



World Food Programme

HOME-GROWN SCHOOL FEEDING

A FRAMEWORK TO LINK SCHOOL FEEDING
WITH LOCAL AGRICULTURAL PRODUCTION

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GLOSSARY OF ACRONYMS

ADMARK	Agricultural Development and Marketing	HIPC	Heavily Indebted Poor Countries
AGMARK	Agricultural Market Development Trust	IFPRI	International Food Policy and Research Institute
AGRA	Alliance for a Green Revolution in Africa	ISO	International Standards Organization
ARE	Assisted Rural Enterprise	JUNAEB	Junta Nacional de Auxilio Escolar y Becas (National Board for Educational Support and Scholarships)
AV	Afrique Verte (Green Africa)	MDGs	Millennium Development Goals
BCG	Boston Consulting Group	MDM	Midday meals
CAADP	Comprehensive Africa Development Programme	M&E	Monitoring and evaluation
CBO	Community-based organization	NASFAM	National Smallholder Farmers Association of Malawi
CE	Commodity exchange	NEPAD	New Partnership for Africa's Development
CHILD	Children in Local Development	NGO	Non-governmental organization
CLUSA	Cooperative League of the USA	PIU	Project Implementation Unit
CNFA	Citizens Network for Foreign Affairs	RAISE	Rural Agricultural Input Supply Expansion
CRS	Catholic Relief Services	RUMARK	Rural Market Development Trust
DR Congo	Democratic Republic of Congo	SIGN	School Feeding Initiative Ghana-Netherlands
EFA	Education for All	SMS	Short message service
FAO	United Nations Food and Agriculture Organization	SNV	Dutch Development Cooperation
FCI	Food Corporation of India	THR	Take-home ration
FFE	Food for Education	UN	United Nations
FNDE	National Fund for Educational Development	UNESCO	United Nations Educational, Scientific and Cultural Organization
GDP	Gross domestic product	WFP	World Food Programme
GFE	Global Food for Education		
GIS	Geographic Information Systems		
GSFP	Ghana School Feeding Programme		
HGSF	Home-grown school feeding		

EXECUTIVE SUMMARY

In the broadest sense, home-grown school feeding (HGSF) is a school feeding programme that provides food produced and purchased within a country to the extent possible. The United Nations World Food Programme (WFP) has collaborated with the Bill and Melinda Gates Foundation, the New Partnership for Africa's Development (NEPAD) and other partners to develop an approach to HGSF. This document is a culmination of these efforts. It focuses in particular on linking school feeding programmes with local small-scale farmer production by creating an ongoing market for small landholders ("smallholders").

The value of HGSF programmes has been recognized consistently by many governments and organizations. In 2003, African governments endorsed the HGSF programme of the Comprehensive Africa Development Programme (CAADP). In the same year, NEPAD identified HGSF as having an immediate impact on food insecurity in Africa, with the potential to contribute to long-term development goals. The United Nations 2005 World Summit recommended "the expansion of local school meal programmes, using home-grown foods where possible," as one of the "quick-impact initiatives" to achieve the Millennium Development Goals. The African Union Special Food Summit, in December 2006, called for an expansion of HGSF to reach at least 20 percent of member states by 2008. Motivated by these strong endorsements, NEPAD, WFP and the Millennium Hunger Task Force launched a pilot Home-Grown School Feeding and Health Programme (HGSFHP) designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food.

School feeding is a well recognized safety net programme that alleviates hunger while supporting education, nutrition health and community development. School feeding can take different forms: providing school meals or snacks to be eaten during school hours or distributing dry take home food rations to pupils at the end of each month or school term if they attended school regularly. School feeding programmes exist in almost all high- and middle-income countries and are present, typically with support from WFP, in some 70 of 108 low- and lower-middle-income countries.

HGSF programmes are not designed from scratch. Especially in Africa, a school feeding programme is typically first created by a country with the support of development partners such as WFP and is sourced with food that may or may not be locally procured. HGSF then evolves, as part of the transition to government ownership, by linking existing school feeding programme demand with local agricultural production.

This document focuses mainly on HGSF as it links to small-scale farmers. Small-scale farmers are poor because of inadequate access to assets such as land, water and human capital. In addition, their production practices are characterized by limited use of productivity-enhancing technologies and practices – such as hybrid seeds and fertilizers. They are also poor because even when they do adopt improved production methods, they are often unable to easily sell their produce in markets, which, for smallholders, are thin, volatile and costly.

HGSF programmes seek to increase access for small-scale farmers through activities in three distinct but linked focus areas:

- **Strategic procurement:** the purchasing process that supplies food to the school feeding programme in such a way that small-scale farmers benefit by ensuring that the procurement process is “strategic”. This means removing the barriers that small-scale farmers face in accessing the school feeding market, such as lack of information, insufficient capacity to meet traditional tendering requirements, lack of capacity to supply, store and transport commodities and vulnerability to post-harvest losses.
- **Agricultural development:** activities intended to help small-scale farmers increase productivity, produce better-quality crops, manage natural resources and mitigate risks in a sustainable way. This entails the provision of assistance packages (e.g. improved seeds, fertilizer and other agricultural inputs at subsidized prices) to the least advantaged small-scale farmers so they can produce food in greater quantities and be able to supply the school feeding programme.
- **Institutional development:** support for appropriate design and implementation of the HGSF programme. This includes the policies, standards, rules and strategies related to school feeding, procurement and increased agricultural production and to national capacity building to fund, manage and implement a cost-efficient programme and document results.

Other important issues to be addressed include:

- assuring minimum nutritional standards are maintained;
- maintaining a continuous supply of food to schools;
- ensuring food quality and safety;
- reducing costs of procurement from small-scale farmers;
- preventing price increases;
- protecting farmers’ own food stocks;
- protecting crop diversity;
- avoiding increasing community’s work load;
- avoiding distracting teachers from other responsibilities;
- transporting food to food-insecure areas;
- countering corruption and bureaucratic inefficiency;
- facilitating institutional coordination;
- balancing costs and benefits.

Implementation of an HGSF programme happens incrementally over **three stages**.

The first stage is characterized by a relatively small proportion of food purchased from small-scale farmers. It is important to protect the existing food pipeline, while beginning to test new procurement schemes with small-scale farmers. Procurement is started in an area that has surplus agricultural production. Activities and investments during the

first stage are geared to establishing the feasibility of using food purchased from smallholders for the school feeding programme in terms of procurement practices and supply and include: conducting initial assessments and baseline surveys, information dissemination, strategic procurement, training small-scale farmers and cooperatives, enhancing smallholder productivity and building institutional capacity.

During **the second stage**, the proportion of food purchased from small-scale farmers gradually increases and the amount of investment needed rises to its highest level, primarily to support agricultural development and market access initiatives. This stage is focused on overcoming barriers that prevent small-scale farmers from accessing the market such as lack of legal status, lack of associations that consolidate bargaining power, poor productivity, poor capacity to store, handle and transport their production and inadequate means for managing risk.

In **the third stage**, a greater proportion of food is being purchased from small-scale farmers (all the food that can be bought given the circumstances and challenges of the environment), the previous efforts having strengthened their position in the market. At this point, ideally small-scale farmers will have developed sufficient capacity to deliver food to schools without sacrificing quality, quantity and timeliness. During this stage, activities emphasize the focus area of institutional development.

The HGSP model, as established in this framework, relies on a robust institutional structure to effectively carry out the programme. Successful programmes are embedded within national legislation, helping to enhance sustainability. They require political commitment and a secure funding source. It is also important to document results and good practices.

The degree to which HGSP can increasingly benefit small-scale farmers depends on the interaction between HGSP's three focus areas and, more specifically, on the following six factors:

- whether the food given to children is based on local tastes and consumption patterns;
- the degree of political support for the programme;
- the institutional capacity to implement it;
- small-scale farmers' productivity and capacity to respond to the needs of the programme;
- availability of funds;
- capacity to maintain the programme over time, even if small-scale farmers' productivity is still low.

HGSP, as understood in this framework, is a relatively new concept that has been implemented in a limited number of countries on a national scale. However, these programmes are becoming increasingly popular with national governments, partners and donors, given the clear win-win benefits of HGSP programmes on local production and increasing availability of cash funding for school feeding programmes.

1. INTRODUCTION

Home-grown school feeding (HGSF) is a school feeding programme that offers food produced and purchased within a country. WFP's HGSF particular focus is to produce and purchase food for the school feeding programme from local small-scale farmers. From WFP's perspective, an HGSF programme aims to both increase children's well-being and promote local agricultural production and development by providing an ongoing market for small landholders ("smallholders").

