disadvantaged and rural areas.

In 2008, a pilot project was launched by the government with the support of UNICEF (and WFP in 2010) to create 15 experimental

preschools supporting 300 children in rural areas. The pilot provided systematic deworming, vitamin A supplements, health and hygiene education, water and sanitation facilities and nutritious school meals. WFP's support consisted of providing a fortified breakfast and lunch to encourage daily attendance and improve micronutrient intake.

Results from an evaluation in 2012 confirmed that the children who attended preschool performed better in primary school than those who did not. The project has been expanded to support 700 preschoolers and the government and partners plan to add 25 preschools each year, focusing on children most in need of early learning opportunities.

Weaknesses still remain. There is a need for a law to regulate how private preschools and schools are working. Teachers need to be better trained. The evaluation recommended that preschool programmes operated by the Ministry of Education should prioritize 5-year-old children to ensure that the resources available focus on children who are closer to primary-school age. Younger children (3-4 year olds) could be enrolled in programmes operated by the Ministry of Social Welfare. In addition, there was a recommendation that a small contribution to cover the costs of providing the service be requested from parents who can afford it.

⁴⁸ Djibouti Education Sector Work Plan 2011 – 2016, Ministry of Education and Training, Djibouti; UNICEF 2012 evaluation report – Experimental facility for early childhood development in Djibouti (July 2010 – May 2011); Publication note on early childhood development, Djibouti WFP Country Office, August 2008.

⁴⁹ UNESCO. 2011. Education for All global monitoring report. The hidden crisis: Armed conflict and education. UNESCO, Paris.

⁵⁰ Schéma Directeur 2010-2019 & CAP sur la qualité, published by the Ministère de l'Éducation Nationale et de l'Enseignement Supérieur de Djibouti, October 2010.

⁵¹ UNESCO. 2011. Global monitoring report, Regional overview: Arab States.

3.3 School feeding and local agricultural production

There is growing excitement around the idea that school feeding programmes that use food produced and purchased locally, or at least within the boundaries of a country, can generate additional benefits for the children involved and also for local farmers, communities and economies.

Linking school feeding to local agricultural production is seen as a way to ensure sustainability and take advantage of a range of potential benefits. Countries are exploring ways to purchase locally, in particular from smallholder farmers to provide them with a stable market for their products and potentially to increase their incomes. They are also empowering school-level committees to purchase food closer to the schools, so that the community is involved in making decisions and managing resources. Local procurement can also be an opportunity to provide more diverse foods, including those that are fresh and unprocessed. These efforts include providing indigenous crops, like the cereal quinoa in the Andes and several types of banana in Asia, that are closer to what children may eat at home. This has the potential to increase the quality of the food basket. Another new area is including products like beans or rice that have been biofortified; this means that they have more than the normal amount of micronutrients, which may be more nutritious.

High-income countries have already applied this approach. In a recent book called *The School Food Revolution*, the authors analyse how governments of developed countries are redesigning public procurement processes in a smarter, more sustainable way. Such programmes provide benefits to various sectors – not just those who produce and consume school meals.⁵²

Several middle- and low-income countries are attempting to reform existing school meals programmes with the above issues in mind. Brazil is perhaps the best-known and most successful programme providing a stable market to family farmers (see Case study 8). Ecuador, Honduras, Namibia and Peru also are linking their programmes to local production. In 2003, African countries included locally sourced school feeding programmes in the Comprehensive African Agricultural Development Programme (CAADP). Since then, they have started implementing national “home-grown” programmes. This is the case in Côte d’Ivoire, Ghana, Kenya and Mozambique (see Case study 9).

These initiatives have piqued the interest of ministries of agriculture which are actively involved in school feeding planning and implementation processes (see Table 6 and Figure 11). Regional alliances such as the New Partnership for Africa’s Development (NEPAD) and ECOWAS in Africa, and the Latin American School Feeding Network (LA-RAE) are increasingly involved in supporting countries with these efforts. Partners such as WFP, FAO, PCD, SNV (Netherlands Development Organization) and the Bill and Melinda Gates

⁵² Morgan, K. and Sonnino, R. 2008. *The school food revolution – public food and the challenge of sustainable development*. London, Earthscan.

Foundation are also providing technical assistance and support to governments. Details on how partners are coming together are presented in Chapter 5.

In countries experimenting with these innovations, practical experience reveals several key challenges:

1. **The education, agriculture and other sectors supporting small-scale farmers need to work better together.** The link between school feeding and local agriculture doesn't work unless there is investment in the production and post-harvest management of food. This is where support from the agriculture sector is needed. Farmers need access to improved seeds, fertilizer and other inputs; credit; and technical assistance to improve their storage and quality control processes. Successful cases, such as in Brazil, have matched farmers who are being supported by the agriculture sector with purchases being made by the education sector. This sort of coordination is needed, but not always easily achieved.
2. **Laws on local procurement need to allow small-scale purchases.** There are often legal barriers to programmes that would like to purchase locally. In many countries, the laws of public procurement impose requirements that are too difficult for small-scale farmers and enterprises to meet. In Haiti, for example, the national school feeding programme is obliged by law to buy food in large quantities, effectively barring small-scale farmer associations from tendering. To fix this, some countries have adopted policies to alter the criteria when purchases are made from small-scale farmers. In the UK, for example, the regulations that apply to the purchase of food for schools have been modified to allow local farmers and companies to tender at a smaller scale.
3. **Key design and implementation issues need to be taken into consideration.** There are various ways of implementing school feeding that incorporate local agricultural production into the food basket. Some governments send cash to schools so the schools can buy the food from local markets, as is the case in Kenya. Others direct the resources to districts or regions which are responsible for local procurement, like in Brazil. Others use catering companies at different levels to provide food to schools, as in Ghana. All of these models have trade-offs that need to be considered. The main ones are: ensuring a stable supply of food to schools all year long especially in arid areas where food may not be available locally; enhancing the nutritional quality of the food (e.g. through fortification) but also taking into consideration that local capacities to process or fortify food may be limited; ensuring the quality and safety of the food; maintaining overall programme costs at reasonable levels while benefiting local farmers at the same time; and having a contingency plan for when food is not available in the country because of drought, flood or any other disaster.

Case study 8 The law of the land – the Brazilian experience with family farmers^{53, 54}

The Brazilian school feeding programme (PNAE – Programa Nacional de Alimentação Escolar) covers all public and community schools in the basic education system – including day care, kindergarten, elementary school, high school and education for young adults – and reaches 47 million students every year. The programme was launched in 1955 and is the second biggest school feeding programme in the world. Its objectives are to contribute to the growth, development and learning capabilities of students; support the formation of healthy habits through food and nutrition education; and promote local family farming through food purchase.

The government allocated US\$2 billion dollars to the PNAE in 2011, approximately 5 percent of the total education budget. This money was channelled from the Brazilian Fund for Educational Development (FNDE – Fundo Nacional de Desenvolvimento da Educação) to the federal district, states or municipalities, depending on the implementation approach adopted. Funding from the FNDE covers the cost of food exclusively; states and municipalities are expected to cover the remaining associated costs (e.g. personnel, infrastructure, logistics).

The Brazilian example shows that it is possible to link food production, school meals, nutrition education and community participation. Since 2009, by law, at least 30 percent of the resources transferred by the FNDE must be used to procure food from family farmers. One of the cornerstones of the Brazilian battle against hunger and poverty is the

Food Acquisition Programme (Programa de Aquisição de Alimentos – PAA), an agricultural programme established to promote purchases of food products directly from family farmers for the government's different food-based programmes. PAA's prior experience helped create the link between small-scale farmers and school feeding in Brazil. Buying locally from family farms led to lower school meal costs and an increase in the availability and consumption of fruits and vegetables.

PNAE also encourages civil society involvement in supervising the food ration, finances and supply chain. This supervision is the responsibility of a School Feeding Council, which is mandatory for states and municipalities that receive resources from FNDE. In addition, school feeding in Brazil means strong inter-institutional coordination and collaboration with the main relevant stakeholders, particularly other ministries.

A rapid surge in the number of children who are overweight in Brazil has been linked to unhealthy eating habits, such as the increased consumption of processed food and a reduction in the consumption of fruits and vegetables. Recognizing this challenge, one of PNAE's objectives is to promote healthy eating habits: menus are designed according to local taste and production, with maximum values for sugar and fats and mandatory inclusion of fruits and vegetables. For this purpose, each executing unit must have a nutritionist who is responsible for the elaboration of menus in line with nutritional norms.

⁵³ Santos, L.M.P. et al. 2007. Evaluation of food security and anti-hunger public policies in Brazil, 1995-2002, Rio de Janeiro, Cad. Saúde Pública.

⁵⁴ Sidaner, E., Balaban, D. and Burlandy, L. (in press). The Brazilian school feeding programme: An example of an integrated programme in support of food and nutrition security. Public Health Nutrition Journal.

Case study 9 The farmer-to-school model of Côte d'Ivoire⁵⁵

The Government of Côte d'Ivoire began its "One School, One Canteen" programme in 1999. It is led by the National Directorate of School Canteens (Direction Nationale des Canteens Scolaires), a unit within the Ministry of Education, in partnership with the Ministry of Agriculture. The programme, which provides school meals to children, includes a component of technical and financial support to smallholder farmers, who are mainly women, to link school canteens with smallholder farmer production. Under the programme, local communities are supported and encouraged to manage the programme within five years by producing food for their school canteens.

The government focuses on helping smallholder farmers organize around schools. The programme includes support to enable the smallholders to increase productivity and progressively meet the school food requirements. The support includes providing: seeds and tools; advice on the establishment of cooperatives (e.g. legal support, creation of internal rules and regulations and financial management); and training on farming

and livestock techniques, livestock health protection (including vaccinations), sanitation, food conservation and processing and marketing techniques. Agricultural extension services are provided by an institution linked to the Ministry of Agriculture, in close collaboration with the school feeding unit.

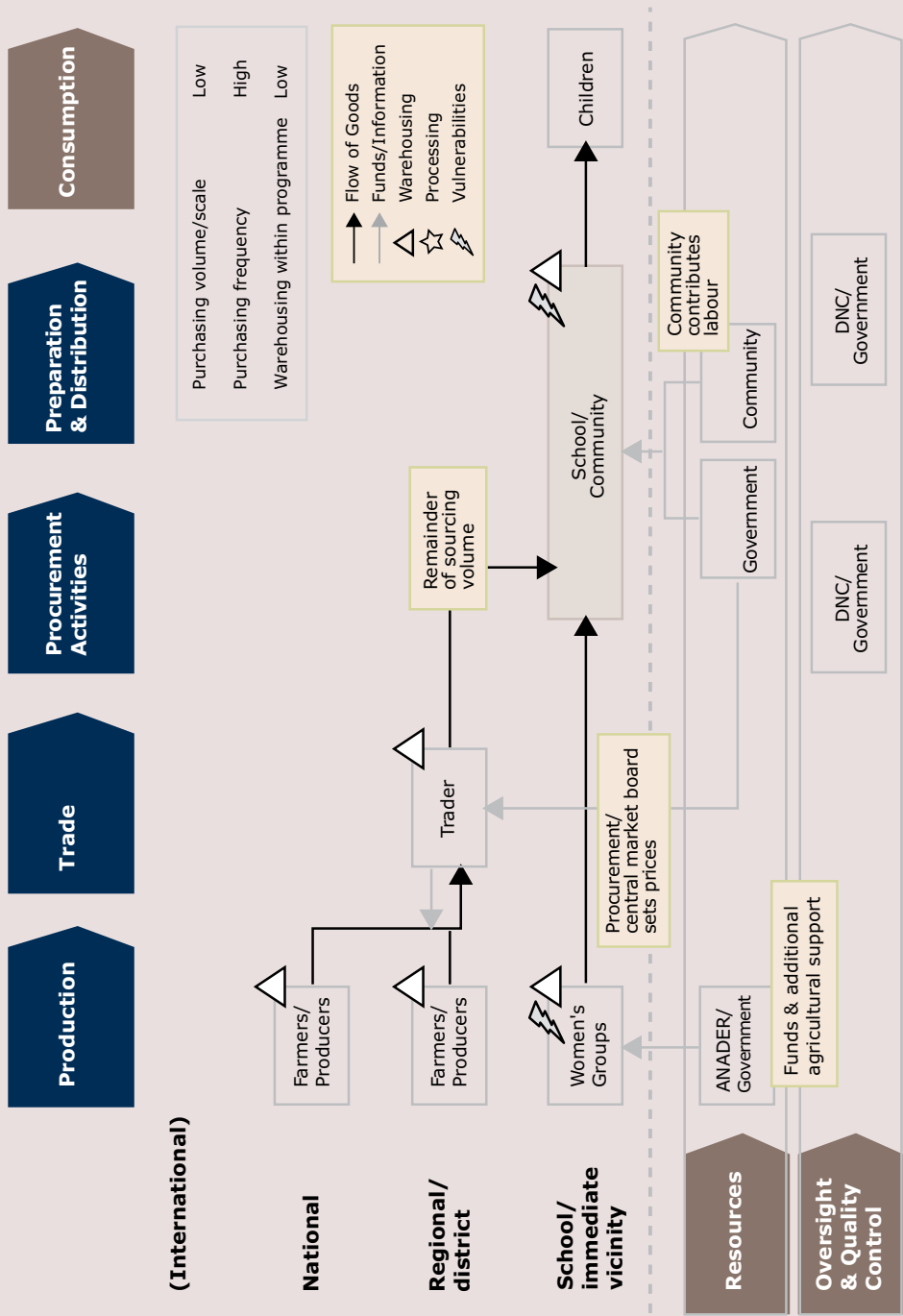
The government also buys food for the programme from large suppliers when smallholders cannot meet the demand. For all transactions, commodity prices are set by a central market board. Transportation is organized either through nationally contracted service providers, if coming from large-scale suppliers, or by local women's groups. Food is prepared at the school. Staff from the Ministries of Education and Agriculture monitor and supervise the programme at the school and farmer organization levels.

In the 2008-2009 academic year, 265,000 schoolchildren in 2,027 schools in Côte d'Ivoire benefited from this programme. In addition, 961 production centres participated and sold 1,270 tons of food.

(continued)

⁵⁵ DNC, WFP & PCD. 2010. A case study of the HGSP programme in Côte d'Ivoire. London, PCD.

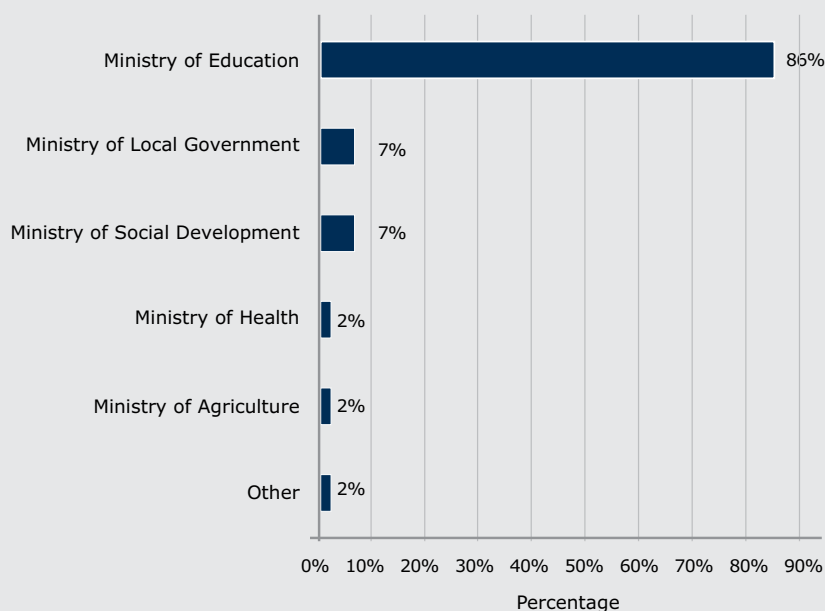
Integrated farm-to-school model - Côte d'Ivoire



3.4 The practical challenges of implementing school feeding programmes

Information from the WFP global school feeding survey shows that in 86 percent of the 59 surveyed countries, the Ministry of Education is primarily responsible for the school feeding programme (see Figure 11).

Figure 11 **Lead ministry responsible for school feeding programme**



Source: WFP global school feeding survey. N=59 countries.

However, school feeding programmes are multisectoral in nature. Although the Ministry of Education is in charge of school feeding in most countries, there is also evidence of important collaboration among sectors. Among countries where the Ministry of Education is responsible for school feeding, we found that another ministry played a role in almost all (93 percent) of them. In particular, the Ministry of Health was involved in 63 percent of these countries, signalling a high level of collaboration between those two sectors. Agriculture was involved in 44 percent of these countries, and the Ministry of Local Government played an active role in 18 percent of them (see Table 6). See Case study 10 for an example of the role of the education and agriculture sectors in school feeding in Kenya.

Table 6 Other ministries playing an active role in the school meals programme, among countries where the Ministry of Education is the main responsible institution

Ministry				Countries	
Health	Agriculture	Local Government	Other	Number	Percent
✓	—	—	—	8	19%
✓	✓	—	—	12	28%
✓	✓	✓	—	3	7%
✓	—	✓	—	4	9%
—	✓	—	—	4	9%
—	—	✓	—	1	2%
—	—	—	✓	8	19%
—	—	—	—	3	7%

Source: WFP global school feeding survey. N=43 countries.

Information from case studies points to four main challenges which lead ministries are tackling when implementing school feeding:

1. **Planning for sufficient institutional capacity:** School feeding programmes are complex. They require significant institutional capacity to run, and often the ministry involved does not have the capacity required. Governments tend to underestimate the resources, the know-how, the systems, the number of staff and the infrastructure required to run school feeding programmes. In many cases, programmes are started without sufficient capacity for management and day-to-day oversight. Plans should be established at the outset for how to increase the existing resources – human, physical and financial – of the ministries involved. Several countries are currently tackling this through assessments.
2. **Issuing national nutrition and quality standards:** To ensure that children are eating safe and nutritious food, it is imperative to establish national quality, safety and nutrition standards and to ensure consistency in the provision of school meals across the country. This is especially challenging in decentralized programmes. When the schools buy the food themselves, committees in charge of food procurement must comply with minimum standards.
3. **Dealing with accountability, monitoring and preventing corruption:** As in any other public programme, it is critical to make sure that resources are being used appropriately. But school feeding programmes are especially challenging because they involve buying large quantities of food, and these transactions are vulnerable to corruption and the favouring of special interests. It is important to design accountability measures into the programmes by, for example, informing beneficiaries of their entitlements, establishing systems to receive complaints from beneficiaries and

setting up mechanisms to track the flow of resources from the ministry down to the school level.

4. **Coordinating with other sectors:** The ministries of health and agriculture are two important actors in school feeding. Others include the ministries of local government or women and children. Coordinating the actions of all these sectors means putting in place mechanisms to share information, plan and make decisions. In several countries, there are steering groups or technical committees for this purpose. However, it is a continuous challenge to ensure that all players take part and coordinate with each other.

Case study 10 Two different ways of doing school feeding – the case of Kenya^{56,57}

The Kenyan school feeding programme is on the way to becoming one of the largest nationally owned programmes in east Africa. A noteworthy feature is its support of multiple models of school feeding to spur local agricultural development and promote food security.

School feeding was introduced in 1979 with the national school milk programme, and a WFP partnership followed in 1980. In 2009, WFP, which had been providing school meals to 1.2 million children, began to scale back its programme. This shift corresponded with the country's launch of two programmes providing mid-day hot meals: the Home-Grown School Meals (HGSM) programme, sponsored by the Ministry of Education, and the Njaa Marufuku Kenya (Eradicate Hunger in Kenya – NMK), sponsored by the Ministry of Agriculture. Both programmes target disadvantaged and food-insecure children in pre-primary and primary schools.

The scale-up of Kenya's school feeding programmes is supported by a developing institutional framework. In 2009, the Ministry of Education and the Ministry of Public Health and Sanitation developed the National School Health Policy and National School Health Guidelines. This was followed by the development of the National School Health Nutrition and Meals Programme Strategy which sets strategic objectives and actions to be achieved by 2015.

The table below presents key information about the two government programmes. While WFP continues to provide school meals, the government has agreed, as part of the transition plan, to increase its caseload by 50,000 primary-school beneficiaries annually. Thus, over time we can expect that the size of the WFP programme will decrease while the government's programmes will increase in size.

Government school feeding programmes in Kenya

	Year started	Beneficiaries (2012)	Budget
Home-Grown School Meals (HGSM) programme	2009	729,000	US\$4.6 million annually
Njaa Marufuku Kenya (NMK) programme	2005	44,000	US\$1.3 million for the first five years

As indicated in the table, the HGSM programme is the predominant government school feeding programme in Kenya. It transfers cash directly from the Ministry of Education to schools in semi-arid areas, which then undertake a competitive procurement process with local farmers and suppliers. Recent findings indicate that most schools are procuring food from local traders or distant trading centres, rather than local producers who do not have marketable surpluses to sell to HGSM schools.

The NMK programme also provides funds for food procurement, but differs from the HGSM programme in two key ways. First,

it provides agriculture extension funds to support smallholder farmers in reacting to the new demand, as well as to schools to establish school gardens. Second, support is only provided for a period of three years at a decreasing rate. Communities may succeed in taking over the management of the programme or may have to seek HGSM support after the three-year period.

In addition to the HGSM and NMK programmes, the government is seeking to develop an appropriate model for arid areas where local food procurement is less feasible.

⁵⁶ Kenya Institute for Public Policy Research and Analysis, Kenya Medical Research Institute, Njaa Marufuku Kenya & PCD (under final government review). The case study of Njaa Marufuku Kenya. London, PCD.

⁵⁷ Partnership for Child Development. 2013. Home-grown school feeding in Kenya: a country profile case study. London, Partnership for Child Development.



4

What are the costs of school feeding?

Chapter 4



While the body of evidence demonstrating the benefits of school feeding programmes is growing, obtaining information on the costs of these programmes remains challenging. There are two principal difficulties that apply for countries of all income levels. First, the costs of a school feeding programme stem from many sources, and the contribution from each depends on the programme design. The largest source of costs is typically the food ration commodities, while other significant costs include transport, operations and overhead. Second, costs are a function of the country context. For example, operations in landlocked countries will generally face greater operational costs than those in countries that have easy access to a sea port. The diversity and complexity of different school feeding operations renders it difficult to employ a standardized methodology in different countries across different income levels.⁵⁸ Data are mostly from low- and middle-income countries, while data from high-income countries remain more difficult to obtain, as discussed earlier (see Box 3).

The WFP global school feeding survey included responses from five high-income countries and eight low-income countries. The fact that the sample size is so small and lacks representation from middle-income countries makes cost information from the global survey inadequate. However, there is another analysis, which we present here, that represents the most recent and complete source of data on school feeding costs. It is a study prepared by PCD, covering 74 countries – including 12 high-income, 39 middle-income and 23 low-income countries – using data from 2008.⁵⁹ There are several important conclusions from that analysis.

Overall, countries are remarkably consistent in their relative investment in school feeding. While there is considerable variation in the country-by-country school feeding costs – ranging from less than US\$20 to over US\$1,500 per child per year – there is consistency when these are compared with other public investments in this age group. In this report, we express school feeding costs per child as a proportion of the amount that countries choose to invest in the education of the same children. In high- and middle-income countries – and in a large number of low income countries as well – this proportion is in the range of from 15 to 20 percent.

Second, there is a trend for school feeding costs to become a much smaller proportion of education costs as income levels rise. These analyses suggest that the main reason for this is an increased investment per child in primary education as GDP rises, but a fairly stable investment in food. In other words, as countries develop, they increase their budget and spending on education, which makes the cost of school feeding relatively smaller, or more affordable. The overall trend is that school feeding represents, on average, 11 percent of education costs in high- and upper-middle-income countries, 24 percent in lower-middle-income countries and 68 percent in low-income countries. This suggests that there is an important role to play for donors and development partners by supporting low-income countries to maintain their investment in school feeding.

⁵⁸ Gelli A, Cavallero A, Minervini L, Mirabile M, Molinas L, and Regnault de la Mothe, M. 2011. New benchmarks for costs and cost-efficiency for food provision in schools in food insecure areas. Food and Nutrition Bulletin.

⁵⁹ Idem.

Finally, the greatest opportunities for cost containment exist in low-income countries. Low-income countries are characterized by a very wide range of costs; there are some countries where school feeding costs per child are more than education costs per child. This undesirable asymmetry is especially common where a country fails to maintain oversight and is reliant on external support to fund and manage the school feeding programme. Helping these countries implement policies to bring their costs in-line with more prudent neighbours presents a key opportunity for efficiency savings.

4.1 School feeding costs

The analysis led by PCD collected data from WFP project data, grey literature, reports from government ministries and published reviews. Information was more difficult to obtain in high-income countries, as discussed in Chapter 1. To allow for comparability across countries, costs were standardized by the composition and size of the food ration, the number of school days in the year and 2008 US\$ values.

The relationships between standardized costs of school feeding, costs of education and GDP per capita were analysed. Substantial variation in the per capita costs of school feeding was found, ranging from a minimum of under US\$20 to a maximum of over US\$1,500 per child per year (see Table 7). To a large degree, this variation is driven by variation in low-income countries. Note that while some low-income countries have a school feeding cost of only 9 percent of basic education costs (the same as the median for high- and upper-middle-income countries), there are others where the cost of school feeding is 230 percent of the cost of basic education.

Table 7 School feeding cost indicators by income level

Income group		School feeding cost per child (2008 US\$)	Cost of school feeding as a share of the cost of basic education	Cost of school feeding as a share of per capita GDP
Low income (n=23)	Mean	56	0.68	0.07
	Median	50	0.48	0.06
	Minimum	20	0.09	0.01
	Maximum	117	2.30	0.25
Lower-middle income (n=23)	Mean	56	0.24	0.02
	Median	46	0.15	0.02
	Minimum	21	0.03	0.00
	Maximum	136	0.89	0.10
High & upper-middle income (n=28)	Mean	371	0.11	0.02
	Median	225	0.08	0.01
	Minimum	24	0.02	0.00
	Maximum	1,586	0.29	0.05
All countries (n=74)	Mean	173	0.33	0.03
	Median	57	0.15	0.02
	Minimum	15	0.02	0.003
	Maximum	1,586	2.30	0.26

Source: Gelli, A and Daryanani, R (forthcoming).

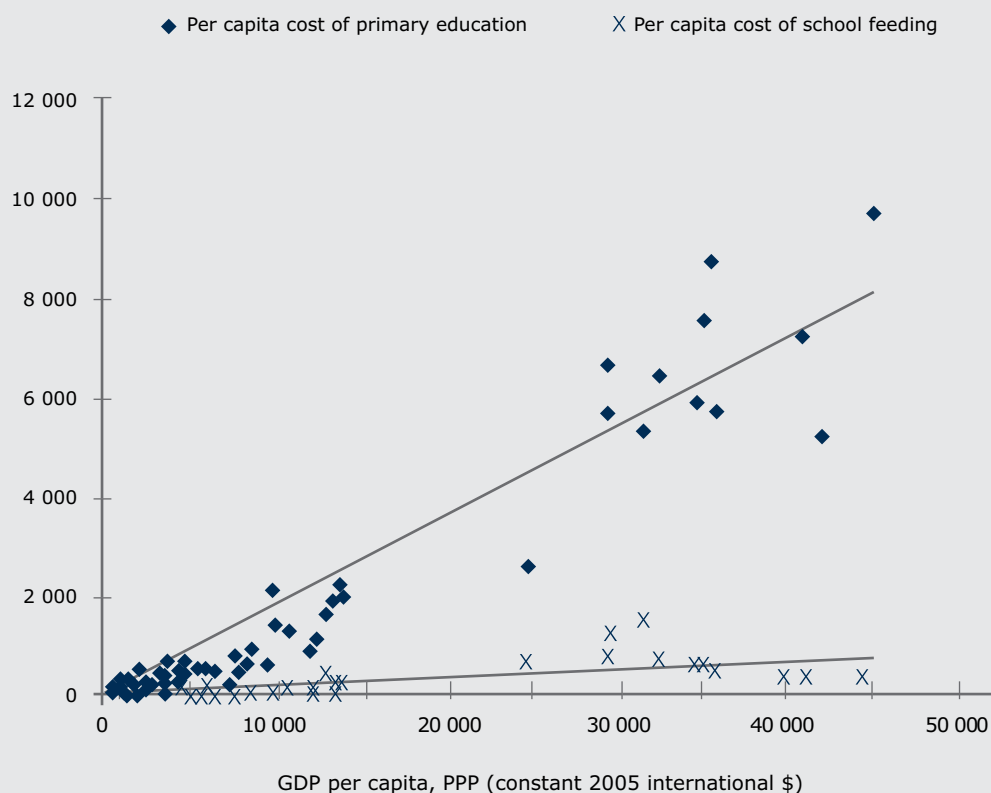
4.2 Examining the relative costs of school feeding

Recent reviews highlight the primary role of school feeding programmes as a safety net for low-income households, although there is also a case for a complementary role in education.⁶⁰ In the absence of comparisons with data on the cost of safety nets in low- and middle-income countries, education expenditures can provide a useful comparator for an intervention for the same age group. Figure 12, which is a refinement of analyses first presented in *Rethinking School Feeding*, shows that though both the per capita costs for school feeding and primary education increase with GDP, they do so at different rates: per capita education expenditures increase far more rapidly with GDP per capita than the per child costs of school feeding. As a result, the per capita ratio of school feeding costs over education costs declines with increasing GDP per capita. As we will see below, the rate of decline is much greater than predicted by these averages, however, and is in part a

⁶⁰ Alderman, H. and Bundy, D. 2012. School feeding programmes and development: Are we framing the question correctly? World Bank Research Observer 27(2): 204-221.

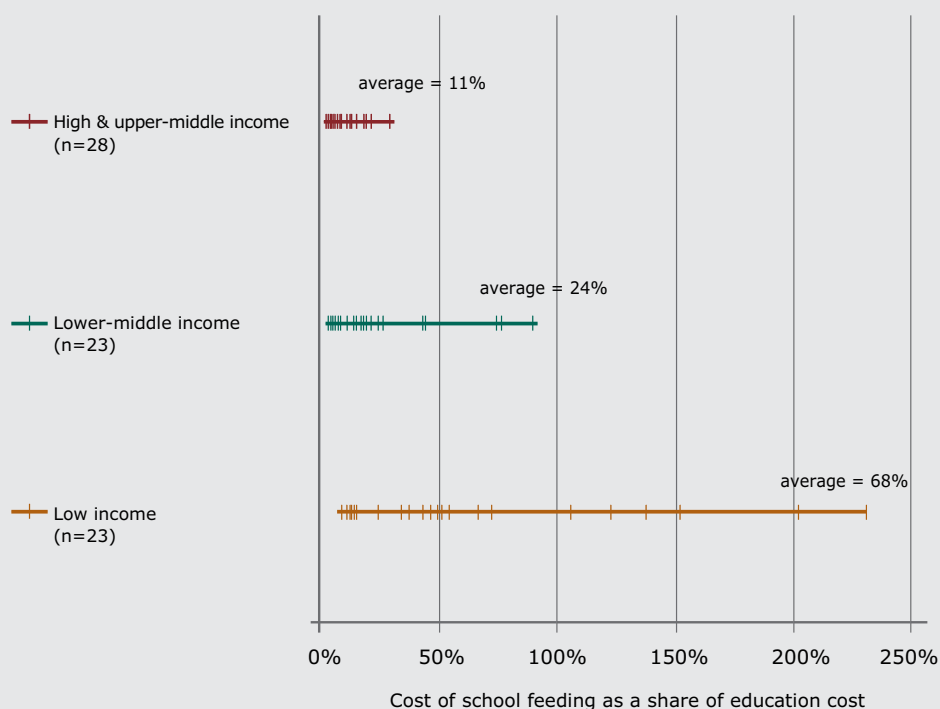
consequence of the considerable variation in the per capita cost of school feeding in low-income countries in particular.

Figure 12 **Costs per child of school feeding and primary education by income level**



Source: Gelli, A and Daryanani, R (forthcoming). N=74 countries.

In high- and upper-middle-income countries, school feeding per capita costs were, on average, equivalent to 11 percent of the per capita investments in primary education, compared with 24 percent in lower-middle-income countries and 68 percent in low-income countries (see Table 7). Across low-income countries, there were also very large variations in the ratio of the per capita cost of school feeding over the per capita cost of education, ranging from 9 percent to 230 percent (see Figure 13). In other countries, the range was considerably narrower: in upper-middle- and high-income countries, the range was from 2 to 29 percent and in lower-middle-income countries, the range was from 3 to 89 percent.

Figure 13 **Cost per child of school feeding as a share of the cost of basic education**

Source: Gelli, A and Daryanani, R (forthcoming). N = 74 countries.

4.3 Drivers of costs in low-income countries

There is very limited data on the drivers of costs of school feeding programmes. Much of the evidence in the published literature is from low-income countries and mainly involves analyses of WFP programmes. These analyses may help explain why the costs are so variable. In these studies, commodity costs were generally found to be the main cost drivers, with the food basket and ration nutritional content varying considerably from country to country.⁶¹ For example, in Honduras, commodities accounted for 79 percent of school feeding costs, followed by 11 percent for operational support costs. Commodities also represented the largest cost category in Malawi, with the next largest contributor to costs being direct support (17 percent).⁶²

⁶¹ Gelli, A. and Daryanani, R. (forthcoming). Are school feeding programmes in low-income settings sustainable? Insights on the costs of school feeding compared to investments in primary education. Food and Nutrition Bulletin; Gelli, A., Cavallero, A., Minervini, L., Mirabile, M., Molinas, L. and Regnault de la Mothe, M. 2011. New benchmarks for costs and cost-efficiency for food provision in schools in food-insecure areas. Food and Nutrition Bulletin.