The value of HGSF programmes has been recognized consistently by many governments and organizations. In 2003, African governments, in their aim to restore agricultural growth, food security, adequate nutritional levels and rural development in Africa, endorsed the HGSF programme of the Comprehensive Africa Development Programme (CAADP). In 2003 the New Partnership for Africa's Development (NEPAD) identified HGSF as having an immediate impact on food insecurity in Africa with the potential to contribute to long-term development goals. The United Nations 2005 World Summit recommended "the expansion of local school meal programmes, using home-grown foods where possible" as one of the "quick impact initiatives" to achieve the Millennium Development Goals, especially for rural areas facing the dual challenge of high chronic malnutrition and low agricultural productivity (World Summit Outcome, 2005; UN Millennium Project, 2005a). Finally, the African Union Special Food Summit, in December 2006, reaffirmed the HGSF initiative and resolved that the implementation of HGSF must be expanded to reach at least 20 percent of member states by 2008.

The Millennium Project's report "Investing in Development", which was published in 2005 as a practical plan to achieve the Millennium Development Goals (MDGs), produced the following ambitious "quick win" recommendation: "Expansion of the school meals programmes to cover all children in hunger hot spots¹ using locally produced food by 2006" (UN Millennium Project, 2005c, Page xxi).

Motivated by that recommendation, NEPAD, the United Nations World Food Programme (WFP) and the Millennium Hunger Task Force (MHTF) launched a pilot Home-Grown School Feeding and Health Programme (HGSFHP) designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food. NEPAD and WFP signed a Memorandum of Understanding to enhance cooperation on HGSF, among other things. Twelve pilot countries (Angola, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Nigeria, Senegal, Uganda and Zambia) were invited to implement the novel programme. So far, three of them have produced specific plans and two (Ghana and Nigeria) are already implementing a nationwide programme.

Clearly, there is a broad understanding that HGSF programmes can deliver a wide variety of outcomes. It is assumed that they have the potential to trigger development processes that benefit not only children in schools, but the community as a whole. But

¹ Hunger hot spot is defined by the task force in hunger as a sub-national area where underweight is over 20 percent (UN Millennium Project, 2005)

what needs to be done to make this happen? How can school feeding programmes become true development tools at the community and country levels?

This framework seeks to respond to these questions by providing information to government and implementing partner staff about how to use existing school feeding programmes as a platform to stimulate local agricultural production and local development. The document aims to highlight best practices based on current experiences with this type of approach, identify key success factors and possible risks of an HGSF programme and provide a step-by-step framework for design and implementation. The first three chapters present an overview of school feeding and HGSF programmes. Chapter 4 describes the importance of identifying an appropriate institutional setting to support the creation and development of HGSF. Chapters 5 through 7 explore in detail the three focus areas of HGSF: strategic procurement, agricultural development and institutional and policy development. While all of these focus areas demand attention at all stages of creating an HGSF programme, strategic procurement is typically the first focus, followed by agricultural development and then by the development of institutions and policies to provide ongoing support once the programme has been established. The final chapter discusses overall programme design considerations, such as costs, funding and monitoring and evaluation approaches.

Because HGSF programmes are built from existing school feeding programmes, we begin with a discussion of school feeding.

2. ABOUT SCHOOL FEEDING

2.1 WHAT IS SCHOOL FEEDING?

School feeding is a well recognized programme that alleviates hunger while supporting education, health and community development. School feeding can take different forms: providing school meals or snacks to be eaten during school hours or distributing dry take home food rations to pupils at the end of each month or school term if they attended school regularly. It is a versatile safety net that can be used as a platform to support children and their families in a variety of contexts:

- At the onset of an emergency, school feeding can be used to get food to affected communities. For example, in the aftermath of the 2004 tsunami in South East Asia, WFP used schools to deliver food to those in the most affected areas.
- During economic shocks, such as those related to increasing food prices, or during protracted crises, school feeding can be an effective safety net to reinforce livelihoods and prevent those affected from adopting negative coping strategies. School feeding is currently being used in this way in many countries, including Haiti, Liberia, Pakistan and Senegal.
- Finally, if linked with local purchases, school feeding can increase the incomes of small-scale farmers and stimulate local development. This is the topic of this framework.

School feeding programmes exist in almost all high- and middle-income countries and are present, typically with WFP support, in some 70 of 108 low- and lower-middle-income countries. They enjoy strong political support and have been identified by the international community as a major strategy to respond to the consequences of rising food prices.

There are many types of school feeding programmes, from those that are totally funded, managed and monitored by the government, to those that depend largely on implementing partners such as WFP to procure the food, deliver it to the schools and monitor the programme. The private sector may also be involved to various degrees.

The level of community participation and involvement also varies. In some cases, the community contributes quite a lot of resources to the programme in the form of food, utensils, firewood or labour. The community's fruits, vegetables and staple products may be the basis of the school feeding programme. Whether by making voluntary contributions or by selling its products, the community benefits from this link. In other cases, such as in emergencies, the community might be struggling with challenges and is therefore not able to contribute substantially. In general, the participation of the community at all stages of the programme – design, implementation and monitoring – is encouraged because stronger and more sustainable interventions result from empowering communities to find local solutions to hunger and poverty.

The objectives of school feeding vary depending on the context. General objectives are to:

- meet the immediate food needs of children;
- alleviate short-term hunger and improve learning capacity;
- increase access to education (i.e. enrolment, attendance, retention and completion);
- reduce gender and social inequalities;
- improve health and nutrition status;
- increase development opportunities.

2.2 THE TARGET GROUP

Generally, school feeding programmes target children individually or schools (i.e. the school becomes the “distribution point” for all the children who are enrolled in it) in vulnerable, food-insecure areas. Most programmes target primary schools, but support also reaches preschools, as part of early childhood development programmes, and children attending non-formal education. In some cases, girls attending lower secondary schools benefit from take-home rations.

Describing the target group in detail is extremely important. It is the first step in designing a successful programme and crucial in defining the programme objectives and performance targets. The choice of the targeting method is very important, as it has implications for programme costs and also poses ethical questions.

There are several ways to estimate the size of the target group and the consequent demand for school feeding programmes. One approach is to state that all school-age children who are chronically hungry when attending school should benefit from a school feeding programme. This is a narrow way to estimate the need. A recent WFP analysis estimated that there are approximately 23 million primary school-age children in Africa who attend school and are undernourished. This figure was calculated by applying the country’s undernourishment rate to the number of primary school-age children and then estimating how many of those undernourished children were enrolled in primary school (WFP 2007c).

A broader way to define the need for school feeding is to use the criteria suggested by the UN Millennium Task Force on Hunger: School feeding should reach primary school-age children enrolled in school who are living in each of the hunger hot spots (i.e. sub-national units with more than 20 percent underweight prevalence). According to WFP’s estimate, 70 million school-age children are currently living and attending school in hunger-stricken areas in sub-Saharan Africa (WFP 2007).²

Finally, the broadest approach is based on the fact that many governments, including Angola, Ghana, and Nigeria, have stated that every child attending public school should benefit from school feeding. Using this approach, the potential demand for school feeding is the total number of children enrolled in primary school, which in Africa is 114 million children (UNESCO, 2007).

² Global School Feeding Gap: School-age Children in Hunger Hot Spots, School Feeding Unit, World Food Programme 2007

3. HGSF OVERVIEW

3.1 WHAT IS HGSF?

In the broadest sense, home-grown school feeding is a school feeding programme that provides food produced and purchased within a country. WFP's definition of HGSF is more focused in that the food for a school feeding programme is produced and purchased locally. The main objective of WFP's HGSF programmes is to link a food-based programme, such as school feeding, with local agricultural production. The HGSF programme assumes that households, local farmers or small businesses may benefit from the demand of the school feeding programme if procurement is designed to increase their ability to access the market and if efforts are made to increase their production. School children may benefit from food that is indigenous to their culture through the school feeding programme. The entire HGSF programme depends on an institutional framework that can sustain the programme and enable its smooth implementation.

HGSF programmes are not designed from scratch. Especially in Africa, a school feeding programme is typically first created by a country with the support of development partners such as WFP and is sourced with food that may or may not be locally procured. HGSF then evolves by linking that programme with local production. In fact, this has been the approach used by most countries preparing HGSF programmes under the NEPAD initiative. In Benin, Kenya and Uganda, HGSF is regarded as a viable way to strengthen the school feeding programme and make it more sustainable. In some cases, such as Ghana, HGSF forms the basis for WFP's exit strategy. In a presentation during the NEPAD High-Level Regional Consultative Meeting on HGSF in Ghana in October 2007, the representative of the NEPAD Secretariat³ explained that the challenge in Africa lies in transitioning school feeding programmes to HGSF programmes (NEPAD 2007).

Addressing this challenge requires developing appropriate linkages between existing programmes and focus areas and creating effective coordination processes (in design and implementation) to maximize the benefits from these linkages.

Case example: Creating the right links

An example of creating linkages between existing programmes is the Kenya HGSF programme called "Njaa Marufuku Kenya" (Eliminate Hunger in Kenya). On the agricultural development side, HGSF provides small grants and training to targeted community-driven food security projects to improve their capacity to produce and market food. On the school feeding side, the government provides grants to schools to purchase the food produced by the small-scale farmers in the community-driven food security projects.

³ Ms. Bibi Gyose, NEPAD Secretariat representative

In addition to the objectives of school feeding programmes, WFP's HGSF programmes have the following objectives:

- increase small-scale farmers' access to the school feeding market, thereby increasing their income;
- encourage improved production practices among small-scale farmers;
- increase direct purchase from smallholders, reducing the roles of other participants in the supply chain who diminish their purchasing power;
- create an enabling environment for small-scale farmers to access markets by providing market information, promoting aggregate supply and advocating for rules, regulations and incentives for smallholder procurement.

Critical Success Factors for HGSF

These core principles should form the basis for the design and implementation of any HGSF programme:

- HGSF programmes must be designed for the country and the specific conditions in which the programme will be operating. Although programmes will be different from country to country, their underlying principles should be the same.
- HGSF programmes are created by building on existing interventions, strategically linking them to optimize resources and benefit from synergies.
- To increase the income of small-scale farmers, programmes must increase small-scale farmers' access to the school feeding market. This can be done by providing information, specific training, support to farmer groups and rules and regulations that facilitate selling practices.
- HGSF must avoid causing an unintended rise in food prices, which could negatively affect smallholders who are buyers or net buyers.

3.2 PROFILE OF THE TARGET GROUP

While school feeding programmes principally target school-age children, WFP's approach to HGSF programmes chiefly targets small-scale farmers. It is estimated that 80 percent of the total number of farms in Africa are small (2 hectares) (Nagayets O, 2005). Of these 54 million small farms, approximately 40 million are in sub-Saharan Africa (this assumes that small farms in African countries are distributed homogeneously, and that sub-Saharan Africa contains 74 percent of African agricultural area). If 193 million people are engaged in agriculture in sub-Saharan Africa, at least 150 million people, or 80 percent of them, should be involved in smallholder farming. Many of these people live below the international poverty line, earning less than one dollar a day (FAO 2006).

Small-scale farmers are poor because of inadequate access to assets such as land, water and human capital. In addition, their production practices are characterized by limited use of productivity-enhancing technologies and practices – such as hybrid seeds and fertilizers. They are also poor because even when they do adopt improved production methods, they are often unable to easily sell their produce in markets, which, for smallholders, are thin, volatile and costly.

It is estimated that some 60 percent of the rural population in Africa live in areas of good agricultural potential but poor market access, while only 23 percent live in areas of good agricultural potential and good market access. The remaining 17 percent live in the most difficult environments, with poor agricultural potential and poor market access. In many cases, limited national or even international demand may leave African producers of basic crops with no market to sell their outputs (WB ADI 2007).

Farms in sub-Saharan Africa can be grouped into four categories:

- **Sellers only:** Households produce enough for their own consumption, are connected to markets and sell their surplus. This, of course, is most favourable economically, since the farmer not only produces enough to feed the household, but also generates income.
- **Buyers only:** Households do not sell because the quantity they produce does not satisfy their own needs. Some of these households may buy small quantities of food to supplement their production, while others must purchase most of their food from the market.
- **Households that buy and sell in the same crop year:** Two sub-groups are in this category: “net sellers” and “net buyers”. Net sellers are households whose sales exceed their purchases, and net buyers are households whose purchases exceed their sales.
- **Households that have no market activity:** Households produce, but do not buy or sell. These households do not have relationships with agricultural commodity markets, and represent a small fraction of farms.

Table 1 shows the distribution of farms across these categories in five countries. The largest proportion of households is “buyers only” who purchase staple crops from the market. In all five cases, fewer than 20 percent of farms are only sellers. For Ethiopia and Kenya, and for most other countries, the percentage of rural households that do not sell or buy is quite low.⁴

Initially, only the small percentage of smallholders who sell will be able to benefit from the demand generated by the HGSF programme. Over time, HGSF may support net buyers so they can produce surpluses to be sold to the school feeding programme. Another issue is that if HGSF programmes increase the demand for staple crops, prices for these products could rise. As a result, farmers who must purchase crops from the market could be hurt more than helped by the programmes⁵ and this should be considered in policy development.

⁴ For Zambia and Mozambique the percentages of farms that don't sell or buy are particularly high since the main staple crop is cassava and some households are autarkic with respect to maize. Based on other empirical information Barrett (2007) confirms this indication: “Indeed, true autarky – no sales and no purchases – is rare.”

⁵ Barrett (2007) makes this point very clearly: “Rather, a large share of smallholders – commonly a majority – are net buyers of the food crops they produce, relying on proceeds from cash crops and off-farm employment to generate the earnings needed to supplement their own food crop production with market purchases. Of course, this means that most small farmers in the region are hurt, not helped, by policies that increase local prices for staple food grains. [...] Still, policymakers and many development researchers continue to discuss development policy for rural Africa as if all farmers were net sellers of the crops they produce and thus stood to benefit from increased prices. The evidence against that popular belief is by now overwhelming.”

TABLE 1: MARKET POSITION OF SMALLHOLDERS IN SELECTED COUNTRIES

Household category with respect to main staple grain:	Percentage of rural farm population				
	Ethiopia (maize and teff)	Kenya (maize)	Malawi (maize)	Mozambique (maize)	Zambia (maize)
Sellers only:	13	18	5	13	19
• top 50% of total sales*	2	2	1	2	2
• bottom 50% of total sales**	11	16	4	11	17
Buyers only	60	55	na	51	33
Buy and sell (net buyers)	13	7	na	12***	3
Buy and sell (net sellers)	12	12	na		6
Neither buy nor sell	2	8	na	24	39
	100%	100%	100%	100%	100%

Source: Jayne et al., 2006

Notes:

* After ranking all households by quantity sold, this row shows the percentage of households in the smallholder sector accounting for the first 50% of total maize sales.

** This represents the percentage of households accounting for the other 50% of total maize sales.

*** The survey in Mozambique was not able to ascertain quantities of maize purchased, therefore whether these households are net buyers or net sellers is unknown.

There are many reasons why long-term economic benefits do not accrue to small-scale farmers, but they generally can be described in terms of three types of access (IFAD, 2003):⁶

- **Access to information about market dynamics and prices.** Small-scale farmers lack access to information about market outlets, prices and dynamics. Scant knowledge often induces them to sell commodities at prices that are either far below or far above market prices. In the former case, the farmers' financial gain is smaller than it could be, while in the latter case, farmers are unable to sell their products. Furthermore, these households lack adequate food storage facilities and are therefore unable to purchase and store their food at times when prices are the lowest. They are instead subject to dramatic seasonal price variations for their food.
- **Access to credit.** Farmers' ability to obtain credit is usually dependent on their access to land; it is difficult for farmers whose land is not titled to obtain credit. The absence or inefficiency of land tenure and land titling systems in sub-Saharan Africa prevents the use of land as collateral. Access to credit is also dependent on lenders' evaluations of farmers' ability to repay loans. Large-scale farmers, who are more likely to produce a surplus or cash crops, have better access to credit than subsistence small-scale farmers. This often means that small-scale farmers are forced to sell their crops shortly after the harvest at depressed prices, with intermediaries reaping the reward of the rising price in the following months. If smallholders cannot access credit from financial institutions, they often seek credit from the informal market, which offers low transaction costs (e.g. no collateral is required) but at high interest rates.⁷

⁶ IFAD, Promoting Market Access for the Rural Poor in Order to Achieve the Millennium Development Goals – Roundtable Discussion Paper for the Twenty-Fifth Anniversary Session of IFAD's Governing Council, 2003.