⁶² Idem.

The historical food-aid approach to supporting country programmes was based on in-kind donations, and in some countries, the food basket included commodities that might, if required to compete on the open market, have otherwise been replaced by foods procured on the market at lower prices. This effect is particularly marked for landlocked countries or countries with poor road networks where there are high transportation costs. This finding may reflect in particular the historical design of WFP programmes, where the bulk of food was donated, usually from sources external to the recipient country.

The encouraging implication of this analysis is that the greatest opportunities to contain costs may be in countries where costs are currently the highest. From this perspective, food purchases in the vicinity of schools could be used to offset the transportation costs associated with traditional food-aid programmes. Of course, it is also the case that the highest costs are associated with local food insecurity, where there is a specific need to transport food from potentially distant more food-secure areas. In this case, the high costs may be associated with greater needs.

Understanding the cost drivers associated with the different school feeding models remains a key area for future research. An equally important area is to better understand how countries can transition to more cost-effective models (see Case study 10 describing the experiences of Kenya).

4.4 Calculating the returns to school feeding

Given the benefits of school feeding outlined in Chapter 3, and the absolute and relative costs of the programme presented above, how can we calculate the net economic returns of school feeding? Answering this question is complex. As demonstrated by Chapter 3, school feeding programmes have multiple benefits, and adding up the effects of these benefits is not straightforward. This problem is not unique to school feeding; other interventions that cross over between sectors (e.g. cash transfers or vouchers) face the same challenges.

To address this challenge within the limitations that still exist in the evidence base, WFP and the Boston Consulting Group (BCG) developed the school feeding investment case for countries which have a WFP presence.⁶³ The investment case is a modelling tool that quantifies the value created for each dollar invested in school feeding, building on the available evidence from three separate sets of benefits: nutrition/health, education and income transfer, which is the value of the school feeding ration at local market prices.⁶⁴ Some benefits are difficult to quantify and have not been incorporated. For example, the benefits of school feeding on local agricultural production (including increases in the incomes of small-scale farmers) have not yet been accounted for in the model.

⁶³ World Food Programme and Boston Consulting Group. (forthcoming). School feeding: An investment case. The article summarizes the investment case results in nine countries implementing WFP school feeding programmes.

⁶⁴ The economic value of the transfer is not the same as the transfer itself. Theoretically, the economic value takes into account how society values the consumption of the poor as compared with the consumption of the average person. In practice, this is not observable nor measurable. Thus, any estimate of the transfer value that is not the economic value can be considered a lower bound.

To calculate a return on investment, the costs of school feeding also have to be considered. The cost components in the model are those discussed earlier: commodity, transport, operational and overhead costs. The input into the model is again country-specific and taken from WFP programme figures. If the government provided financial support to the programme, its contributions are also included in the model. Additional costs to the community (e.g. for infrastructure and training, or for absorbing the increased number of enrolled children due to school feeding) are neglected in the model.

The investment case model (see Case study 11) indicates that the potential for improved health, education and increased productivity along children's lifespans together greatly outweigh the costs of the programme. Among a sample of nine countries that each implemented one or more of the three different school feeding options (i.e. meals, take-home rations and biscuits), the cost-benefit ratio was calculated to range from 1:3 to 1:8. Thus, for each dollar a government spends on school feeding, it could potentially receive at least three dollars back in the form of various economic returns.

Case study 11 The investment case for school feeding⁶⁵

The Investment Case (IC) is a modeling tool that quantifies the value created for each dollar invested in school feeding, building on the available evidence from three separate sets of benefits: education, nutrition/health and income transfer. The benefits of school feeding on local agricultural production (including increases in the incomes of small-scale farmers) have not yet been incorporated into the model.

The IC draws on the assumption that a higher attendance rate at school increases a child's skill level, which in turn should lead to higher earnings later in life. More specifically, the model assumes that the positive returns on education are such that one additional year of schooling leads to 5 percent higher earnings in the future.⁶⁶

The estimates of school feeding's effects on enrolment, attendance and drop-out rates in the model are country-specific and taken from WFP standard project reports over three years, using national averages and a control group of areas which do not have school feeding. The returns from the causal chain from school feeding to educational attainment to higher future wages make up the biggest

effect the model finds, accounting for nearly half of the total return.

The three effects of income transfer, health improvements and better educational outcomes do not exist separately, however. For example, they are linked via the assumption that school feeding improves educational outcomes which consequently increases life expectancy. The IC analysis highlights the reinforcing and multiplicative effects among the various outcomes which make school feeding a unique intervention. At the same time, these interlinkages mean that the model has to be carefully checked and updated to avoid multiplying unreasonable assumptions.

The IC was designed using conservative estimates at each step, and sensitivity checks were done for each parameter to identify the biggest levers. This showed that the main mechanism which creates monetary benefits is increased productivity and the consequently higher wages throughout the adult life of the beneficiary; school feeding prepares the base for this during childhood, accounting for around 74 percent of the overall return. Hence, new evidence regarding every step in

the causal chain (i.e. from school feeding to educational outcomes to higher wages) should be integrated in updates and refinements of the model.

The graphs below present estimated benefits and costs of school feeding in four countries.

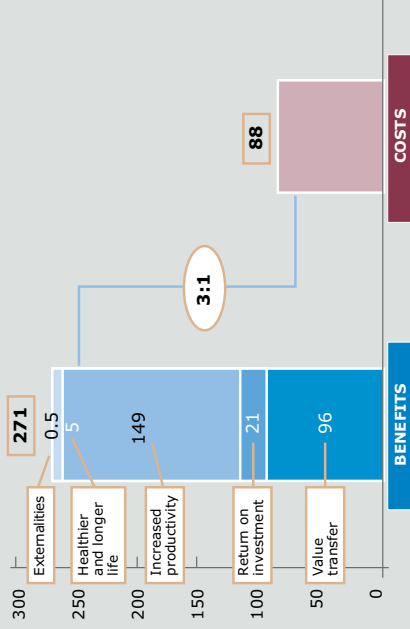
In line with the current debate on how social protection programmes can contribute to achieve improved productivity and economic growth in developing countries,⁶⁷ the IC model further concludes that school feeding is an investment in human capital rather than a social cost.

⁶⁵ A review of the IC model in countries implementing WFP school feeding programmes is contained in 'School feeding: An investment case'. The article, developed by the WFP School Feeding Unit of the Policy Planning and Strategy Division in Rome with contributions from BCG, the WB and PCD, is forthcoming.

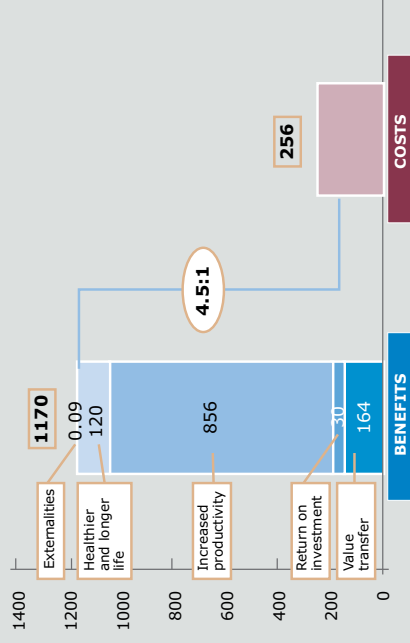
⁶⁶ Psacharopoulos, G. & Patrinos, H. 2012. Returns to investment in education: A further update. World Bank Policy Research Working Paper 2881. Washington DC, World Bank; Onphanhdala P. & Suruga T. (2007). Education and earnings in Lao PDR: Further results. Graduate School of International Cooperation Studies Working Paper Series 16. Kobe, Japan, Kobe University; Jukes M., Drake L., Bundy D. 2008. School health, nutrition and education for all: Levelling the playing field. Washington DC, World Bank; Miguel E. & Kremer, M. 2004. Worms: Identifying impacts on education and health in the presence of treatment externalities. *Econometrica* 71(1): 159-217.

⁶⁷ Alderman, H. and Yemtsov, R. 2012. Productive role of safety nets. Background paper for the World Bank 2012-2022 Social Protection and Labour Strategy. Social Protection and Labour Discussion Paper No. 1203.

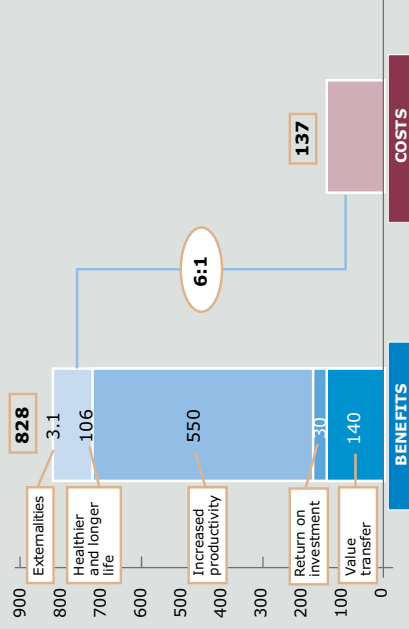
Ratio between benefits and costs for Cambodia 3:1



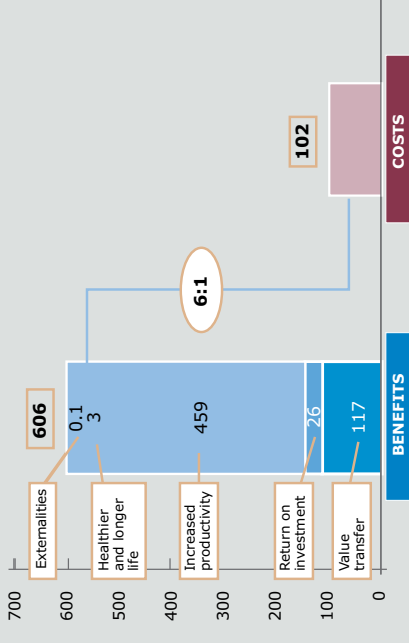
Ratio between benefits and costs for Honduras 4.5:1



Ratio between benefits and costs for Malawi 6:1



Ratio between benefits and costs for Tajikistan 6:1



5

How do development partners support school feeding?

Chapter 5



A broad range of development partners – including UN agencies, multilateral institutions, NGOs, donors, academic institutions and the private sector – support governments with their school feeding programmes, particularly in low-income countries. This section looks at how these partners coordinate and interact at the global, regional and country levels. It also describes changes that have taken place in WFP which have impacted the way the organization approaches school feeding and interacts with its partners.

In the last few years, there has been an increase in the level of participation and investment of partners at all levels in school feeding activities. This may be because partners are responding to countries' increased demand for support, as discussed in previous chapters of this book, and also because they have recognized the role that school feeding can play to achieve social protection and child development goals. Despite these positive developments, there is no true global mechanism to bring together all the relevant players and countries to disseminate knowledge, coordinate action and facilitate learning. Formalizing partner coordination seems to be a matter of priority, especially at the global level.

Supporting low-income countries to make the transition from externally-supported to nationally-funded and managed programmes emerges as the main challenge moving forward. Identifying partners' comparative advantages, agreeing on best ways to support countries and doing so under the overall direction of the governments involved will be key actions for the future.

5.1 Partnership and coordination at the global level

Towards a global vision for school feeding

Since 2009, the global understanding of school feeding has changed dramatically, mirroring WFP's broader strategic shift from food aid to food assistance (see Section 5.4). Today, school feeding is seen as a safety net that contributes to countries' social protection and development goals by providing support to children and their families in almost every country in the world. Previously associated with unsustainable models of food aid, the programmes are currently being embedded into national institutional and legal frameworks and connected with local sources of food.

This new vision for school feeding was strengthened by the partnership among WFP, the WB and PCD, which was established in response to the 2008 and 2009 food and financial crises. The partnership has the objective of improving the quality of programmes in low-income countries by applying a more rigorous, evidence-based approach to school feeding and providing coordinated support to the countries that are in the process of transitioning to national ownership (i.e. Ghana, Haiti, Kenya, Malawi, Mali, Mozambique and Peru). Case studies have been undertaken in the following 14 countries: Brazil, Botswana, Cape Verde, Chile, Côte d'Ivoire, Dominican Republic, Ecuador, El Salvador, Kenya, India, Mexico, Namibia, Nigeria and South Africa. The joint research agenda, established in 2009, has strengthened the knowledge base and led to the development of practical tools and guidance (see Annex I) and publications such as this one.

Work has been driven by the comparative advantages of the organizations. The WB's education and social protection sectors led the process of reviewing the evidence on school feeding, which culminated in the publication, with WFP and PCD, of *Rethinking School Feeding*. The WB education sector has also worked with governments, WFP, PCD, the United Nations International Children's Emergency Fund (UNICEF) and other partners to develop the Systems Approach for Better Education Results (SABER) tool for systematic policy analysis of school health and school feeding interventions. It has been used in more than 20 countries in Africa, especially through regional meetings of ECOWAS and EAC, and with specific countries, including Sri Lanka, in South Asia. The SABER approach is intended to assist countries as they work towards a transition to more sustainable programmes. The WB's social protection sector includes school feeding within its financial support to the social safety net responses of low-income countries. Technical assistance to governments has led to improvements in programme design, such as in the case of the programme in Ghana (see Case study 13).

PCD, which in 2010 received a grant from the Bill and Melinda Gates Foundation to support the link between school feeding and local agricultural production, has been instrumental in strengthening the evidence base. It has done so by designing three impact evaluations, case studies and technical working papers and providing technical assistance to countries, especially on the issues of monitoring and evaluation and the link to local agricultural production.

Recently, partners such as the Government of Brazil (through the WFP Centre for Excellence against Hunger) and FAO have been instrumental in strengthening support to countries, particularly on the link to local agricultural production and smallholder farmers. There is growing recognition that country-to-country support – in the form of south-south and other types of collaboration – is important, and that development partners have a role to play in facilitating these connections. Moving forward, other partners, such as Russia and China, will continue to shape and influence global thinking and practice on school feeding: the Russian Federation has reintroduced school feeding and is working with its neighbours to support similar interventions, while school feeding in China is a key element of the US\$5 billion per year national strategy to support the development of poor children.

Partnership and coordination within the education sector

On the education side, existing international alliances and goals provide the broader frameworks under which school feeding activities are carried out. Recent efforts linked to the United Nations Secretary General's "Education First" initiative are bringing all partners together once again to refocus on quality of education. This provides an ideal platform to highlight the importance of school health and school feeding in supporting a child's ability to fully participate in learning. In this context, the partnership between WFP, UNESCO and UNICEF has been recently strengthened through the launch of the "Nourishing Bodies, Nourishing Minds" initiative, which will ensure better coordination of action at global and country levels on the issue of quality of education (see Box 7).

Box 7 Nourishing bodies, nourishing minds - Partnering for children's well-being and equity in education

UNESCO, UNICEF and WFP launched an initiative to improve educational outcomes for the world's most underserved children at the World Economic Forum in Davos in January 2013. Over the next three years, the partners will be working with the governments of Haiti, Mozambique, Niger and Pakistan to identify and remove barriers that prevent children from accessing comprehensive health care, nutrition and education programmes.

The aim is to generate replicable models that incorporate partnership among agencies and other actors, including the private sector, in support of national priorities and local institutions, for further scale up. The collection of evidence on best practice is a top priority. The initiative is in support of EFA goals and the UN Secretary General's "Global Education First" campaign.

The UNESCO-led EFA initiative, through its high-level working group composed of ministers of education from countries all over the world, has carved out a clear role for school feeding in achieving EFA and the MDGs. The FRESH initiative, launched in the EFA high-level meeting in Dakar in 2000, provided a broad framework for collaboration among many agencies and partners, including the WB, the World Health Organization, UNICEF and WFP, on the issue of children's health and nutrition. School feeding was later explicitly addressed in the EFA high-level meeting of 2011 in Addis Ababa, where it was recognized as a key intervention to support vulnerable children and their families.

The Global Partnership for Education, established in 2002 as a "global compact" between low-income and donor countries, has supported the financing of school feeding programmes in several countries. It provides a clear mechanism for coordination among multilateral agencies, donor countries, the private sector, NGOs and countries to allocate resources according to national priorities in education. In recent years, it has provided approximately US\$30 million in financing for school feeding in Côte d'Ivoire, Madagascar, Mauritania, Mozambique and Lao, although the exact amount of its contributions to school feeding operations in general is not known and is likely to be much higher. Additionally, the support of donor countries to WFP operations is crucial (see Box 8).

Box 8 The support of donors in low-income countries

As seen in previous chapters, donor support in low-income countries accounts for about 83 percent of all investments in school feeding. There is an urgent need to partner with donors, not only to find ways to support countries in financing these programmes, but also to engage in sharing and learning experiences, south-south cooperation and efforts to strengthen the evidence base and knowledge.

Recently, donors have appreciated the importance of stable, multi-year funding for

school feeding in low-income countries, as this allows the government and partners to plan for a systematic transition. For example, contributions from Australia, Canada and the United States have been targeted to school feeding programmes. School feeding operations are also supported by Brazil, Egypt, Honduras, Luxembourg, the Russian Federation and many others. Donors providing multilateral contributions for development activities also support school feeding.

Partnership and coordination within the agriculture sector

The Bill and Melinda Gates Foundation has supported local agricultural production and its link to school feeding through its portfolio of grants in the “structured demand” area – a cluster of organizations supporting the connection between smallholder farmer production and demand-based programmes such as school feeding. Focused primarily in Africa, each organization has a role to play along the supply chain. The Alliance for a Green Revolution in Africa (AGRA), for example, supports the supply side by financing the provision of inputs, credit and training; WFP’s Purchase for Progress (P4P) project works on the market access side (see Box 12); and PCD and the Dutch NGO SNV provide support on the school feeding side, looking at issues related to procurement, governance and research. In total, the Gates Foundation has invested almost half a billion dollars in support of structured demand platforms, including school feeding.⁶⁸

The engagement of key lead agencies such as FAO – which supports not only the link to local production but also the establishment of school gardens and the design of nutrition education programmes that go alongside school feeding – has been important. The Government of Brazil, primarily through the Centre of Excellence established with WFP in Brasilia, has emerged as a key supporter of school feeding programmes sourced from local agricultural production, following its own successful national experience.

There are several successful experiences with private-sector involvement in supporting countries along the supply chain. For example, DSM, a world-leading company in the development of nutrition products, has supported school feeding activities by working with WFP on the improvement of fortified blended foods. This support came through optimizing

⁶⁸ Bill & Melinda Gates Foundation Grants Database website:
<http://www.gatesfoundation.org/How-We-Work/Quick-Links/Grants-Database>

a vitamin and mineral premix and then adding additional ingredients to prepare a cereal specifically for young children. Also, BCG has helped to analyse the costs and the drivers of those costs along a supply chain for a school feeding programme.

Despite these positive developments, the potential of the private sector, at national and multinational levels, to support school feeding by providing technical assistance, know-how or operational or financial support has not yet been fully explored.

Global coordination mechanisms

In the last few years, the GCNF has teamed up with several partners to expand the only wide-reaching forum on school feeding. This has significantly increased the number of countries and participants that are represented, and made the forum a platform for knowledge dissemination and cross-sectoral learning (see Case study 12). However, there is still no true global mechanism to bring together all the relevant players and countries to disseminate knowledge, coordinate action and facilitate learning.

WFP will be working with partners in the coming years to ensure that efforts in the education sector are integrated with those in the agriculture sector. It will also be exploring options on how to establish a global coordination mechanism that can strengthen the quality of the support provided to low-income countries as they transition from external support to national ownership.

Case study 12 The Global Child Nutrition Forum – Bringing together leaders and practitioners

The growth and influence of the Global Child Nutrition Forum ("the Forum") demonstrates increased government interest in school feeding. Over the past few years, the Forum has created a worldwide alliance of leaders dedicated to advancing school feeding.

Sponsored by the US-based GCNF, the Forum supports the development of sustainable country-owned school feeding programmes. Starting in 1997, the Forum has gathered over 300 delegates from over 85 countries in Africa, Asia and South America.

The past few years have seen a significant increase not only in the number of attendees, but also in the level of engagement of governments representing countries from across luso-, anglo- and francophone Africa,

and including countries from Asia and South America. In 2010, the Forum was hosted in Ghana, where 130 of the world's leading school feeding experts from 18 countries came together. At that time, only one minister and one permanent secretary participated in the Forum. The 2011 Forum, held in Kenya, attracted experts and delegates representing 22 sub-Saharan African countries, including three ministers and four permanent secretaries. Finally, at the 2012 Forum in Ethiopia, there were seven ministers and eight permanent secretaries from agriculture, health and education ministries, alongside over 200 regional and international experts from 23 sub-Saharan African countries, making it the largest convening of leading international school feeding experts.

The evolution of the Forum can also be seen in the growing number of international participants it has attracted. In 1997, the Forum's participants were mostly delegates from targeted countries. In 2012, in addition to the delegates, the Forum included observers and participants ranging from UN agencies to the private sector, among those WFP, the WB and FAO. For the past three years, GCNF has co-hosted the Forum with PCD; in 2013, GCNF will partner with the WFP Centre of Excellence against Hunger to host its fifteenth Forum in Brazil.

The Forums serve two principal purposes. They encourage linkages among ministries

to foster integration and collaboration across sectors. And they enable school feeding experts to learn from each other's experiences and to share ideas and discuss strategies to implement effective programmes.

Communiqués produced by delegates at the past three Forums reflect the increased importance of school feeding. The 2012 Forum Communiqué highlighted the need for collaboration across various ministries, focused on the link between school feeding and local agricultural production and prioritized collaboration with the private sector and civil society.

5.2 Partnership and coordination at the regional level

The clearest formal efforts to establish coordination mechanisms between partners and countries have been at the regional level. The regional networks provide a multisectoral platform through which partners, donors and governments can set policy, agree on action and channel specific support.

Partnership and coordination in Latin America

In Latin America, LA-RAE is a non-profit organization which was established in 2005 in Chile with the objective of supporting the improvement of school feeding programmes in the region through technical assistance, training, sharing knowledge and learning and promoting south-south cooperation. LA-RAE organizes annual regional forums on school feeding to provide a space for countries and development partners to discuss regional issues; the last one was hosted by the Government of Ecuador in November 2012. LA-RAE has garnered support from the School Nutrition Association of the United States, WFP, PCD and FAO, and is actively promoting south-south cooperation agreements with countries like Brazil, Chile and Mexico which have the capacity to provide technical assistance and support throughout the region.

Partnership and coordination in Africa

In Africa, work on school feeding is driven by NEPAD, which is an African Union strategic framework for socio-economic development. The link between school feeding and local agricultural production (i.e. home-grown school feeding) is one of the key initiatives of CAADP, which was established in 2003 by NEPAD. Several partners, including WFP, the WB and PCD, provide support to governments under the CAADP framework.

African subregional school health and nutrition networks, consisting of members officially

appointed by the different ministers of education, provide a platform for sharing good practice and operational experience in school feeding. Based within regional economic communities (e.g. ECOWAS, EAC), they have proven key to building capacity and developing consensus on good practice in the Africa subregions. Situation analyses conducted by the networks have been used to inform the regional councils of ministers about cross-sectoral developments.

The West Africa ECOWAS and Mauritania Network includes: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Senegal, Sierra Leone and Togo. The Eastern Africa EAC Network includes: Burundi, Eritrea, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Uganda, United Republic of Tanzania and Zambia. Both networks meet and communicate regularly and are guided by their yearly action plans.

Partnership and coordination in Southeast Asia

In Southeast Asia, the Southeast Asian Ministers of Education Organization (SEAMEO) has been promoting cross-country learning and networks on school health, including school feeding, since 1965. SEAMEO is an international intergovernmental organization among Southeast Asian countries that promotes regional cooperation in education, science and culture in Southeast Asia. SEAMEO focuses on quality and equity in education; preventive health education; culture and tradition; information and communication technology; languages; poverty alleviation; and agriculture and natural resources. The organization's highest policy-making body is the SEAMEO Council, which comprises the 11 Southeast Asian education ministers. In response to demand from Southeast Asian governments, PCD, Mahidol University, the Asian Centre of International Parasite Control and the Japan Consortium for Global School Health Research organize an annual short course on school health and nutrition in the region. The course, which has a strong focus on school feeding, brings together government and development partners with the objective of strengthening partnerships within the Southeast Asia School Health and Nutrition community.

5.3 Partnership and coordination at the country level

In many countries, it has been challenging to ensure effective mechanisms through which donors and partners can effectively coordinate their inputs and support. As is the case globally, at the country level there are several sectors involved in school feeding, and each of these have coordination groups for donors, centred around a specific plan or strategy. In many countries, school feeding features in more than one sectoral plan and is discussed in several donor or partner groups (e.g. in education, social protection and health), leading to a bit of confusion and inefficiency.

Despite this challenge, there are many countries where partnership between development partners and the government has been particularly successful. Recently, WFP, FAO and the International Fund for Agricultural Development (IFAD) country teams in Mozambique

received an award from the heads of the three Rome-based agencies for outstanding collaboration in the area of agriculture and food security. Several of the countries' safety nets, including school feeding, have benefited from the partnership. In Niger, the partnership among WFP, UNICEF, FAO and UN Women has worked towards supporting integrated school-based approaches (including support to school feeding), local food production (particularly from women farmers), school infrastructure and other education inputs.

The Purchasing in Africa for Africans project, supported by the Brazilian Government, is a partnership among five countries in Africa, WFP and FAO to connect smallholder production to school feeding programmes (see Box 9). Although relatively recent, the project is bringing the agriculture and education sectors together to benefit schoolchildren and smallholder farmers.

At the country level, local and international NGOs play a crucial role in implementing school feeding. Last year, WFP recorded operational partnerships with international and local NGOs for school feeding in nurseries, kindergartens and primary and secondary schools. The largest number of partnerships were in support of primary schools, and most of them (more than 200 out of 255) were with local NGOs. NGOs such as Save the Children International, World Vision, Care International and Catholic Relief Services are among those providing support to school feeding in developing countries.

The larger numbers of partners at the country level translates into a greater demand for government time and effort to ensure that all actions are contributing to national goals. It is important to avoid overburdening national ministries, civil society groups and NGOs. Some countries have put in place technical working groups at the national and subnational levels to ensure proper coordination with development partners. Collaboration appears to be stronger when there is a formal agreement or strategy established between the partners and the government.

Box 9 Purchasing in Africa for Africans – a promising new partnership

Drawing upon the experience of Brazil's Food Purchase Programme within its Fome Zero (Zero Hunger) initiative, Purchase in Africa for Africans is a promising partnership between WFP and FAO which builds upon the expertise of both agencies. With funding and technical expertise from Brazil, commodities will be procured through smallholder farmers for use in local school meal programmes. To the extent possible, this will be linked to the

WFP-led P4P initiative. Pilot interventions are taking place in Ethiopia, Mozambique and Senegal, with Malawi and Niger expected to commence shortly. In addition to the operational component of this pilot, WFP's Centre of Excellence in Brasilia will coordinate an analysis of the successes and challenges of procuring from smallholder farmers for school meal programmes.

Case study 13 Working in partnership with the Government of Ghana⁶⁹

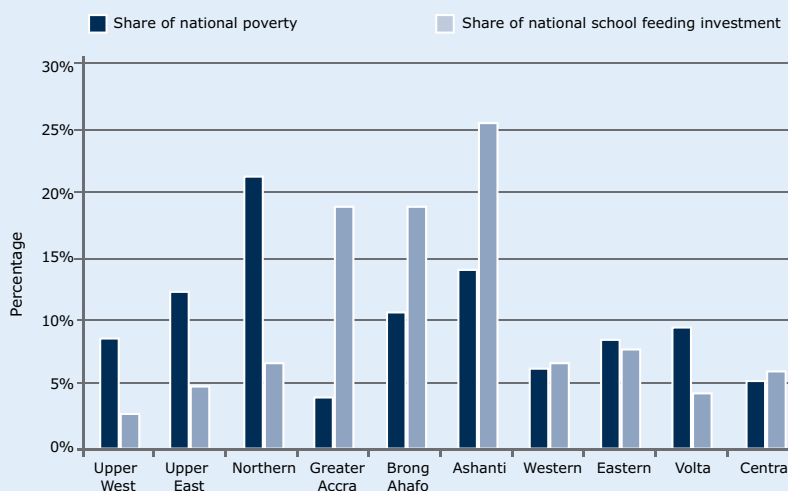
The Ghana school feeding programme provides children in kindergarten and primary schools with a hot meal composed of staples (such as maize), protein, fruits and vegetables. Since the programme started in 2005, the government has successfully secured the support of several partners. This is in large part due to the political commitment and support shown at levels of government starting from the very top. Partners and donors include: the Dutch Government (which provided funding for the programme in its initial years), WFP, PCD, SNV (a Dutch NGO) and the WB, among others. Donors supporting partnership efforts in Ghana are the Bill and Melinda Gates Foundation and Dubai Cares.

One example of the benefits of working in partnership is the work that has been done to improve the efficiency of the programme's targeting – making sure that the poorest

children have access to school meals. The case illustrates how evidence can be used to review national policy and how the comparative advantages of different partners can be successfully leveraged.

A study to evaluate the targeting of social programmes was undertaken by the Ministry of Employment and Social Welfare, with support from the WB and UNICEF in 2010. The study reviewed 24 national safety net programmes. One of the findings was that only 21 percent of the investment of the school feeding programme was going to the poor. Affluent regions of the country were getting the larger share of the programme, including Greater Accra and Ashanti, while the ones with the largest proportion of poor people were getting less, including the Upper West, Upper East and Northern regions (see graph).

Share of national poverty and food security and regional distribution of the school feeding programme in Ghana



Based on the evidence, the government requested support from the WB, WFP and PCD to retarget the programme. Information about which regions and which schools should be receiving the programme (and from which ones support should be phased out) was compiled by the WB using national statistics, data from WFP's Comprehensive Food Security and Vulnerability Assessment 2008/2009 and spatial data variables. With this information,

the government launched a retargeting effort in 2011, which meant that some schools in better-off areas would no longer receive school feeding, while those in poorer areas would now start to be covered. PCD supported a nationwide sensitization campaign to explain the reasons and the benefits of this initiative. As a result, 70-80 percent of the investment in school feeding now goes to the poorest regions.

⁶⁹ World Bank and Ghana School Feeding Programme 2011; Retargeting exercise presentation during policy scoping mission.

5.4 WFP's new role in school feeding

A new direction

Over the years, WFP has emerged as the leading international agency supporting school feeding programmes in low-income countries. Working with many of the partners mentioned in the previous sections, WFP works at the global, regional and country levels providing technical assistance, policy advice and operational support. The organization has helped to institutionalize programmes in at least 37 countries, which are now managing them without WFP support.

In 2009, WFP's role in school feeding changed in response to a broader organizational shift from food aid to food assistance (see Box 10). The approval of a new school feeding policy by the Executive Board in 2009 signalled a new era of engagement with governments and partners in support of school feeding. The policy established WFP as a provider of time-bound support to governments with the long-term objective of phasing out its assistance, leaving behind sustainable, cost-effective national school feeding programmes.

Moving away from a project approach, WFP started to integrate school feeding programmes into the wider system of government policies in the education and social protection sectors. The policy included a renewed emphasis on government ownership. It also included a strong focus on local procurement and the link with smallholder farming, and a commitment to more nutritious food baskets.

Since then, WFP at all levels has been working to put the elements of the school feeding policy and the general principles of the Strategic Plan into practice. The new direction came with significant challenges that WFP has been addressing, including: supporting staff to acquire new skills, particularly in the areas of capacity development, policy dialogue and negotiation; developing or strengthening guidance on the design and implementation of programmes; introducing tools for analysis and policy dialogue; designing innovative projects that incorporate the principles of the new policy; and strengthening the evidence base for school feeding.

There are three main areas in which WFP has been putting the policy into practice: 1) supporting the transition to national ownership of programmes; 2) linking school feeding to local agricultural production; and 3) increasing the nutritional quality of the food baskets.

Box 10 From food aid to food assistance – WFP changes direction

WFP's 2008–2013 Strategic Plan marked a significant change in WFP's strategic orientation. It changed WFP from a food-aid organization, providing food directly to needy households, to a food-assistance organization, with a range of modalities for supporting nations, communities and households in increasing their access to food and nutrition security.

The new direction was prompted by a series of interlinked factors. First, the growing international emphasis on national ownership and country-led approaches, as reflected in the 2005 Paris Declaration and the 2008 Accra Agenda for Action, moved WFP to focus on supporting national policy frameworks and goals.

Second, the 2008 fuel and food price crisis signalled a new era characterized by a changing structure in food markets and its consequent impact on vulnerable households all across the world. The related financial crisis also stressed the need for programmes to respond to shocks even if food markets reverted, prompting governments in

low-income countries and donors to re-evaluate their views about safety nets.

And lastly, WFP explored new approaches to tackle food insecurity based on an understanding that while food aid in the past saved lives, it could also have negative impacts on local markets and agricultural production in the medium-to-long term.

The strategic shift was facilitated by an increasing proportion of cash contributions from donors, which opened up new opportunities for scaling up modalities such as cash, vouchers and local purchase that were previously not common in WFP's portfolio of activities. To operationalize this shift, the organization reviewed its governance and management structure, reviewed its financial framework and approved a new set of internal policies aligned with the new direction.

WFP's upcoming Strategic Plan 2014–2018 is expected to continue WFP's move towards food assistance by further clarifying and sharpening the strategic objectives and roles of WFP.