⁷ There are several reasons why a poor household in a rural area prefers informal lenders to a bank. They include: physical distance from the lending institution, illiteracy (which makes it difficult to deal with written documents exchanged with the bank) and high fees charged by bank officials. Furthermore, lending institutions often require collateral, such as land, from borrowers. Constrained by weak land-titling systems, rural households are often excluded from formal credit programmes.

- **Access to markets.** Smallholders usually live and work far from the markets where they sell their crops and buy inputs. Farmers in the most remote areas are likely to be worse off, while those closer to road networks are in a better position to access markets. Smallholders located long distances from urban centres cannot participate effectively in agricultural trade.⁸ Storage facilities tend to be concentrated around urban areas, and inadequate roads limit access to them. These factors create excessive regional price variability, where the most remote areas experience greater seasonal price swings than the less remote areas (Barret, C.B, 1996).

3.3 BENEFITS

HGSF, as understood in this framework, is a relatively new concept that has been implemented in very few countries on a national scale. The impact of school feeding on the local economy has not been sufficiently studied so far. One possible explanation for this gap in research is that the objectives of school feeding programmes are normally centred on educational and sometimes nutritional objectives. There are very few programmes that explicitly include stimulating the local economy or local production as an objective and these programmes are fairly recent, as is the case with the national school feeding programme in Ghana. In general, evaluations of school feeding do not include indicators to address this issue.

Some countries have already benefited from the positive outcomes of using local food to source existing national school feeding programmes, but there are very few countries that have intentionally linked school feeding programmes with agricultural interventions in a systematic way. In the sections below we examine the existing evidence and the results of economic modelling conducted to estimate the possible effects of HGSF in low-income countries.

Existing evidence from high- and middle-income countries

Many high- and middle-income countries are already applying this approach in national school feeding programmes. In the United Kingdom, the East Ayrshire local authority initiated a pilot school meals programme in 2004 in 12 schools. Two of the objectives of the programme were to: (i) localize the food chain and repatriate expenditure on food directly into the local economy; and (ii) increase the potential for public money to assist sustainable businesses and local employment by procuring the food for the programme locally. Two evaluations of the programme conducted to date indicate that the local economy has benefited from the injected resources, generating employment in the firms that cater for the programme. According to the evaluation, the 12 schools in the scheme benefit the local economy by £ 160,000. At present 70 percent of the food is locally sourced.⁹

⁸ The remoteness of rural households from markets is a common feature of the agricultural sector throughout sub-Saharan Africa. It is difficult to imagine how a revamping of agricultural marketing in the region can take place in the absence of the public sector's investment in the transport infrastructure. This suggests a point that falls outside the scope of this report: sub-Saharan governments – responsible for the provision of public goods – are partly responsible for the inefficiency of the commodities markets in sub-Saharan Africa. There are several circumstances in which providing public goods, such as transport infrastructure, holds a greater potential to alleviate poverty than the efforts to expand access to markets discussed here.

⁹ Sonnino, R. (2007). Local School Meals in East Ayrshire, Scotland: A Case Study. Paper presented to the World Food Programme. Rome.

A background paper for the Millennium Project Task Force on Hunger provides information on the impact of a locally sourced school feeding programme in Guatemala.¹⁰ The programme shifted the supply of food from centralized industrial suppliers to local producers and helped develop local markets. A study in Indonesia of a school feeding programme initiated by the government during the country's economic crisis in the 1990s, which included only locally produced food, found widespread acknowledgement that farmers were receiving benefits from the programme through sales.¹¹ A similar experience can be found in Chile, where the government initiated a local purchase scheme for school feeding following a natural disaster in the southern part of the country in 2001 as part of a package of measures to reactivate the local economy. Local farmers that received support from the National Agricultural Promotion Agency now supply nearly all of the programme's vegetable requirements in that region (for more details see <http://www.junaeb.cl/>).

There is also information on two dairy programmes in Asia. In China, the National School Milk Programme created 223 new jobs for every 100,000 children during its initial pilot stage. Consequently, the programme increased the incomes of Chinese dairy farmers by an additional USD 400 from milk sales for every cow. Similar results were also found in Thailand, where national milk production increased from 120,000 litres a day before 1985 to 1,550,000 after a national school milk scheme was established. An estimated 250,000 jobs in the dairy industry were created.¹² However, milk is not the best alternative for school feeding programmes since the costs of transporting, packaging and handling this commodity are high.

These examples arise from high- and middle-income countries where institutional capacity is strong and domestic markets are more developed. There is very little information of how these programmes would fare in low-income countries with vulnerability to food insecurity, constraints to food production, low institutional capacity and thin or volatile food markets.

Modelling exercise

While the benefits of offering small-scale farmers access to markets are difficult to estimate, an increase in income is expected. One way to assess the potential benefits of HGSF for small-scale farmers and the agricultural sector is to conduct a simulation of the programme, or economic modelling. Based on different assumptions and scenarios, the number of small-scale farmers and their increase in income can be estimated. Although any economic modelling exercise has its limitations, it can be one useful piece of information to capture the potential of such a programme.

An economic modeling exercise commissioned by the Millennium Project Task Force on Hunger attempted to shed some light on the potential of locally sourced school feeding programmes in Africa (Ahmed and Sharma 2004).¹³ In their analysis, the authors conclude

¹⁰ Caldes, N. and A. U. Ahmed (2004). *Food for Education: A review of program impacts*. Washington DC, International Food Policy Research Institute.

¹¹ Studdert, L. J., Soerikirman, K. M. Rasmussen and J. P. Habicht (2004). "Community-based school feeding during Indonesia's economic crisis: Implementation, benefits and sustainability". *Food and Nutrition Bulletin* 25(2):156-165.

¹² Caldes, N. and A. U. Ahmed (2004). *Food for Education: A review of program impacts*. Washington DC, International Food Policy Research Institute.

¹³ Ahmed, A.U. and M. Sharma (2004). *Food-for-education programs with locally produced food: Effects on farmers and consumers in Sub-Saharan Africa*. Washington DC, International Food Policy Research Institute.

that if school feeding programmes with locally produced foods are successful in inducing farmers to adopt modern technology in maize production, they have the potential to substantially benefit producers and consumers throughout sub-Saharan Africa. The study assumes that 50 million primary school-age children in Africa would receive school feeding. The authors estimate that in aggregate terms, the supply for maize shifts by 30 percent and the demand curve by 26.6 percent. The total incremental benefits of supplying the programmes with locally produced food were potentially worth about USD 1.6 billion a year in 2003 prices. Of this total, 57 percent would go to consumers and 43 percent to producers.

Case study 1: Modelling the costs and impact of HGSF in Kenya

An economic model of a potential HGSF programme in Kenya was conducted in 2007 by WFP, the International Food Policy and Research Institute (IFPRI) and the Gates Foundation. The tool was calibrated on smallholder agriculture in Kenya, but the framework of analysis remains general enough to apply it to other countries in sub-Saharan Africa. The study modelled a school feeding programme in Kenya that relied on purchasing maize from small-scale farmers in a high-potential area for maize and then transporting the food to schools in a low-potential area.

According to the model, the income of the small-scale farmers in the high-potential area for maize increased by a given amount. The model then found that the impact on small-scale farmers would be much larger if the HGSF programme were combined with agricultural programmes (supply-side interventions) that raise productivity and achieve a higher yield increase for their crops. The increased demand from HGSF would be met by an increased supply, thereby avoiding a negative effect on prices and negative impacts on net buyers of food.

The conclusions of the modelling exercise are:

- It is possible to raise the income of a significant number of small-scale farmers through HGSF;
- A productivity increase must be achieved for complete success and low risk of negative externalities (e.g. uncontrolled price increases);
- If there is an appropriate supply response to the programme, the incremental costs of HGSF are manageable;
- Little or no supply response will result in fewer farmers being impacted by HGSF, price increases that might harm net-buyers and higher incremental costs of the HGSF programme.

3.4 KEY ISSUES

There are important issues to be addressed when implementing HGSF; however, there is limited practical information about them. The issues described below have been identified through research conducted for this framework and from the experiences of countries that are in the process of implementing HGSF programmes, such as Brazil, Chile, Ghana and Nigeria.