Supporting the transition to national ownership

WFP's niche is in low-income, food-insecure countries. It supports governments in two main ways. First, in contexts where school feeding is still too expensive or there is limited capacity, WFP supports implementation directly. Out of the estimated 368 million children receiving school meals each year, WFP reaches 26 million of them in 60 countries, with an investment of US\$482 million (see Table 8). Second, WFP provides technical assistance and advice to national agencies with the objective of strengthening institutions and their capacity to manage their own programmes.

WFP is systematically looking at sustainability and transition to national ownership at all stages of assistance. Around 50 percent of WFP country offices with a school feeding

operation rate themselves at an advanced transition stage with the government, 12 percent are at the initial stages and 38 percent are in the middle.⁷⁰ However, only 28 percent of offices have a concrete transition strategy and milestones agreed with the government; in 50 percent of the offices, this discussion is ongoing. This signals the potential for transition to full national ownership of programmes and also the need to put in place formal agreements with governments, both of which are things WFP will be working on in the next few years.

To assist with the transition, WFP has worked with partners to develop tools to: 1) guide policy dialogue in countries; 2) assess the context and the capacity of national institutions to implement school feeding; 3) analyse the cost of school feeding and the budgetary implications for governments; and 4) put in place transition strategies. These tools have been applied in at least 25 countries and are available to any stakeholder supporting school feeding (see Annex I for an explanation of these tools and further resources).

To support governments in the process of designing and implementing school feeding programmes, WFP opened a Centre of Excellence against Hunger in Brasilia in November 2011 (see Box 11). The initiative is a partnership with the Government of Brazil and aims to be a platform for south-south cooperation, leveraging the Brazilian experience in the areas of safety nets and hunger reduction, including school feeding.

Box 11 WFP's Centre of Excellence against Hunger in Brazil

The WFP Centre of Excellence against Hunger in Brasilia is a global hub for policy dialogue and south-south learning in school feeding, nutrition and food security programmes. The Centre, which is a partnership between WFP and the Brazilian Government, was created in 2011 to support governments in Africa, Asia and Latin America in developing sustainable solutions against hunger. Based on the success of the Brazilian experience in poverty reduction and food security over the last ten years, the Centre provides policy advice, technical assistance and learning opportunities to countries and helps them develop their own programmes. While support to other countries is envisioned, the Centre currently focuses on 18 priority countries: Bangladesh, Côte d'Ivoire, East Timor, Ghana, Guinea-Bissau, Haiti, Kenya, Laos, Malawi, Mali, Mozambique, Niger, Rwanda, Senegal, Tanzania, Togo, Zambia and Zimbabwe.

Since its creation, the Centre has received 16 country study visits (Bangladesh, East Timor, El Salvador, Ghana, Guinea-Bissau, Guinea, Haiti, Honduras, Malawi, Mali, Mexico, Niger, Republic of Congo, Rwanda, Senegal and Tanzania). Country delegations are usually composed of staff from several ministries (e.g. education, health, agriculture, planning and finance). Some are high-level visits and others are technical. International organizations, such as Howard Buffett Foundation and the Bill and Melinda Gates Foundation, have also visited the Centre to learn about the practices implemented in Brazil and to discuss future partnerships.

At the end of the visit, the country delegation is encouraged to draft an action plan, which then becomes the basis for further technical support. The Centre has sent or is planning to send experts to Guinea, Malawi, Mozambique and Rwanda. It can also support national

⁷⁰ WFP global school feeding survey

stakeholder workshops and accompany governments through the different stages of their decision-making processes.

Priorities for WFP include increasing policy dialogue with different partners in school feeding; food security; and south-south

cooperation. A global conference on school feeding will be hosted by the Centre in 2013 in partnership with GCNF and PCD. It is expected to bring together governments from all over the world to discuss challenges and future plans for school feeding programmes.

Linking school feeding to local agricultural production

A second area of innovation is WFP's efforts to link school feeding to local agricultural production as a way to increase the sustainability of programmes. Wherever possible, WFP is trying to procure from smallholder farmer organizations to increase their access to this new market if doing so does not affect the costs or the nutritional value and quality of the food basket.

WFP is also piloting different approaches on behalf of governments – 73 percent of country offices are implementing innovations in procurement; within this group, about half are procuring new types of commodities which are not traditionally in WFP's food basket (e.g. milk or fruit), and 16 percent are piloting decentralized procurement schemes where cash is sent to schools or districts for local procurement of food. With these efforts, WFP is experimenting and taking the initial risks so it can later support the transition of programmes to national ownership through approaches that are tried and tested in a specific context.

WFP's role in linking school feeding to local agricultural production is twofold:

1. **As a buyer of food:** WFP can explore ways of purchasing food locally and, in some cases, from smallholder farmer associations for the school feeding programmes it operates. WFP's role is to make the link between farmers' production and WFP's purchasing procedures. It also has a role in collating and sharing the lessons that are coming out of these experiences with new ways of purchasing food.
2. **As a provider of technical assistance to governments that buy food for national programmes:** WFP's experience in international, regional and local procurement can be useful for governments and other partners who are testing out new approaches for school feeding. In the coming years, WFP is expected to play a greater role in advising governments on public procurement and how to structure food-based programmes to benefit the local economy and agricultural development.

These efforts are informed by the lessons emerging from WFP's P4P pilot, which is an initiative that started in late 2008 with funding from the Bill and Melinda Gates Foundation and the Howard G. Buffett Foundation, with subsequent funding from a number of other donors. The pilot is taking place in 20 countries (see Box 12). So far, P4P, through its

partners, works with over 800 smallholder farmer organizations that represent over one million farmers. Over 290,000 metric tons of food have been contracted from smallholder farmer organizations and, of this, over 190,000 metric tons have been delivered, putting about US\$77 million directly into the hands of farmers. P4P and its extensive research agenda, combined with other efforts by partners like PCD, are expected to shed light on the potential benefits of linking school feeding to local agricultural production in the coming years and shape WFP's response and support to governments moving forward.

Box 12 WFP's Purchase for Progress Initiative

As the world's largest humanitarian agency, WFP is a major staple food buyer. In 2012, WFP bought US\$1.1 billion worth of food commodities, and more than 70 percent of this was in developing countries. WFP buys locally in developing countries when its criteria of price, quality and quantity can be met. P4P is a logical continuation of this local procurement, with its intent to achieve a higher developmental gain with WFP's procurement footprint by buying increasingly in a smallholder-friendly way.

Through P4P, WFP's demand provides smallholder farmers in 20 pilot countries with a greater incentive to invest in their production, as they have the possibility to sell to a reliable buyer and receive a fair price for their crops. It is envisioned that in the wake of WFP purchasing in a more smallholder-friendly way, other buyers of staple commodities, including governments and the private sector, will increasingly be able to buy from smallholders.

P4P also invests in capacity building at the country level in areas such as post-harvest handling or storage, which will yield sustainable results in boosting national food security over the long term. The P4P five-year pilot (2009-2013) rests on three pillars:

1. Demand: Through P4P, WFP tests innovative ways to buy staple food and promote marketing opportunities for smallholder farmers.
2. Supply: P4P links WFP's demand with the expertise and resources of partners who support farmers to achieve better yields, reduce their losses after the harvest and improve the quality of their staple crops.
3. Learning and sharing: P4P will gather and share lessons on effective approaches to connect smallholder farmers to markets in a sustainable way and will share them widely with stakeholders.

Ensuring children receive nutritious food baskets

The third area of work has been ensuring that WFP-supported school meals are nutritious, fortifying them where needed and ensuring that they are served at the right time of day to ensure maximum impact. To meet these goals, WFP has been exploring new ways of providing food baskets that are nutritious, as locally sourced as possible and sustainable. A major opportunity to increase the nutritional quality of the food given to children is through micronutrient powders. Currently, WFP is providing these to schools in Afghanistan, Ghana and Madagascar and is planning to do so in Chad, Haiti, Indonesia,

Kenya, Mali and Niger in order to reach over one million school-age children in 2013.

Another approach is to provide children with multi-fortified food products such as corn soy blend, high-energy biscuits and other fortified snacks and, when possible, to have them fortified and processed by local private companies. WFP data show that in 2011, 14.4 million boys and girls – 51 percent of WFP school feeding beneficiaries – received multi-fortified food commodities in 27 countries. Of these, 6.5 million children received multi-fortified products which were procured locally in 13 countries.

Important progress has been achieved in local fortification of flours, such as maize meal. Recent developments in the fortification of staple foods will also offer opportunities to deliver micronutrients to school children. Fortified rice is being tested in Cambodia and Egypt. In Cambodia, a study found that two types of fortified rice (PATH UltraRice and DSM NutriRice) were accepted by teachers, parents and schoolchildren in four primary schools. Biofortification enables increased nutritional content in foods traditionally consumed by schoolchildren, such as the orange-fleshed sweet potatoes that are rich in vitamin A which are being tested in Mozambique and Uganda.

In carrying out all these activities, WFP works with partners and engages a broad coalition of stakeholders that are currently studying different aspects of school feeding policy and implementation.

5.5 The way forward for WFP and partners

Since 2009, following the change in the global vision for school feeding and WFP's new policy, an impressive amount of work was done at the global, regional and country levels to translate that new vision into reality. But much more needs to be done. The road to transition and sustainability is a long one, and WFP and its partners are still at the beginning of the process. The following are some of the emerging priorities for the medium term.

- 1. Establish a global coordination mechanism for school feeding.** It is clear that a large number of international partners are involved in school feeding, and there has been a substantial amount of investment from the social protection, education and agriculture sectors in support of these programmes. But cross-sectoral coordination and partnership remains a challenge.

The multisectoral nature of school feeding has allowed actors from a range of areas to participate; however, this has also meant that there are no obvious pre-existing coordinating structures in place as there are with other interventions that fall squarely within the realm of a specific sector. Finding an effective coordination framework at the global level should be a priority to ensure that countries, particularly low-income countries which are transitioning from external support to national ownership, get the right support at the right time.

- 2. Strengthen the existing regional networks.** Most of the initiatives at the regional level have been country-led rather than promoted by development partners, which has made them particularly resilient and effective. Supporting the networks and coordination mechanisms that already exist in a way that facilitates learning and exchange of information between countries and that channels the support of development partners could go a long way towards strengthening coordination and the quality of the assistance.
- 3. Continue to support countries through the transition to sustainability.** One of the preconditions for the sustainability of the programmes is for the education and the agriculture sectors to come together in support of them. On the education side, efforts are being made to reinforce the partnerships that support the quality of education and which are vital to ensure an adequate learning environment for children. WFP's renewed partnership with UNICEF and UNESCO (called "Nourishing Bodies, Nourishing Minds") will contribute to strengthening the quality of support on the education side. On the agriculture side, building platforms of collaboration along the supply chain has proven to be successful in several countries, although a lot more remains to be done to make things work, including finding ways to leverage the support of the private sector more efficiently. All of these efforts should be underpinned by a strong learning agenda, which is being supported by several academic institutions and specialized agencies. Measuring the impact of partnerships and documenting what works in which context will be key to establishing effective mechanisms for collaboration in the future.

Table 8 **WFP school feeding numbers****School Feeding Programmes Supported by WFP (2011 Data)**

2010	2011	Details
22.4 million	25.9 million	Total number of school children
49	48.2	Percentage of girls
62	61 ⁷¹	Number of countries assisted
US\$442.2m	US\$482.4m	Direct expenses on school feeding programmes
2.1 million	2 million	Girls provided with take-home rations
0.8 million	0.8 million	Boys provided with take-home rations
1.8 million	1.9 million ⁷²	Number of pre-school children assisted
10.3 million	5.3 million ⁷³	Children dewormed in assisted schools

Regional numbers

Regional bureaux	Number of countries	School children	% Girls	% Total
Asia	13	8,803,413	47	34
Middle East, Central Asia and Eastern Europe	9	1,447,925	50	6
West Africa	16	3,129,695	47	12
Southern Africa	5	1,917,696	50	8
Central and East Africa	10	4,185,630	48	16
Latin America and Caribbean	7	4,832,329	50	18
Sudan ⁷⁴	1	1,630,205	51	6
TOTAL	60	25,946,893	48	100%

Number of children, quantities of food and expenses by programme category

Project category	Projects		Children		Food distributed		Direct expenses	
	Number	%	Number (million)	%	Volume (000 mt)	%	(US\$ million)	%
Development	45	50	10.7	41.1	234.8	49.2	193.5	40.1
Protracted relief and recovery	35	38.9	9.5	36.5	128.1	26.8	160.7	33.3
Emergencies	10	11.1	5.7	22.1	114.2	24	128.1	26.6
TOTAL	90	100	25.9	100	477.1	100	482.4	100

⁷⁰ The Benin country office did not implement school feeding due to a lack of resources. Cape Verde's programme was transitioned to the government in 2010.

⁷¹ Likely to be underestimated as not all countries systematically segregate number of pre-school from primary-school children.

⁷² Likely to be underestimated as not all countries systematically report on deworming figures.

⁷³ Sudan figures include Sudan and South Sudan prior to the independence of South Sudan.

Conclusions



This publication presents the state of our understanding of school feeding. It builds on the analysis of the *Rethinking School Feeding* book published by the WB and WFP in 2009. At that time, there were significant gaps in the information about the global coverage, total investment, costs and overall scale of school feeding. Over the last three years, WFP and its partners have worked on further developing the knowledge base through a global school feeding survey, a series of case studies and technical working papers. The data have allowed us to go more in-depth, fill in some of the gaps that were identified and develop new research questions, which are highlighted below.

The overall conclusion of this report is that school feeding programmes are big business worldwide. The global investment in these programmes is between US\$47 billion and US\$75 billion a year, with more than 368 million children being fed every day and nearly every country seeking to implement programmes. These programmes have multiple objectives, but especially serve to provide social safety nets and promote education and nutrition outcomes. Since the financial crisis in 2008, the coverage of these programmes and interest in them have increased among both better-off and poor countries.

These programmes have tangible benefits, and there are potentially important efficiency gains to be made in all countries, but especially in the poorest ones. There is a need for countries and the development community to work together to help ensure that existing and new programmes are effective and efficient. It is clear from this analysis that the time has come to give school feeding programmes the attention they need and deserve.

The following are the key findings and the current research agenda under development.

Key findings

The prevalence of school feeding

- There are at least 368 million pre-primary-, primary- and secondary-school children receiving food through schools around the world, based on a sample of 169 countries.
- Based on the information available about the number of children receiving school meals and the current knowledge of the per capita cost of school feeding, we estimate that there is a global yearly investment of between US\$47 billion and US\$75 billion – most of which is from government budgets.
- Countries where the coverage of school feeding programmes is the least adequate are those with the greatest need. Current estimates suggest that while nearly 50 percent of schoolchildren receive free meals in middle-income countries, the figure for low-income countries is 18 percent. In high-income countries, the school feeding service is almost universally available to children at a differential cost depending on the level of income of the family – some children pay for their meals and others receive them at subsidized costs or for free.

- From a global perspective, external development assistance is a minor contributor to overall school feeding costs, accounting for less than 2 percent of the total. However, while programmes in high- and middle-income countries are almost exclusively financed by internal revenues (i.e. taxes and other sources), programmes in low-income countries rely on donor support. In these countries, external sources of funding cover about 83 percent of the programme needs. Thus, donor support in low-income countries makes it possible for children in these countries to have access to programmes that are available almost everywhere else.
- The figures presented in this report are the first global estimates of school feeding and much remains to be done to improve the accuracy of the data. The availability of information on school feeding in high-income countries is limited and very often less comprehensive than comparable data available in low- and middle-income countries. There is a need to continue building on these efforts at the global level to have better information on a yearly basis. A stronger knowledge base is needed to support countries to design and implement more sustainable, adequate and efficient programmes.

Differences by country income level

- The marked differences between programmes in high-, middle- and low-income countries indicate that the income level of a country is associated with the size and quality of the programmes and their level of consolidation into national policy.
- Programmes in high- and upper-middle-income countries are generally more established, meaning that they have consolidated regulatory frameworks and stronger institutionalization. Programmes in low-income countries, by contrast, have less consolidation in national policy frameworks. Out of a sample of 94 countries, most (86 percent) high- and upper-middle-income countries had either a policy or a legal document in place which regulated the national school feeding programme. In low-income countries, most (52 percent) did not have a policy or legal framework. A significant fraction of middle- and low-income countries (16 percent and 18 percent respectively) noted that a policy was being drafted.
- Despite these challenges, there is increasing political support for school feeding programmes and demand for evidence-based guidance on school feeding. The search for knowledge is indicated by the demand for high-quality analyses, government participation in international fora and the extent to which governments, especially those in low-income countries, have prioritized school feeding. Despite overall financial constraints, at least eight low-income countries have started national school feeding programmes since 2000. There is a clear emphasis here not only on scaling up existing programmes, but also on improving programme quality and efficiency.
- The available information confirms that there is indeed a transition to more sustainable, efficient and consolidated programmes as country income levels rise. There is evidence to suggest that there is an income threshold after which countries are better able to afford and manage school feeding programmes. Thus, there is a strong case for donor

and partner support to low-income countries to design and implement more efficient, effective and sustainable programmes.