- **Assuring minimum nutritional standards are maintained:** HGSF must guarantee an uninterrupted supply of appropriate quality food to targeted children. Although the food basket can and should be modified to be home-grown and correspond as much as possible with local and traditional tastes, it needs to maintain minimum nutritional standards. Challenges might arise from the need to fortify the food basket, which would add food processing as another step in the value chain. It might be possible, though, to turn what might be a hurdle into an additional benefit by establishing or supporting community-based milling and fortifying initiatives. An example of this approach is in the school feeding programme in Malawi, where a small pilot project is supporting five community bakeries to manufacture and deliver fortified scones to the schools. These bakeries receive training from WFP on the manufacturing and fortification process and also receive the fortified pre-mix for the scones. Another option is to use instant fortificants that are added to the food once it is cooked and ready to serve. This approach has been piloted in WFP’s school feeding programmes in Tanzania and Cambodia.
- **Maintaining a continuous supply of food to schools:** There is the risk of interrupting the supply of food to schools due to unforeseen circumstances, such as small-scale farmer defaults caused by natural disasters or political strife. This risk needs to be mitigated by linking the programme with national food grain reserves or other mechanisms designed to protect food-based programmes in the country.
- **Ensuring food quality and safety:** Poor food quality or safety can jeopardize the success of the school feeding portion of the HGSF programme. There should be a quality control system to ensure the safety of the food provided to schools, regardless of whether the food is purchased from small-scale farmers or from large wholesalers.
- **Countering corruption and bureaucratic inefficiency:** There may be a higher risk of corruption and inefficient procedures in HGSF due to the number of stakeholders involved. Bureaucracy can slow down many of the legal or institutional procedures, such as writing contracts, forming cooperatives and purchasing. Decentralized procurement may lead to mismanagement of public funds if there are no controls in place to counter these possibilities.
- **Reducing costs of procurement from small-scale farmers:** Procurement directly from smallholders is problematic due to high transaction costs, high risk of default, difficulties in meeting quality standards and delays in delivery. The creation of procurement mechanisms that address these problems and contain or reduce costs will be critical for the success of HGSF. It is important to identify ways to combine farm productivity interventions with procurement mechanisms. An example is contract farming, or the “share cropping” arrangement used in the Millennium Village in Kenya, where farmers receive credit on inputs (e.g. seeds, fertilizer, pesticides) before planting in exchange for a 10 percent share of the production.
- **Preventing price increases:** If the demand for food from the school feeding programme is significantly greater than the actual supply of food in the market, prices may increase, negatively affecting net buyers of food and further increasing their food insecurity. This issue can be addressed by using market analysis tools to target areas for procurement where there is sufficient food supply and by increasing production over time in other

areas through agricultural development interventions. Ideally, production should be increased in a way that net buyers become net sellers.

- **Protecting farmers' own food stocks:** Small-scale farmers may be tempted to sell a large proportion of their production to the school feeding market without taking into consideration their households' consumption needs. Training and sensitization activities should educate farmers about the potential negative long-term consequences of responding disproportionately to HGSF demand.
- **Protecting crop diversity:** Small-scale farmers may begin to cultivate more of the crop needed for the HGSF programme to the detriment of other crops that had been cultivated. This would make farmers more reliant on a specific type of crop and market, whereas HGSF should be seen as a catalyst to help small-scale farmers eventually access other types of markets. This can be addressed by putting more emphasis on the need for crop diversification and on adopting new technologies to increase yields within the same area of cultivation.
- **Avoiding increasing the community's work load:** The community (sometimes mostly women) and the teachers may at times perform most of the duties for the HGSF programme. They may be responsible for purchasing the food, controlling its quality, overseeing the cooking and distributing the food to the children. While community members' participation is important, attention needs to be paid to adding to their responsibilities and decreasing the time they might have available for other activities, such as generating income, growing staple crops, cleaning and looking after younger children. This issue may be addressed by encouraging more men to participate in the programme, accommodating women's schedules and fostering awareness about gender issues.
- **Avoiding distracting teachers from other responsibilities:** Additional responsibilities for teachers, especially in the decentralized models of HGSF where teachers frequently purchase the food, can have negative implications for children's education. Field work in India showed that teachers in charge of the HGSF activities need an average of two to three hours every day away from teaching. While children's learning opportunities might be increased by providing them with food at school, children may also be disadvantaged if their teachers have fewer hours for classroom teaching as a result of their added HGSF responsibilities.
- **Transporting food to food-insecure areas:** In some countries, food-insecure areas may not be suitable for procurement for the school feeding programme. In Kenya, for example, the areas where school feeding operates are not surplus areas suitable for local food procurement. HGSF would need to purchase the food in one region of the country and transport it to another. The economic modelling work conducted in Kenya indicates that although the costs of procuring food from another region may be higher, HGSF can still yield high cost-benefit ratios.
- **Facilitating institutional coordination:** Countries currently implementing HGSF programmes identify institutional coordination as one of the most important aspects of the programme, due to the number of stakeholders and the need to link different initiatives to achieve results. It is important to understand the degree to which the

institutional environment (administrative, political, fiscal) is enabling or constraining and to assess the strengths, weaknesses and comparative advantages of specific stakeholders. In this way, it is possible to identify arrangements for effective local partnerships and participation opportunities for local government, community groups, civil society and the private sector.

- **Balancing costs and benefits:** Buying food directly from small-scale farmers may be more expensive at the beginning of an HGSF programme, but it empowers farmer and community groups, thus providing long-lasting incentives and contributing to local development. It is important to conduct a careful analysis of these kinds of trade-offs, balancing costs, impact and efficiency of the programme.

The degree to which HGSF can increasingly benefit small-scale farmers depends on the interaction between HGSF's three focus areas (see the next section) and, more specifically, on the following six factors:

- whether the food given to children is based on local tastes and consumption patterns;
- the degree of political support for the programme;
- the institutional capacity to implement it;
- small-scale farmers' productivity and capacity to respond to the needs of the programme;
- availability of funds;
- capacity to maintain the programme over time, even if small-scale farmers' productivity is still low.

3.5 THE THREE FOCUS AREAS

The key concept in HGSF programmes is access. The circumstances of small-scale farmers and their families often prevent them from accessing development processes. HGSF seeks to "level the playing field" for those who do not have the same opportunities and capabilities. WFP's HGSF programmes increase access for small-scale farmers through activities in three focus areas: strategic procurement, agricultural development and institutional and policy development.

- **Strategic procurement:** This focus area addresses the purchasing process that supplies food to the school feeding programme in such a way that small-scale farmers may benefit. The specific intent to benefit small-scale farmers is what makes this procurement process "strategic". Thus, this focus area attempts to remove the barriers that small-scale farmers might face in accessing the school feeding market, such as lack of information, insufficient capacity to meet traditional tendering requirements, lack of capacity to supply, store and transport commodities and vulnerability to post-harvest losses.
- **Agricultural development:** This focus area is composed of activities intended to help small-scale farmers increase productivity, produce better-quality crops, manage natural resources and mitigate risks in a sustainable way. This focus area tailors assistance packages (e.g. improved seeds, fertilizer and other agricultural inputs at subsidized prices) to the least advantaged small-scale farmers so they can produce food in greater quantities and be able to supply the school feeding programme.

- **Institutional development:** This focus area includes the contextual support that exists and that may need to be developed for the appropriate design and implementation of the HGSF programme. This includes the policies, rules and strategies related to school feeding, procurement and increased agricultural production and to the capacity of the country to manage available resources to implement a cost-efficient programme and document results.

3.6 THE THREE STAGES

Implementation of an HGSF programme requires time. Buying food from small-scale farmers does not happen automatically or suddenly. Rather, it will happen incrementally over three stages. The graph below illustrates the different stages of HGSF in a schematic way. In reality, programmes are expected to evolve depending on the specific context and on the capacities of the different stakeholders involved. HGSF should be thought of as a process that can take many years to complete. The process requires flexibility to adapt to changing situations and to manage the risks and challenges that might arise. In broad terms, however, HGSF could evolve in three stages described in the text and the graph.

The first stage is characterized by a relatively small proportion of food purchased from small-scale farmers. It is important to protect the existing pipeline of food to school feeding programmes through regular procurement practices, while beginning to test new procurement schemes with small-scale farmers. Activities during the first stage include conducting assessments and baseline surveys of the local environment, disseminating information among the small-scale farmers and learning from pilot efforts related to procurement and agricultural development. At this stage, local purchase schemes are developed and tested on a small scale to assess the feasibility of using food purchased from smallholders for the school feeding programme. Most of the activities during this phase are focused on strategic procurement.