The importance of school feeding

- There are two main reasons why countries may choose to implement school feeding programmes: (1) to address social needs and provide a social safety net during crises; and (2) to support child development through improved learning and enhanced nutrition.
- In the short term, as a social safety net, school feeding provides direct support to the poor by transferring income to families. In high- and middle-income countries, school feeding is often integrated in broader social welfare systems. The challenge in low-income countries is how to ensure similar institutionalization, sustainability and efficiency of these programmes, given limited resources and capacities.
- School feeding supports families in securing education for their children, especially female children who are often differentially excluded from education. These programmes thus promote human capital development in the long run and help to break intergenerational cycles of poverty and hunger. School feeding contributes to a child's readiness to learn and ability to participate in his or her own educational process. The benefits are particularly strong for girls.
- School feeding can only contribute if the other major elements that have an impact on learning, such as teachers, textbooks, curriculum and an environment conducive to learning, are also in place. Ensuring that these interventions are provided is a prerequisite. Additionally, care should be taken to avoid using teachers or education staff to prepare food, since this merely taxes the system that one is seeking to enhance.
- The nutritional status of school-aged children impacts their physical development, health, learning and cognitive potential, and subsequently their school attendance and educational achievement. School feeding programmes can be designed to support nutrition issues.
- There is a third important aspect of school feeding for which we still have limited empirical evidence: the potential benefits to the local economy and the community of purchasing food as close as possible to the schools. Linking programmes to the agriculture sector may have direct economic benefits and can potentially benefit the entire community as well as the children. This can also help the sustainability of the programme and create predictable and structured markets for local produce. This approach has been identified as one of the critical elements in the transition to sustainable programmes.
- There are several challenges that the public sector needs to tackle related to the management and implementation of school feeding, including: strengthening institutional capacity; maintaining oversight and issuing national nutrition standards; ensuring accountability and transparency in the use of public funds; and coordinating

actions with other sectors.

- School feeding can achieve much more than feeding children. However, while there are multiple potential benefits, they depend on the design features of a programme, and not all benefits may be realized in one programme. Thus, it is important to determine the objectives of a particular programme and make sure that the programme design (in terms of modalities chosen, type of food given to the children and targeting criteria) corresponds to its objectives.

The costs of school feeding

- Overall, countries are remarkably consistent in their relative investment in school feeding. While there is considerable variation in the country-by-country school feeding costs – ranging from less than US\$20 to over US\$1,500 per child per year – there is consistency when these costs are compared with other public investments in this age group. In this report, we express school feeding costs per child as a proportion of the amount that countries choose to invest in the education of the same children. In high- and middle-income countries – and in a large number of low-income countries as well – this proportion is in the range of from 15 to 20 percent.
- There is a trend for school feeding costs to become a much smaller proportion of education costs as income levels rise. These analyses suggest that the main reason for this is an increased investment per child in primary education as GDP rises, but a fairly stable investment in food. In other words, as countries develop, they increase their budget and spending on education, which makes the cost of school feeding relatively smaller, or more affordable.
- Low-income countries are characterized by a very wide range of costs; there are some countries where the per child cost of school feeding is more than the per child cost of education. This means that the greatest opportunities to contain costs may be in countries where costs are currently the highest.
- An initiative to calculate the returns of school feeding by WFP and BCG through economic modelling indicates that school feeding's potential to improve children's health, education and increased productivity greatly outweighs the costs of a programme. Among a sample of nine countries, the cost-benefit ratio was calculated to range from 1:3 to 1:8. Thus for each dollar a government spends on school feeding, it could potentially receive at least three dollars back in the form of various economic returns.
- While the body of evidence demonstrating the benefits of school feeding programmes is growing, obtaining information on the costs of school feeding programmes remains challenging. Understanding the cost drivers associated with the different school feeding models remains a key area for future research. An equally important area for research is to better understand how countries can transition to more cost-effective models.

The role of development partners in school feeding

- In the last few years, partners have increased their level of participation and investment in school feeding activities. This may be because they are responding to countries' increased demand for support and also because they have recognized the role that school feeding can play to achieve social protection and child development goals. Despite these positive developments, there is no true global coordination mechanism to bring together all the relevant players and countries to disseminate knowledge, coordinate action and facilitate learning. Thus, formalizing partner coordination seems to be a matter of priority, especially at the global level.
- One of the preconditions for these programmes to be sustainable is for the education and agriculture sectors to come together in support of them. On the education side, efforts are being made to reinforce the partnerships that support the quality of education and that are vital to ensure an adequate learning environment for children. WFP's renewed partnership with UNICEF and UNESCO, called "Nourishing Bodies, Nourishing Minds", will contribute to strengthening the quality of support on the education side. On the agriculture side, building platforms of collaboration along the supply chain has proven to be successful in several countries, although a lot more remains to be done, including finding ways to leverage the support of the private sector more efficiently. All of these efforts should be underpinned by a strong learning agenda, which is being supported by several academic institutions and specialized agencies. Measuring the impact of partnerships and documenting what works in which context will be key to establishing effective mechanisms for collaboration in the future.

Research agenda

The following are the main areas of needed research that were identified during the preparation of this report:

- **A database on school feeding programmes in high-income countries that complements the information already available for middle- and low-income countries, including the size, coverage and functioning of programmes.** There is a clear gap in the information available on school feeding in high-income countries. Current data are not accurate enough, which is why we have resorted to estimates of beneficiary numbers and total investment. Efforts need to be made to systematically gather this information at a central level – generally this information is found at state or district levels but is not aggregated at a central level – which would strengthen the knowledge base for school feeding worldwide.
- **An analysis of the efficiency of school feeding programme targeting in low-income countries.** Information available to date suggests that there is low coverage of school feeding programmes in low-income countries (18 percent), and that these programmes are predominantly targeted to geographical areas. What we do not know is how efficient these programmes are in reaching the poor. Analyses like the one that was done in Ghana would greatly help to improve programme quality and efficiency.

- **An analysis of the cost drivers of school feeding programmes.** Data on per capita costs of school feeding are much more robust now than five years ago, and there are now benchmarks available. However, there is a need to explore the cost drivers of programmes. In other words, we need to understand why costs may be low in one country and very high in another, and produce guidance for countries on how to estimate costs along the supply chain and optimize operations.
- **Country impact evaluations of different types of national school feeding programmes.** There is a surprisingly low number of school feeding impact evaluations across all income groups, which is a lost opportunity to improve programme effectiveness. Moving forward, there is a clear need to strengthen national monitoring and evaluation systems.
- **Studies that assess the impact of purchasing food from smallholder farmers for school feeding operations.** There is a need to learn from programmes that are designed to purchase from smallholder farmers (e.g. the programme in Brazil and WFP's P4P experience). This work should also be linked to a better understanding of how to set up the supply chain in different countries, including the potential trade-offs and risks.
- **Studies on how high-income countries target their programmes as well as the feasibility of introducing individual targeting and cost-recovery mechanisms in middle- and low-income countries.** High-income countries have introduced elements of cost recovery in their programmes, meaning that children who pay for their meals are indirectly covering the costs of children in vulnerable families that cannot afford them. There is a need to understand how middle- and low-income countries can refine their targeting methodologies with the possible introduction of cost-recovery mechanisms.
- **Guidance on food quality standards and food safety.** There is a need to study how countries are tackling the issue of food quality standards and nutritional guidance for school feeding, and issue guidance on these issues for countries that wish to strengthen this dimension of their programmes.
- **An analysis of how countries have transitioned from external support to country financing and management of programmes.** Despite recent work to document the transition from external support to nationally-managed programmes (part of which is presented in this report), there is still a knowledge gap about how countries have managed to finance these programmes and what the financial transition looks like.

As part of ongoing efforts to disseminate practical knowledge on school feeding, two additional analyses will be published by WFP, the WB and PCD in 2013. The first one is a compilation of case studies from several countries, which will provide information on the practical experience of implementing school feeding. The second will be a compilation of lessons learned from countries that have transitioned to nationally-owned programmes. In the coming years, at least three impact evaluations will be undertaken by PCD in an effort to further strengthen the evidence base, and several technical working papers will be written to continue building the knowledge base.



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Annex I

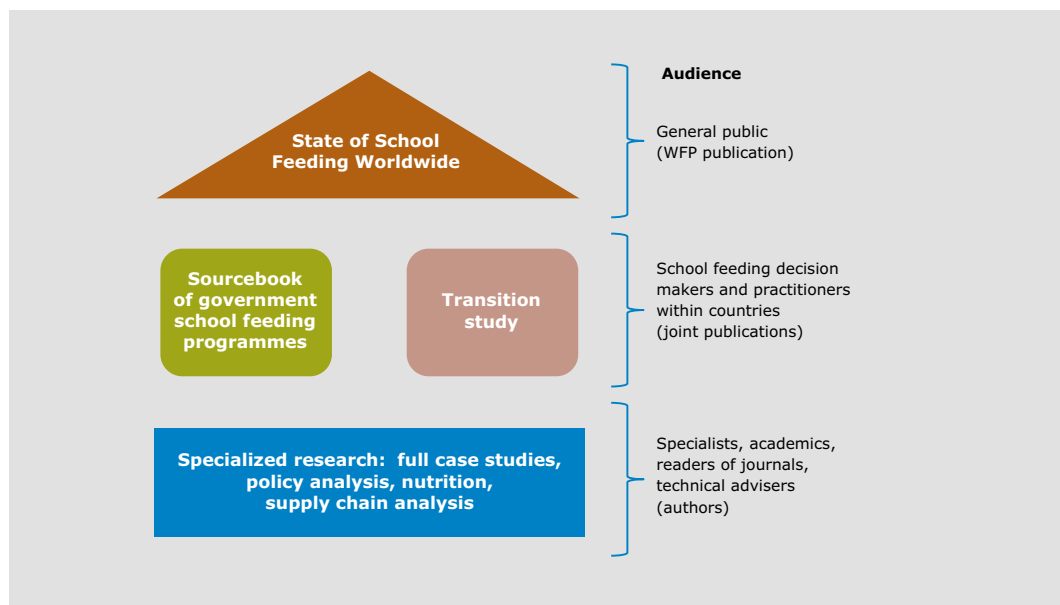
World Food Programme, World Bank and Partnership for Child Development partnership publications

In 2009, building on the joint analysis of *Rethinking School Feeding*, WFP, the WB and PCD came together to pool expertise and build on their comparative advantages to strengthen the evidence base for sustainable national school feeding programmes.

Through this strong platform, the partnership works closely with governments and cross-sectoral partners to support the work of school feeding policy-makers and programmers.

Key partnership publications

A key priority of the partnership is to ensure that information is made available for country governments to assist them in their decision-making. With this in mind, the partnership has been working in unison on a number of resources for release in 2013, the first being the current publication: *The State of School Feeding Worldwide*. This publication establishes the current state in the knowledge of school feeding across the globe, and highlights research gaps and challenges. As depicted in the figure below, *The State of School Feeding Worldwide* is supported by two specialized publications, *The School Feeding Sourcebook* and *The Transition Study*, which will be released in 2013. These three publications are underpinned by specialized research and programme guidance, the current state of which is presented in the Partnership Resources section.



The School Feeding Sourcebook

The sourcebook, to be released in 2013, contains case studies of government school feeding programmes in low- and middle-income countries, and is aimed at decision-makers and practitioners. It was developed in response to the demand in low- and middle-income countries for more information on how other countries are designing and implementing their school feeding programmes. The focus of the sourcebook is 12 country case studies (Brazil, Botswana, Cape Verde, Chile, Côte d'Ivoire, Ecuador, Kenya, India, Mexico, Namibia, Nigeria and South Africa) of school feeding programmes which provide meals to approximately 178 million children every day. The sourcebook will provide analysis of the trade-offs associated with alternative school feeding models, along with specific lessons learned and examples of good practices.

The Transition Study

This study, also to be released in 2013, explores the transition process as countries move from externally-supported to government-run school feeding programmes. The transition study provides an in-depth analysis of this transition process, supported by the six case studies (Botswana, Cape Verde, Dominican Republic, Ecuador, El Salvador and Namibia). It adds to the findings of the sustainability chapter in *Rethinking School Feeding*.

These publications are also underpinned by a collection of research working papers.

Selected partnership resources

Listed below are some of the key resources that are a result of this ongoing partnership.

Selected publications

- Bundy, D.A.P., Burbano, C., Grosh, M., Gelli, A., Jukes, M.C.H. & Drake, L.J. 2009. Rethinking school feeding: social safety nets, child development and the education sector. Directions in Development: Human Development. Russian edition (2010), Arabic/ Chinese/ French/ Portuguese/ Spanish editions (2011). Washington DC, The World Bank and WFP.
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- Masset, E. & Gelli, A. 2012. (in press) Improving community development by linking agriculture, nutrition and education: Design of a randomised trial of “home-grown” school feeding in Mali. Accepted. *Trials*.

Programme guidance

The partnership has developed a range of toolkits and planning guides to support the design and implementation of sustainable national school feeding programmes. These are described below.

Tool	Description	Link
School Feeding Monitoring & Evaluation Toolkit	This M&E toolkit is intended for use by programme managers within national government, administrators, schools and other stakeholders. Developed in response to a need for new technical guidance and knowledge management tools for programme design, it includes four main components: a data dictionary, example data collection forms and survey tools, M&E system assessment tools and M&E guidelines.	http://bit.ly/14HISjT
School Feeding Menu Planner	The School Feeding Menu Planner is a Web application designed to support the menu-planning process.	http://rationplanner.hgsf-global.org

School Feeding Investment Case	Developed in collaboration with BCG, the investment case model assesses the costs and benefits of school feeding programmes. The model produces a benefit-cost ratio that can be used to illustrate that school feeding can represent an investment with quantifiable returns over the lifetime of a beneficiary.	http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp255155.pdf
The Systems Approach for Better Education Results (SABER)	The SABER framework is used for assessing the state of school feeding policy in a country. The approach, developed by the WB in cooperation with WFP and other partners, is part of a larger WB education benchmarking exercise. By providing a snapshot of school feeding in a country, structured around the five standards of quality and sustainability, it can serve as a baseline to track progress in capacity development.	http://worldbank.org/education/saber
Building Consensus: A Guidance Note on School Feeding Stakeholder Workshops	A stakeholder workshop brings the government and partners together to build a shared understanding of school feeding, to create a national vision and to agree on a clear roadmap for realizing this vision. Practical instructions for planning and organizing a stakeholder workshop are provided in this manual.	http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp255153.pdf
A Guidance Note to Develop a National Sustainability Strategy	A sustainability strategy outlines how the government can strengthen its national school feeding programme in collaboration with partners. The strategy includes an analysis of the school feeding situation and the capacity development needs and establishes a roadmap with milestones, objectives, timelines and responsibilities for strengthening national school feeding capacity. This Note guides the process of drafting a sustainability strategy.	http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp255149.pdf
National Programmes Cost Assessment	This tool allows provides a method for assessing and analysing the costs of a national school feeding programme. It also contains instructions for drafting cost scenarios that can inform government decision-making by showing the implications of different design and scale-up options.	http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp255154.pdf

School feeding Case studies

Botswana

- PCD. 2011. Home-grown school feeding in Botswana: A country profile case study. Botswana Institute for Development Policy Analysis. London, PCD.
- Isler, A. 2012. Botswana: The transition to a national school feeding programme. Rome, WFP.

Brazil

- Sidaner, E., Balaban, D. and Burlandy, L. 2012. The Brazilian school feeding programme: An example of an integrated programme in support of food and nutrition security. Public Health Nutrition Journal, 6: 1-6.

Cape Verde

- WFP. 2012. Cape Verde: The transition to a national school feeding programme. Case study commissioned by the Government of Cape Verde, United Nations Joint Programme in Cape Verde and WFP.

Chile

- Espinoza, M.A., Palma J.I. & Gelli, A. 2011. Case study on local development initiatives of the school catering programme in Chile. London, PCD.

Côte d'Ivoire

- DNC, WFP & PCD. 2010. A case study of the HGSF programme in Côte d'Ivoire. London, PCD.

Dominican Republic

- WFP. 2012. A situation analysis of school feeding in Dominican Republic. Rome, WFP.

Ecuador

- WFP. 2012. A study on the evolution of the school feeding in Ecuador. Rome, WFP.
- WFP. 2012. Situation analysis of the national school feeding programme in Ecuador. Rome, WFP.

El Salvador

- WFP. 2009. School feeding in El Salvador: Preliminary findings of a case study of transition. Rome, WFP.
- WFP. 2012. El Salvador: Was the school feeding handover to the Government successful? Rome, WFP.