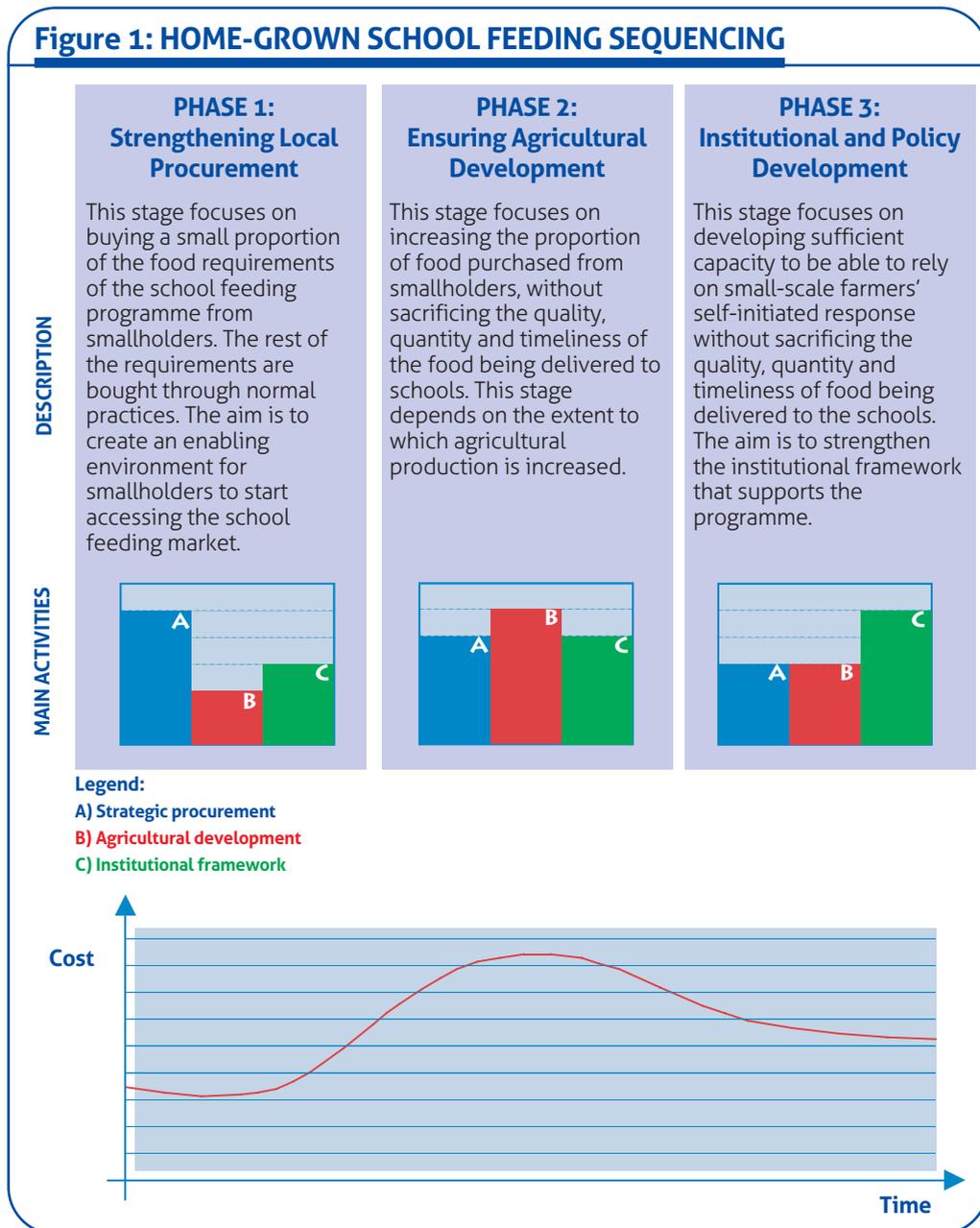
During the second stage, the proportion of food purchased from small-scale farmers gradually increases and the amount of investment needed rises to its highest level, primarily to support agricultural development and market access initiatives. The focus of the work in this stage is to overcome barriers that prevent small-scale farmers from accessing the market such as lack of legal status, lack of associations that consolidate bargaining power, poor productivity, poor capacity to store, handle and transport their production and inadequate means for managing risk. At this stage, the programme should pay particular attention to the needs of small-scale farmers who are net buyers, since they are in a weaker position in the market. Most of the activities during this phase are focused on agricultural development.

In the third stage, a greater proportion of food is being purchased from small-scale farmers (all the food that can be bought given the circumstances and challenges of the environment) and the previous efforts have strengthened small-scale farmers' position in the market. During this stage, investment needs gradually decrease since the efforts in the previous stages have enabled small-scale farmers to respond to the school feeding market without any specific intervention. Activities emphasize the focus area of institutional development.

HGSF requires interventions in all of the focus areas: strategic procurement, agricultural development and institutional development. Although the focus areas are distinct, they must

be coordinated to produce intended outcomes. The most sophisticated procurement strategy will not work if it targets small-scale farmers who are unable to grow enough surplus to meet school feeding requirements. Conversely, efforts to improve agricultural production may backfire without reliable transport infrastructure and market outlets. Each HGSF programme must include a combination of pro-smallholder agricultural development and procurement activities, tailored to the context in which the HGSF programme operates and they must all be supported by a strong institutional framework.

Figure 1: HOME-GROWN SCHOOL FEEDING SEQUENCING



4. SETTING THE STAGE

4.1 OVERVIEW

The HGSF model, as established in this framework, relies on a robust institutional structure to effectively carry out the programme. In fact, it is the third focus area of the programme and is seen as the base which supports its entire structure. A discussion of the broader issues regarding the development of a supportive institutional environment is presented in Chapter 7. However, it is useful here to review the essential institutional issues that must be considered when embarking on an HGSF programme.

At the 2007 NEPAD High-Level Regional Consultative Meeting on HGSF in Ghana, the comments of the representative of the NEPAD Secretariat (HGSF Ghana Consultation Report, 2007) highlighted the fact that establishing the right institutional framework for HGSF is critical for its implementation and success. It was reported that some of the criteria for implementing HGSF include:

- the need for political commitment and good governance;
- the link between commitment and concrete action;
- clear articulation by the lead ministry to guide implementation;
- clear definition of roles and responsibilities of cooperating ministries (in particular agriculture and education);
- development of clear budget lines for each ministry;
- creation of task forces for implementation;
- creation of strategies for local ownership and involvement of local structures.

From the outset, political will and commitment are crucial. Political will must then lead to creating policies or legal instruments to incorporate HGSF into the system. A prime example is in Brazil, where Fome Zero (Zero Hunger) is the government's most important social policy and has enabled different innovative programmes to exist, including HGSF. This is discussed further in Chapter 7. The other very important aspect of creating an institutional structure for HGSF is identifying who is responsible for what in HGSF design and implementation.

4.2 POSITIONING HGSF WITHIN EXISTING SECTORAL MANDATES

The fact that HGSF functions in both the education and agriculture sectors is considered a strength because it widens the set of possible outcomes. This can, however, also be HGSF's biggest challenge when creating the institutional arrangements needed for the programme to be effectively implemented.

Each sector tends to concentrate its efforts on achieving what it considers to be its central goal or set of goals, and consequently plans and allocates resources to these priorities. The challenge for programmes such as HGSF is to find the right incentives for each sector so that

the sector considers the programme a tool through which to achieve one or more of its central goals. This should then be translated into HGSF being included in sectoral strategies and planning documents, which would then enable the different sectors to allocate the appropriate amount of resources for the programme.

School feeding programmes are part of education sectoral strategies to achieve universal primary education and to provide a quality education by creating safe learning spaces and child-friendly or nutrition-friendly schools. Since most nascent HGSF programmes in Africa are developed from existing school feeding programmes, the ministries of education are already familiar with the programme's potential benefits. Including school feeding in sector plans means being able to tap into sources of funding that might be available for the programmes. In fact, some countries are benefiting from specific funding available for the education sector by allocating it to school feeding. Madagascar, for example, has received funds from the Education for All Fast Track Funding Initiative to implement a national school feeding programme.

Ministries of agriculture also have much to gain under the HGSF approach. In general, agriculture strategies and priorities, especially for Africa, include increasing yields of small-scale farmers, promoting the adoption of new technologies and increasing access to markets. In the case of Ghana, the Ministry of Agriculture's Food and Agriculture Sector Development Policy includes specific strategies to enhance the participation of poor small-scale farmers in food-security initiatives. The strategy includes designing and implementing special programmes to target resource-poor farmers, enhancing production diversification among vulnerable groups, ensuring access to nutrition and health information and ensuring more effective utilization of food. HGSF represents, in general, an effective tool with which this ministry could achieve many of its goals, or make better use of the resources that are already used for existing programmes. This means that, for most of the African countries starting HGSF programmes, the challenge is or will be to make these advantages explicit to the agriculture sector, which might or might not be fully engaged at present.

The key point is that HGSF enables both sectors to achieve a portion of their goals and could actually help them spend their scarce resources in a more efficient way because they would be tapping into each other's infrastructure and capacity. HGSF provides incentives for both ministries without creating competition for resources.

4.3 IDENTIFYING AN INSTITUTIONAL HOME FOR HGSF

The intersectoral nature of HGSF means that there are multiple parties that have an interest in the programme and play an important role in its implementation, but that should not justify lack of accountability or the absence of a clear institutional set-up for the programme. For the programme to be successful, HGSF should have a "home" within the institutional structure of a given country; that is, a designated actor or group of actors responsible and accountable for the design and implementation of the programme at the central and sub-national levels.

In many countries, especially in Africa, the school feeding programme falls under the responsibility of the ministry of education. However, choosing an institutional home for HGSF is not that straightforward. In some cases where decentralization is very advanced, the ministry of the interior or the ministry of local government also plays a prominent role.

There are several possible arrangements, depending on the context and particular characteristics of the country. Information from case studies conducted point to two main institutional arrangements for the programme: an independent institution in charge of the programme or an assigned line ministry with overall responsibility.

In some cases, where the programme is housed will be based to a large extent on political considerations rather than technical ones. Whatever the arrangement, it is suggested that governments find a way to build upon the existing sectoral infrastructure to implement the HGSF programme, however imperfect it may be. Furthermore, the choice of an institutional home for the programme should be based on a careful analysis of the strengths and weaknesses of the different parts of the system. For example, there should be a clear idea about the level of involvement and capacity of each line ministry, the degree of partnership with the private sector and the particular strengths of civil society organizations. Based on this analysis, the selection of a home for the programme should rely on the strongest part of the system while mitigating or compensating for the particular weaknesses in capacity.

In any case, a robust decision-making process and mechanisms by which those decisions are implemented are extremely important for HGSF. Regardless of the degree of decentralization of the programme, there is always the need to have an institution at the central level that is responsible for its overall implementation. HGSF's central-level institutional home should perform the following functions:

- overall design and implementation of the programme and its results;
- channelling and mobilizing appropriate resources for the different focus areas;
- monitoring and evaluation;
- aligning with broader development strategies;
- aligning with sectoral policy processes;
- setting priorities, targets and guidelines for the programme;
- identifying key implementation functions;
- diagnosing capacity and capacity gaps;
- providing overall supervision.

4.4 IDENTIFYING IMPLEMENTATION STRUCTURES

Once an institutional home has been identified, it is important to identify the implementation structures at the local level (i.e. how the programme actually works) to complete the picture of HGSF. The ultimate way to measure HGSF success is to assess whether hungry children are being fed at school and whether small-scale farmers are receiving the support they need to sell their surplus.

The NEPAD High-Level African Consultation on HGSF in Ghana identified two main models for programme implementation. One is a “bottom up” approach with local ownership, drawing on the strengths of existing community-based institutions, such as school management committees and village groups, to manage the HGSF programme. This bottom-up model is decentralized at the district and regional levels to ensure strong monitoring and

programme supervision. Food is procured by local school or community committees, from women's groups and farmer-based organizations, with some support from district and state institutions. In some cases, such as in Ghana and Thailand, schools or school-based committees are primarily responsible for implementation, making crucial decisions regarding all aspects of procurement and service delivery.

The second model for programme implementation is centralized at the national or state level and typically relies on contractors and traders for food procurement. While there is some community contribution and participation, such as from school or community gardens, the main ownership for the programme rests with the state or regional institution.

According to the results of the NEPAD consultation, most African countries use a decentralized, or bottom-up, approach that relies heavily on local structures. Decentralization allows greater room for creative, albeit informal, implementation that better responds to local needs and contexts, which in turn may foster local community involvement vital to successful HGSF. Nigeria's decentralized, informal procurement system, for instance, allows each school management committee to purchase foodstuffs and develop menus that reflect local dietary patterns and traditions. Such services are better able to use locally adapted technologies, support coordinated community action and promote partnerships.

Decentralization may indeed provide an impetus for a radical overhaul of school feeding programmes. In Scotland in the late 1990s, devolution created opportunities for the country to redesign its school feeding programme, which was one of the first attempts to address the crisis in the UK school meals system triggered by the abolition of nutritional standards and the Compulsory Competitive Tendering policy of the previous decade.

Case study 2: How HGSF works in Scotland

In 2002, the Scottish Parliament reformed the school meal programme through the Expert Panel Report on School Meals – Hungry for Success, which addressed the need to establish links between “learning and teaching on healthy eating in the curriculum and food provision in the schools”. The Hungry for Success report is now the regulatory framework for the national programme.

In 2003, the Local Government Act in Scotland established the duty of best value for school meals, emphasizing its educational and health aspects. In May 2004, the Scottish Executive implemented its “Sustainable Procurement Guidance for Public Purchasers”, which stated that buyers may legitimately specify requirements for freshness, delivery, frequency, specific varieties and production standards.

In Eastern Airshire, the local council led the process for linking the school meal programme to local production through a sophisticated tendering process. This process is managed by a specialized team of the council which provides guidance and information to potential suppliers. Advertisements are placed in the local press and the criteria for selection include the ability to supply to deadlines, the quality and range of food, food handling arrangements and facilities, use of resources and rewarding suppliers' contribution to sustainable development, e.g. through biodiversity promotion. The bids are evaluated by a panel on the basis of price (50 percent) and quality (50 percent) (Sonino R, 2007).

A decentralized implementation model, while having these advantages, also raises certain important issues:

At the local level, HGSF implementation might be overly concentrated on school feeding because HGSF is likely to evolve from an existing school feeding programme. There is a risk of missing opportunities to link with agricultural initiatives that are already supporting small-scale farmers.

School feeding programmes may become politicized at the local level and equitable access, both within and between localities, may be compromised under some decentralized governance systems. In Ghana, development programmes do not fully benefit from clear policy and planning. Similarly, despite the control from the Brazilian school feeding committees, private companies or local politicians may influence the tendering process. Indeed, NEPAD acknowledges such irregularities as one of the major potential barriers to HGSF implementation (Tomlinson M, 2007). Tackling these potential limitations requires clear and wider policy frameworks as well as independent and robust monitoring and evaluation (M&E) systems that ensure consistency and accountability.

In many decentralized HGSF programmes, implementation is delegated to regional or local governments (e.g. in Ghana, India and South Africa), or even to individual schools (e.g. in Nigeria and Thailand). HGSF presents added burdens of local food procurement to these regional or local entities already strapped for resources. In India, many states and schools lack some of the most basic infrastructure requirements, such as water supply, kitchen sheds, storage facilities and utensils. Empirical evidence shows that in the state of Kerala (and possibly elsewhere in India), the paucity of resources under a devolved system has deterred active local government involvement (Chettiparamb, 2007). Appropriate technical, infrastructure and financial support are necessary to ensure that these sub-national implementers are equipped with mechanisms and the capacity to cope with the added responsibilities of tendering, purchasing, food storage, transportation, monitoring cash and food management and auditing.

Decentralization may result in uneven implementation. In some localities, communities and schools with greater resources, political support or local initiatives may be better governed than others, creating regional disparities or reproducing or exacerbating existing inequalities. In such cases, localities, communities and schools most in need of the benefits of HGSF may be left out. In Brazil, where state and municipal government contributions make up a considerable proportion of the programme funding, poorer states may have fewer resources to cover all the needs in the state. In a similar manner, under India's decentralized system, local governments "have the freedom to expand on the programme, but only by providing their own funds" (Chettiparamb,A, 2007).

Decentralization often leads to great differences in practices at regional and local levels. Ghana's HGSF programme, although rolled out nationwide under high-level political leadership, shows differences at the regional, district and school levels in administration structure, procurement practices, menu development and meal preparation. This is also true in Brazil, India and South Africa, where a diversity of practices can be observed at each implementation level. In Thailand, where individual schools make decisions about the use of the government subsidy, the school lunch programme is not formalized except for the use of nutritional guidelines set by the national government.