Ghana

- PCD. 2011. Ghana school feeding program: Re-tooling for a sustainable future. Ghana Institute of Management and Public Administration and University of California Berkeley Haas School of Business. London, PCD.

India

- PCD. 2011. The school feeding programme in India: A case study. MS Swaminathan Research Foundation. London, PCD.

Kenya

- Kenya Institute for Public Policy Research and Analysis, Kenya Medical Research Institute, Njaa Marufuku Kenya & PCD (under final government review). The case study of Njaa Marufuku Kenya. London, PCD.
- Partnership for Child Development. 2013. Home-grown school feeding in Kenya: A country profile case study. London, Partnership for Child Development.

Malawi

- Burbano, C., Neeser, K. & Bundy, D.A.P. 2009. Cost analysis of school feeding and school health options in Malawi. London, PCD.

Mali

- Diallo, A.S. 2012. Evolution of school feeding in Mali. English/French editions. Bamako, PCD.

Mexico

- Government of Mexico & WFP. 2012. Sistema nacional para el desarrollo integral de la familia (DIF). Estudio de Caso: Programa Desayunos Escolares de Mexico.

Namibia

- Ellis, J. 2012. The Namibian school feeding programme: A case study. London, PCD.
- Government of Namibia & WFP. 2012. The Namibian school feeding programme transition case study. Rome, WFP.

Nigeria

- Shaad, B., Jaisinghani, N. & Gelli, A. 2010. Nigeria's Osun State home-grown school feeding and health programme case study. London, PCD.
- Aigbedion, A., Chamorro, P., Duggan, R. & Fujiwara, K. 2012. Osun State home-grown school feeding programme: Improving sustainability through increased local farmer participation. London, PCD.

South Africa

- Rendall-Mkosi, K., Wenholds, F & Sibanda, N. B. 2012. Case study of the national school nutrition programme in South Africa. London, PCD.

Government strategy plans

The following national school feeding policies and plans were developed through partnership support:

- State of Osun, Nigeria. 2012. Elementary school feeding and health programme transition strategy. Osogbo, Government of Osun State, Nigeria.
- The Republic of Ghana. 2011. Home-grown school feeding technical assistance plan. Accra, Government of Ghana.
- The Republic of Kenya. 2012. Home-grown school meals programme technical development plan. Nairobi, Government of Kenya.
- The Republic of Mali. 2013. Stratégie nationale de suivi-évaluation- programme national d'alimentation scolaire. Bamako, Government of Mali.

Further resources

The listing above is just a selection of the partnership's school feeding resources. Further resources can be downloaded from the following websites:

- www.hgsf-global.org
- www.wfp.org/school-meals
- www.schoolsandhealth.org
- www.un.org/esa/socdev/poverty/PovertyForum/Documents/The%20Essential%20Package.pdf
- www.freshschools.org/Documents/FRESHandEFA-English.pdf

Annex II

Country-specific school feeding indicators

The table in this Annex presents country-specific information on school feeding programmes. It is the first systematic attempt since *Rethinking School Feeding* to gather a set of key indicators. The indicators are defined below and their sources are noted. More detailed information is provided in footnotes. Cells with dashes indicate that information was not available to us at the time of publication.

Steps have been taken to ensure that the information presented in this annex is as accurate as possible. However, there may be cases where country information varies from what is presented. The intention of WFP and partners is to continue efforts to improve the quality and accuracy of country school feeding indicators. For any questions, please contact us at sf_team@wfp.org.

Income level: All countries in the report as classified as low income (**L**), lower-middle income (**LM**), upper-middle income (**UM**), or high and upper-middle income (**H**) as per the World Bank definition.

Reported implementers of school feeding programme: A school feeding programme may be managed by the government, WFP and/or another organization. This indicator provides information on who is managing and funding the programme. It does not seek to provide information on specific implementation arrangements such as the way the supply chain is set-up (e.g. decentralized versus centralized programmes). Information on the implementers of the programme was obtained from the WFP global school feeding survey for 2011.

Reported targeting approach: A national school feeding programme may have individual (**I**), geographical (**G**) or universal (**U**) targeting. See Box 1 for the definition of targeting. This information was obtained from the WFP global school feeding survey for 2011.

Reported or estimated beneficiaries: The number of pre-primary-, primary- and secondary-school children who receive some form of school feeding (e.g. a hot meal, biscuit or snack or take-home ration) from the national school feeding programme. Beneficiary figures were obtained from several sources including the WFP global school feeding survey, or were estimated when the information could not be obtained. Beneficiary data reported here is for 2011. Estimated beneficiary figures are italicized and grey in the table.

Estimated coverage: The proportion of school-attending children who are beneficiaries of the national school feeding programme. Information presented here is limited to primary-school students only. The numerator is the number of primary-school feeding beneficiaries

in 2011 as reported in the WFP global school feeding survey and other sources. The denominator is the number of pupils in primary school as reported by the World Bank in 2011. When this information was not available, the number of pupils in primary school was estimated using data from 2011 or the latest available year from UNESCO and the World Bank.

Estimated cost: The estimated average cost of school feeding per child per year in 2008 US\$ as reported in Gelli A. and Daryanani R. (forthcoming).

Table A2.1 **Country-specific indicators of school feeding**

Country	Income level ¹	Reported implementers of school feeding programme ²			Reported targeting approach ³	Reported or estimated beneficiaries (1,000s) ⁴	Estimated coverage ⁵	Estimated cost ⁶
		Government	WFP	Other				
Afghanistan	L		✓	✓	G	1 841	35%	—
Albania	LM	✓			—	111	—	—
Algeria	UM		✓		G	31	—	24
Angola	UM	✓		✓	G	221	—	—
Antigua and Barbuda	UM	✓			—	7	—	—
Argentina	UM	✓			G	3 002	—	158
Armenia	LM		✓		G	38	32%	21
Australia	H	✓			G	5	—	512
Austria	H					N/A		
Azerbaijan	UM					N/A		
Bahrain	H	✓			—	58	—	—
Bangladesh	L	✓	✓	✓	G	1 930	11%	20
Barbados	H	✓			—	14	—	—
Belarus	UM	✓			—	228	—	—
Belgium	H					N/A		
Belize	LM	✓			—	26	—	—
Benin	L	✓	✓		G	324	18%	23
Bermuda	H	✓			—	3		—
Bhutan	LM	✓	✓		G	82	33%	53
Bolivia	LM	✓	✓	✓	U	1 906	100%	46
Bosnia and Herzegovina	UM	✓			—	112	—	—
Botswana	UM	✓			U	330	—	472
Brazil	UM	✓			U	47 271	—	30
Bulgaria	UM	✓			—	166	—	—
Burkina Faso	L	✓	✓	✓	U	2 209	100%	44
Burundi	L		✓		G	190	10%	32
Cambodia	L		✓	✓	G	756	33%	48
Cameroon	LM		✓	✓	G	43	1%	91
Canada	H	✓			I	293	—	—
Cape Verde	LM	✓			U	86	97%	128
Central African Republic	L		✓		G	284	44%	70
Chad	L		✓		G	255	15%	55
Chile	UM	✓			I	2 263	—	260

Country	Income level ¹	Reported implementers of school feeding programme ²			Reported targeting approach ³	Reported or estimated beneficiaries (1,000s) ⁴	Estimated coverage ⁵	Estimated cost ⁶
		Government	WFP	Other				
China	UM	✓			G	26 000	—	—
Colombia	UM	✓	✓		U	3 334	—	67
Comoros	L	✓			—	20	—	—
Republic of Congo	LM		✓	✓	G	233	33%	46
Costa Rica	UM	✓			U	603	—	95
Côte d'Ivoire	LM	✓	✓		G	374	14%	20
Croatia	H	✓			U	152	—	—
Cuba	UM	✓			I	956	—	—
Cyprus	H	✓			—	35	—	—
Denmark	H					N/A		
Djibouti	LM	✓	✓		G	28	43%	41
Dominica	UM	✓			—	5	—	—
Dominican Republic	UM	✓			U	1 372	—	81
DR Congo	L		✓		G	1 176	11%	—
DR Korea	L		✓		G	1 922	—	—
Ecuador	UM	✓	✓		U	1 789	—	45
Egypt	LM	✓	✓		G	7 002	64%	—
El Salvador	LM	✓			U	1 313	85%	22
Equatorial Guinea	H					N/A		
Eritrea	L					N/A		
Estonia	H	✓			—	47	—	—
Ethiopia	L		✓		G	681	5%	67
Finland	H	✓			U	795	—	658
France	H	✓			I	3 320	—	1 586
Gabon	UM					N/A		
The Gambia	L	✓	✓		G	159	69%	—
Georgia	LM					N/A		
Germany	H					N/A		
Ghana	LM	✓	✓		G	352	7%	136
Grenada	H	✓			—	9	—	—
Guatemala	LM	✓			U	3 052	94%	30
Guinea	L	✓	✓		G	553	38%	51
Guinea-Bissau	L		✓		G	126	45%	—
Guyana	LM	✓			G	17	17%	—
Haiti	L	✓	✓	✓	U	2 155	100%	—

Country	Income level ¹	Reported implementers of school feeding programme ²			Reported targeting approach ³	Reported or estimated beneficiaries (1,000s) ⁴	Estimated coverage ⁵	Estimated cost ⁶
		Government	WFP	Other				
Honduras	LM	✓	✓		U	1 460	100%	57
Hong Kong SAR, China	H	✓			I	244	—	408
Hungary	H	✓			I	249	—	—
India	LM	✓			U	113 600	79%	—
Indonesia	LM	✓	✓		G	125	0%	21
Iran	UM	✓	✓		U	3	—	—
Iraq	LM		✓		G	555	11%	—
Ireland	H	✓			I	91	—	435
Israel	H	✓			—	502	—	—
Italy	H	✓			I	1 802	—	1 278
Jamaica	UM	✓			U	311	—	—
Japan	H	✓			U	9 770	—	799
Jordan	UM	✓			G	115	—	—
Kazakhstan	UM	✓			—	629	—	—
Kenya	L	✓	✓		G	1 991	28%	38
Kuwait	H	✓			—	136	—	—
Kyrgyzstan	L	✓			U	301	77%	—
Lao PDR	LM	✓	✓	✓	G	177	19%	—
Latvia	UM	✓			—	73	—	—
Lebanon	UM	✓			—	295	—	—
Lesotho	LM	✓	✓		G	445	100%	28
Liberia	L		✓	✓	G	648	100%	95
Luxembourg	H	✓			—	23	—	—
Madagascar	L	✓	✓	✓	G	237	6%	115
Malawi	L		✓	✓	G	790	23%	48
Malaysia	UM	✓			—	1 916	—	—
Mali	L	✓	✓	✓	G	354	17%	117
Malta	H	✓			—	16	—	—
Marshall Islands	LM	✓			—	4	—	—
Mauritania	L	✓	✓		G	186	35%	64
Mauritius	UM	✓			—	75	—	—
Mexico	UM	✓			I	5 164	—	59
Moldova	LM	✓			—	70	—	—
Mongolia	LM	✓			—	135	—	—
Morocco	LM	✓			G	1 423	31%	—

Country	Income level ¹	Reported implementers of school feeding programme ²			Reported targeting approach ³	Reported or estimated beneficiaries (1,000s) ⁴	Estimated coverage ⁵	Estimated cost ⁶
		Government	WFP	Other				
Mozambique	L		✓	✓	G	427	8%	50
Myanmar	L		✓	✓	G	310	6%	67
Namibia	UM	✓			I	225	—	—
Nepal	L	✓	✓	✓	G	471	9%	56
Netherlands	H					N/A		
New Zealand	H					N/A		
Nicaragua	LM	✓	✓		U	967	98%	54
Niger	L	✓	✓		G	168	9%	43
Nigeria	LM	✓			G	155	1%	45
Norway	H					N/A		
Pakistan	LM		✓		G	2 078	11%	62
Palau	UM	✓			—	1	—	—
Panama	UM	✓			U	461	—	36
Paraguay	LM	✓			G	10	1%	—
Peru	UM	✓			G	3 000	—	37
Philippines	LM		✓		G	92	1%	45
Poland	H	✓			G	730	—	—
Portugal	H	✓			U	1 615	—	—
Puerto Rico	H	✓			—	191	—	—
Qatar	H	✓			—	57	—	—
Romania	UM	✓			—	538	—	—
Russian Federation	UM	✓			G	2 647	—	—
Rwanda	L	✓	✓		G	541	16%	96
São Tomé and Príncipe	LM		✓		G	40	100%	—
Saudi Arabia	H	✓			—	2 121	—	—
Senegal	LM	✓	✓	✓	G	764	44%	53
Serbia	UM	✓			—	181	—	—
Seychelles	UM	✓			—	6	—	—
Sierra Leone	L		✓	✓	G	530	44%	69
Singapore	H	✓			—	188	—	—
Slovakia	H	✓			—	136	—	—
Slovenia	H	✓			—	68	—	—
Somalia	L		✓		G	76	30%	—
South Africa	UM	✓			G	8 821	—	64
Spain	H	✓			I	1 737	—	845

Country	Income level ¹	Reported implementers of school feeding programme ²			Reported targeting approach ³	Reported or estimated beneficiaries (1,000s) ⁴	Estimated coverage ⁵	Estimated cost ⁶
		Government	WFP	Other				
Sri Lanka	LM	✓	✓		G	1 264	59%	40
St. Kitts and Nevis	H	✓			—	4	—	—
St. Lucia	UM	✓			—	12	—	—
St. Vincent and the Grenadines	UM	✓			—	9	—	—
State of Palestine	LM		✓	✓	G	389	97%	—
Sudan ^a	LM		✓		G	1 630	34%	—
Swaziland	LM	✓			U	328	99%	36
Sweden	H	✓			U	1 181	—	535
Switzerland	H				N/A			
Syria	LM		✓		G	46	2%	—
Tajikistan	L		✓		G	330	48%	—
Tanzania	L	✓	✓	✓	G	1 275	15%	27
Thailand	UM	✓			G	1 677	—	85
Timor-Leste	LM	✓	✓		U	288	100%	—
Togo	L	✓		✓	G	40	3%	—
Tonga	LM	✓			—	8	—	—
Trinidad and Tobago	H	✓			—	84	—	225
Tunisia	UM	✓			G	240	—	—
Turkey	UM	✓			—	4 209	—	—
Uganda	L		✓		G	94	1%	29
Ukraine	LM	✓			—	758	—	—
United Kingdom	H	✓			I	3 791	—	646
United States	H	✓			I	45 000	—	389
Uruguay	UM	✓			I	256	—	—
Uzbekistan	LM	✓			—	959	—	—
Venezuela	UM	✓			U	4 031	—	189
Vietnam	LM	✓			—	3 409	—	—
Yemen	LM		✓		G	65	2%	—
Zambia	LM	✓	✓		G	2 112	73%	57
Zimbabwe	L				N/A			

¹ This classification follows the World Bank definition and is based on thresholds set on July 2012 according to per-capita 2011 gross national income (<http://data.worldbank.org/about/country-classifications>). The per-capita income thresholds for the three groups are as follows: \$1,025 or less for low income countries (L); \$1,026 to \$4,035 for lower-middle income countries (LM); \$4,036 to 12,475 for upper-middle income countries (UM); and \$12,476 or more for high income countries (H).

- ² In the WFP global school feeding survey, countries report if they have a school feeding programme and if so, if the programme is managed by the government, WFP and/or another organization. Countries where WFP is providing technical assistance but not direct assistance in food provision are not counted as having a WFP programme. Countries which do not have a programme are noted by blank cells in the set of columns under "Implementer of school feeding programme". The rest of the cells, which provide information about the school feeding programme (e.g. targeting), are marked as not applicable (N/A) for such countries.
- ³ In the WFP global school feeding survey, countries reported the programme's targeting approach. Individually targeted programmes are those where children are selected according to demographic factors such as age, gender or poverty. For geographically targeted programmes, location determines one's eligibility. Certain locations may be selected according to indicators such as poverty, food-security prevalence or low educational achievement. Universal targeting is where all children, regardless of their age, socio-economic status or gender, are eligible to participate in the programme.
- ⁴ Beneficiary data was reported in the WFP global school feeding survey, or obtained from case studies, Web searches, publications and correspondence with high- and upper-middle-income countries. For countries where the information was not available, beneficiaries were estimated as described in Annex III and are for primary-school children only. Estimated beneficiary figures are italicized and grey in the table.
- ⁵ The proportion of school-attending children in primary school who are beneficiaries of the national school feeding programme. Coverage is not calculated for countries which have estimated beneficiaries, and is not presented for upper-middle and high-income-countries. The numerator is the reported number of primary-school feeding beneficiaries in 2011. The denominator is the number of pupils in primary school as reported by the World Bank in 2011. When this information was not available, the number of pupils in primary school was estimated using the reported primary school-age population and gross enrolment rate from 2011 or the latest available year from UNESCO and the World Bank. More information regarding the calculation is presented in Annex III.
- ⁶ Information on the estimated annual cost of school feeding per child was obtained from Gelli A. and Daryanani R. (forthcoming). It was collected from multiple sources including WFP project data, reports from government ministries, grey literature and published reviews. A dash in this column indicates that the information was not available.
- ^a Sudan figures include Sudan and South Sudan prior to the independence of South Sudan.

Annex III

Methodology and sources used for estimating beneficiaries, coverage and investment

This report draws on both primary and secondary sources for information about school feeding programmes in countries around the world. The primary source for quantitative data is the WFP global school feeding survey fielded in January-March 2012. Additional information for countries not in the survey was obtained from a comprehensive review of case studies, publications and reports. A specific effort was made to obtain information from high-income countries through direct contact with government focal points. Finally, for countries where insufficient information was obtained, parameters were estimated using the available information and other sources from the WB and UNESCO.

The first chapter of this report presents estimates for the following key indicators: number of school feeding beneficiaries, type of targeting used by countries, coverage of programmes and investment. As programme expenditure figures by country are not available, investment is defined here as the total amount budgeted for school feeding or the estimated budget based on average costs. Complementary information from other sources used is cited. Sample sizes vary by indicator as information from some sources was not available for every country.

Data on costs come from a different source, as information from the WFP global school feeding survey was not reliable. The study presented here is the most recent and complete source of data on school feeding costs covering 74 countries, including 12 high-income, 39 middle-income and 23 low-income countries, using data from 2008.⁷⁵

Qualitative information presented in this report was obtained from several sources, the main one being case studies conducted by WFP, the WB and PCD between 2010 and 2012. Additional information was contributed by WFP country office staff, key partners (such as the WB, PCD, SFT and GCNF) and government counterparts. Qualitative information has gone through an internal review process. Country case studies have been vetted by WFP country office staff.

This annex proceeds as follows. A detailed description is presented regarding how estimations of beneficiaries, coverage costs and investment were calculated when insufficient information was obtainable from the WFP global school feeding survey and other sources. It concludes with a summary of the limitations from the estimations.

⁷⁵ Gelli, A. and Daryanani, R. (forthcoming). Are school feeding programmes in low-income settings sustainable? Insights on the costs of school feeding compared to investments in primary education. Food and Nutrition Bulletin.

Estimations

The number of beneficiaries and level of investment was estimated for countries where information was not available from the WFP global school feeding survey or other sources as follows:

- Beneficiaries were estimated using the average coverage in countries from the same income group and the number of primary-school children as reported by the WB and UNESCO.
- Investment was estimated using the average costs of school feeding in countries from the same income group as reported in Gelli and Daryanani (forthcoming) and the number of beneficiaries (from the survey or estimated).

Because the estimates of beneficiaries use average coverage values, the approach used to calculate coverage is presented first.

Coverage

School feeding coverage in country i (C_i) is defined as the number of children receiving school feeding in primary schools (B_i) divided by the number of pupils in primary schools (P_i):

$$C_i = \frac{B_i}{P_i}$$

Variables description

B_i : number of children receiving school feeding in primary schools in country i as reported in the WFP global school feeding survey or from other sources.

P_i : number of pupils in primary schools as reported by the WB. For countries where this information was not available, the figure was estimated as follows:

$$P_i(\text{estimated}) = \text{SAP}_i * \text{GER}_i / 100$$

where:

SAP_i = primary school-age population in country i (source: UNESCO Institute for Statistics 2011); and

GER_i = gross enrolment rate in country i (source: World Bank World Development Indicators 2010). This calculation takes into account out-of-age children in primary schools, which would not be the case with net enrolment.

Coverage estimates range between 0 and 100 percent by definition, as there cannot be more beneficiaries than children at school (pupils or enrolees).

In addition to country-specific estimates, average coverage by income group x (see Box 2 for how income groups are defined) was calculated, taking into account the population size P (weight) as follows:

$$C_x = \frac{\sum B_{i,x}}{\sum P_{i,x}}$$

For each income level x , the total number of school feeding beneficiaries $\sum B_{i,x}$ was divided by the total number of pupils $\sum P_{i,x}$ in countries classified in that income group.

Estimates of coverage by income group are presented in Table A3.1 below.

Table A3.1 **Average coverage by income level**

	Average coverage
Low-income countries (n=32)	18%
Middle-income countries (n=35)	49%
High- & upper-middle-income countries (n=37)	63%

Source: WFP global school feeding survey, other sources, World Bank and UNESCO. N=104 countries.

The coverage in high and upper-middle income countries was used for the estimations, but is not presented in the text due to the small number of high-income countries and the reliability of the estimate.

Beneficiaries

Table A3.2 presents the sources from which estimates of beneficiaries were obtained. The WFP global school feeding survey provided estimates of beneficiaries for 99 countries. Case studies, publications, websites and correspondence with government focal contacts provided estimates for an additional 21 countries. The number of beneficiaries was estimated for the remaining 49 countries for which a prior publication had documented the presence of a national school feeding program.⁷⁶ Sources for countries where beneficiary information was obtained from case studies, publications and websites are listed in Table A3.3.

⁷⁶ Database from the publication: Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. 2011. Rethinking school feeding: Social safety nets, child development and the education sector. Washington, DC, World Bank.

Table A3.2 Sample by source of information for the number of beneficiaries in national school feeding programmes

Source	Number of countries	Country names
WFP Global School Feeding Survey – sent to WFP country offices	82	Afghanistan, Algeria, Angola, Armenia, Azerbaijan, Bangladesh, Benin, Bhutan, Bolivia, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Colombia, Democratic Republic of Congo, Republic of Congo, Côte d'Ivoire, Cuba, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Gambia, Georgia, Ghana, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, India, Indonesia, Iran, Iraq, Jordan, Kenya, Democratic Republic of Korea, Kyrgyz Republic, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Sudan, South Sudan, Pakistan, Panama, Peru, Philippines, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, Sri Lanka, State of Palestine, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Uganda, Yemen, Zambia, Zimbabwe
WFP Global School Feeding Survey – sent to government focal points ^a	17	Canada, Chile, China, Costa Rica, Finland, Mexico, Morocco, Netherlands, Norway, Portugal, Russian Federation, South Africa, Sweden, Tunisia, United Kingdom, United States, Uruguay
Case studies, publications and websites	15	Australia, Belgium, Botswana, Croatia, Equatorial Guinea, Gabon, Guyana, Hong Kong, Ireland, Jamaica, Japan, Nigeria, New Zealand, Paraguay, Venezuela
Correspondence with high-income countries	6	Austria, Denmark, France, Germany, Poland, Switzerland
Estimations	49	Albania, Antigua and Barbuda, Argentina ^b , Bahrain, Barbados, Belarus, Belize, Bermuda, Bosnia and Herzegovina, Bulgaria, Comoros, Cyprus, Dominica, Estonia, Grenada, Hungary, Israel, Italy, Kazakhstan, Kuwait, Latvia, Lebanon, Luxembourg, Malaysia, Malta, Marshall, Mauritius, Moldova, Mongolia, Palau, Puerto Rico, Qatar, Romania, Saudi Arabia, Spain, Serbia, Seychelles, Singapore, Slovak Republic, Slovenia, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Tonga, Trinidad and Tobago, Turkey, Ukraine, Uzbekistan, Vietnam
Total	169	

^a Countries that completed part of the survey but did not provide complete information on beneficiaries are not listed here (Spain, Argentina and Hungary). Instead, they are listed in estimations.

^b The government focal point contact completed the survey, but provided beneficiary numbers for Mendoza province only. Rather than use that figure, the number of beneficiaries in the country was estimated.

Table A3.3 Sources for 15 countries where beneficiary information was obtained from case studies, publications and websites

Country	Source
Australia	Website: http://www.deewr.gov.au/Schooling/Pages/TheSchoolNutritionProgram.aspx
Belgium	Harper, C., Wood, L. and Mitchell, C. (2008). The provision of school food in 18 countries. School Food Trust.
Botswana	Partnership for Child Development. 2011. Home-grown school feeding in Botswana: A country profile case study. Botswana Institute for Development Policy Analysis. London, Partnership for Child Development.
Croatia	Website: http://public.mzos.hr/Default.aspx?sec=2498
Equatorial Guinea	WFP, Global School Feeding Report 2006.
Gabon	WFP, Global School Feeding Report 2006.
Guyana	Website: http://www.SchoolsandHealth.org
Hong Kong	Harper, C., Wood, L. and Mitchell, C. (2008). The provision of school food in 18 countries. School Food Trust.
Ireland	Harper, C., Wood, L. and Mitchell, C. (2008). The provision of school food in 18 countries. School Food Trust.
Jamaica	WFP, Global School Feeding Report 2006.
Japan	Oji, M., Promoting dietary education through school lunch programmes in Japanese schools, Director of School Health Education Division, Workshop on School Feeding System in APEC Economies, 28-29 June 2012.
Nigeria	Aigbedion, A., Chamarow, P., Duggan, R. and Fujiwara, K. (2012). Osun state home-grown school feeding programme: Improving sustainability through increased local farmer participation. London, Partnership for Child Development.
New Zealand	Harper, C., Wood, L. and Mitchell, C. (2008). The provision of school food in 18 countries. School Food Trust.
Paraguay	US Department of Labor, August 2009 and WFP, Global School Feeding Report 2006
Venezuela	WFP, Global School Feeding Report 2006.

In order to estimate the school feeding beneficiaries in country i ($B_{i,estimated}$), the coverage by income group (C_x) was multiplied by the number of pupils in primary school in country i (P_i):

$$P_i(estimated) = C_x * P_i$$

P_i was obtained from the WB or estimated from UNESCO as discussed above. Of the 49 countries for which beneficiaries were estimated, 20 were high-income and 19 were upper-middle-income countries. Beneficiaries in these 39 countries were estimated using the average coverage in upper-middle- and high-income countries.

Investment

Calculations for global investment in school feeding are presented in Table 3 in the body of the report and reproduced below (Table A3.4). Investment here is defined as the total budget allocated to school feeding or an estimation of that budget. Information on country expenditures on school feeding is not available. Only countries which have a school feeding programme were included in the investment estimation.

Table A3.4 Four methods of estimating the total yearly investment in school feeding

Sample	Number of countries	Number of beneficiaries	Investment value	Estimated global investment (US\$)
Beneficiary sample 1	89	325 million	Budget allocated	30 billion
	89	325 million	Average cost per income group	58 billion
Beneficiary sample 2	154	368 million	Budget allocated for 89 countries which have data; average cost per income group for remaining 64 countries	47 billion
	154	368 million	Average cost per income group	75 billion

Source: WFP global school feeding survey, World Bank, UNESCO, Gelli A. and Daryanani R (forthcoming).

The approaches to the four calculations of estimated global investment reported in the table above were as follows:

- (1) Estimated global investment: US\$30 billion

Sample: 89 countries

Source: WFP global school feeding survey and WFP cost benchmark

The first approach, which resulted in a figure of US\$30 billion, is based on the national budget as reported in the global survey (56 countries) and WFP expenditures on school feeding in 2011 (58 countries). The estimate of national budget also includes funding from the WB, the Fast-Track Initiative (FTI) and the private sector. WFP expenditures are tracked annually through a benchmarking exercise. The global investment, $M_{(1)}$, is the sum of the national budget G_i and WFP expenditures E_i across the 89 countries:

$$M_{(1)} = \sum_{i=1}^{89} (G_i + E_i)$$

(2) Estimated global investment: US\$58 billion

Sample: 89 countries*Source:* WFP global school feeding survey and Gelli A. and Daryanani R. (forthcoming)

The second approach, which resulted in a figure of US\$58 billion, is an alternative estimation for the same sample of countries as the first estimation (89 countries). Instead of using reported budget figures, total investment $M_{(2)}$ was estimated as the sum of the average cost in each country i from income group y multiplied by the number of beneficiaries in country i across the 89 countries:

$$M_{(2)} = \sum_{y=1}^3 \sum_{i=1}^{89} (AC_y * B_i)$$

B_i may have been reported in the survey or estimated using average coverage as described earlier. The income grouping used for average costs is consistent with Gelli and Daryanani (forthcoming), and differs from the grouping used to estimate average coverage.

The figures for $M_{(1)}$ and $M_{(2)}$ differed substantially. The five countries which contributed most to the overall difference are presented in the table below. The United States alone contributed to 60 percent of the difference.

Table A3.5 Top five countries contributing to the difference between investment estimated from average costs versus investment reported in the survey

Country	Difference in investment estimation using approaches (1) and (2)	Percentage of total investment difference ($M_{(2)} - M_{(1)}$)
United States	16.7 billion	60%
India	7.3 billion	26%
United Kingdom	2.4 billion	9%
Brazil	1.9 billion	7%
China	-2.9 billion	-7%
	25.4 billion	92%

Source: WFP global school feeding survey, World Bank, UNESCO, Gelli A. and Daryanani R. (forthcoming)

(3) Estimated global investment: US\$47 billion

Sample: 154 countries

Source: WFP global school feeding survey, WFP cost benchmark, and Gelli A. and Daryanani R. (forthcoming)

The third approach, which resulted in a figure of US\$47 billion, was calculated using the two different methods. To the US\$30 billion figure estimated using approach (1), we added an estimation using approach (2) for 64 countries which we knew had a national school feeding programme and for which budget data were not available. The number of beneficiaries (from the global school feeding survey or estimated) was multiplied by the average cost per income group of the country, and the resulting values were summed up across the set of 66 countries. The full calculation for approach (3) can be depicted as follows:

$$M_{(3)} = \sum_{i=1}^{89} (G_i + E_i) + \sum_{y=1}^3 \sum_{i=90}^{154} (AC_y * B_i)$$

(4) Estimated global investment: US\$75 billion

Sample: 154 countries

Source: WFP global school feeding survey and Gelli A. and Daryanani R. (forthcoming)

The fourth approach, which resulted in a figure of US\$75 billion, was calculated using approach (2), but instead included the 64 countries for which budget data were not available. As described above, the number of beneficiaries (from the global school feeding survey or estimated) was multiplied by the average cost per income group of the country, and these values were summed up across the set of 154 countries. This calculation can be summarized by the equation below:

$$M_{(4)} = \sum_{y=1}^3 \sum_{i=1}^{154} (AC_y * B_i)$$

Limitations of the analysis

There are a number of important considerations that limit the validity of the analysis presented in this report. The greatest limitation is the lack of information for high-income countries on indicators such as number of beneficiaries and investment. The number of beneficiaries was only available for 13 high-income countries, and had to be estimated for 20 high-income countries.

With regard to the number of beneficiaries and coverage, it is very difficult to disaggregate total figures into pre-, primary- and secondary-school age groups. For example, while the

information from the survey and other sources include children of all ages (pre-primary, primary and secondary), the estimates for 49 countries are only for primary-school children because of a lack of data on coverage for the remaining age groups. Thus, the totals presented here are generally underestimates of total coverage. Improving the quality of the raw data on beneficiary numbers and programme costs is an important area for future investment.

Respondents to the WFP global school feeding survey generally reported only on information from national school feeding programmes (those managed by the government) and WFP-supported programmes. Thus, there is a general lack of information on programmes managed by other partners such as NGOs or community-based organizations. The exception is on beneficiary figures for which we do have information on other implementing partners. Also, information on investment includes national budgets and donor funding channelled through WFP but does not include funds from donors channelled through NGOs. Thus, total investment figures are underestimated.

Acronyms

BCG	Boston Consulting Group
CAADP	Comprehensive Africa Agriculture Development Programme
EAC	East Africa Community
ECOWAS	Economic Community of West African States
EFA	Education for All
FAO	Food and Agriculture Organization of the United Nations
FRESH	Focusing Resources on Effective School Health
GCNF	Global Child Nutrition Foundation
LA-RAE	Latin American School Feeding Network
MDG	Millennium Development Goal
NEPAD	New Partnership for Africa's Development
NGO	non-governmental organization
PCD	Partnership for Child Development
P4P	Purchase for Progress
SABER	Systems Approach for Better Education Results (World Bank)
SFT	School Food Trust (from 2012 renamed as "Children's Food Trust")
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank
WFP	World Food Programme

A meal in school is a powerful tool. In this book, for the first time, we present the global picture and data from research that shows an estimated 368 million children receive a meal at school every day, both in developing countries and in affluent countries. The global investment is in the order of US\$75 billion a year.

This book does not focus on the UN World Food Programme's operations. Done in partnership with the World Bank and the Partnership for Child Development, the *State of School Feeding Worldwide 2013* presents the current status of our understanding of school feeding through a global survey, maps, case studies and analysis.

It provides new insights into the policy and management of school feeding programmes. How can school feeding programmes become more effective and efficient? How do school meals contribute to social protection, education and health goals? How do governments support the link between local agricultural production and school meals to make programmes sustainable? How can school feeding programmes better support the most vulnerable families and children in any society?

This book is a work in progress that seeks to share the knowledge about a vital tool for nourishing the bodies and minds of future generations. The time has come to pay school feeding programmes the attention they need and deserve.



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