4.5 DEVELOPING INSTITUTIONAL COORDINATION MECHANISMS

It is just as important to have a mechanism to coordinate the actions of different stakeholders as it is to have an institution with overall responsibility for programme implementation. Coordination among the various institutional and non-institutional stakeholders is important to effectively address the HGSF focus areas, ensure smooth planning, mobilize and allocate human and financial resources and create legislative and policy support for the interventions. The actual effectiveness of the coordination mechanisms depend on the power of the institution that is accountable for it. In general, HGSF's "institutional home" should also be the guardian of the coordination process. If coordination is effective, the different sectors and stakeholders will be able to channel sector resources based on an HGSF central budgeting and planning process conducted by the institution in charge.

In many cases, effective coordination at the central level is achieved through a steering committee or an interagency working group that includes representatives of the public sector and other important groups, such as academia, national and international NGOs, civil society and bilateral donors. The tasks of an HGSF steering committee could include advising on the policy, legal and institutional framework for project preparation, approving resource allocation criteria and mechanisms, advising about targeting beneficiaries and geographic areas, and reviewing, providing comments about and approving project operations. In general, the steering committee, with its broad representation, functions as an oversight committee, requesting groups to assume accountability for programme components and activities and reinforcing internal control mechanisms.

Coordination at the local level is as important as coordination between central structures. At the regional, district and school levels, it is very important to effectively channel efforts and resources towards correctly implementing the programme. In Ghana, for example, the HGSF programme is implemented by local government at the district level, with regional government coordinating and monitoring within each of Ghana's ten regions. Establishing effective partnerships between different stakeholders at the local level (e.g. district assemblies, school management committees, parent-teacher associations and local farmers' associations and communities) is critical for programme success. District planning coordination units play the main coordinating role.

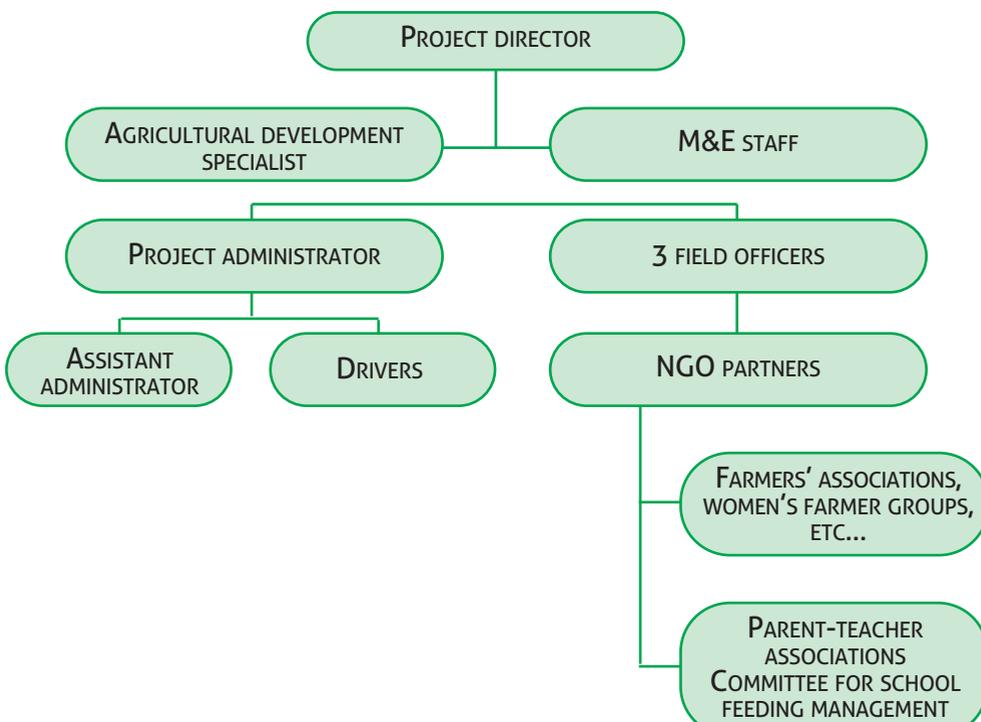
Institutional arrangements for HGSF vary among countries and depend on a number of factors, including the type of government and governing rules (e.g. very centralized or decentralized), the programme funding mechanisms, the political process and the priority given to HGSF by the various political bodies. Some of the other key institutional entities for an HGSF programme are:

- **A joint ministerial task force**, which is in charge of implementing the institutional and policy development focus area and of providing guidelines and directives for overall programme preparation;
- **A programme committee**, composed of government and non-government staff, which is responsible for coordinating the HGSF components and activities and monitoring and evaluating HGSF programmes;

- **A Project Implementation Unit (PIU)**, which is responsible for day-to-day management and implementation of the HGSF programme, including procurement, disbursement, logistics and all other aspects of programme implementation. The PIU is often staffed with a project manager, accountant, procurement officer, project evaluation specialist, monitoring specialist and, when needed, an office support person or driver. All staff should be recruited using a competitive process;
- **International technical advisors** who assist in programme design and implementation and provide technical capacity in specific areas of the programme or in specific innovations in the way the programme is shaped and implemented. International technical advisors may become very important in external programme evaluations;
- **Implementing agencies**, which are local organizations such as NGOs, community-based organizations (CBOs) and private companies, that manage specific activities (e.g. procurement, distribution, catering and food processing) when local government lacks the capacity to oversee and implement service delivery.

Figure 2: Proposed Project Implementation Unit (PIU) in Benin

Planning and Evaluation Committee (Min. of Planning, Education and Agriculture, WFP Country Director, Danish cooperation, 3 NGOs)



4.6 SELECTING PARTNERS AND DONORS

Partners are essential in multi-sector programmes such as HGSF because they share the funding and management responsibilities for selected activities. Partners can be one of two types:

- **Autonomous entities**, such as private sector, civil society, bilateral or international donors. They use their own funding to conduct some HGSF activities or the activities of an entire focus area. These entities set their own criteria, coordinating them with the overall design of the HGSF programme, to implement and manage the programme and monitor success. National-level issues like quality standards, regulations and procurement rules must be followed by all partners in an HGSF programme;
- **Subcontracted entities**, such as national or international NGOs, associations and private institutions. They follow the directions of the PIU and the objectives, deliverables and timeline specified by their contract with the PIU, or with a local government or private sector entity responsible for overall HGSF implementation.

In HGSF programmes, donors and NGOs or technical support bodies are particularly important to assist in these areas:

- **School feeding**
 - > financing training for administrative staff to manage funds;
 - > financing food costs;
 - > conducting M&E activities;
 - > setting up cooking facilities, which should include fuel-efficient stoves;
 - > off-setting the cost of materials used in the programme, such as plates, cups and educational material;
 - > providing health and nutrition-related activities such as deworming, micronutrient fortification and HIV and AIDS awareness materials.
- **Procurement**
 - > financing warehouses and training staff;
 - > providing initial technical and business development services to smallholders and their groups to lower the high up-front costs of establishing contract farming arrangements;
 - > financing pilot procurement activities;
 - > training those in charge of procurement, such as community members, groups, parent associations and school masters;
 - > providing innovative tools to disseminate information;
 - > conducting M&E activities.
- **Agricultural development**
 - > financing baseline studies, market surveys, crop production surveys, etc.;

- > brokering linkages between farmers, their groups and potential providers of inputs and marketing outlets in the private sector;
- > providing inputs and technical assistance;
- > providing innovative tools to disseminate information;
- > promoting the formation of farmers' associations and cooperatives to improve farmers' market position;
- > assisting smallholders to access financial services (e.g. investment credit) that are not supplied by the agro-marketing firms;
- > conducting M&E surveys, including baseline studies, and mid-term and final evaluations;
- > financing pilot agricultural development activities.

- **Institutional and policy development**

- > providing technical assistance to develop the strategy, policies and legal framework for HGSF;
- > providing training for government staff at all levels;
- > supporting M&E design and implementation;
- > supporting the development of public awareness campaigns.

Partners should be selected through a competitive process based on eligibility criteria. Only those institutions that have performed well should continue to receive funding and support to conduct HGSF activities. The HGSF PIU should establish effective ways to monitor partners and link continued funding to performance. Monitoring indicators should be clear and transparent and should address quality and operational efficiency. Reporting must include the monitoring indicators, rather than just general, qualitative information. Mutually agreed performance standards should be set at the time the partnership is established.

5. FOCUS AREA 1: STRATEGIC PROCUREMENT

5.1 OVERVIEW

This HGSF focus area addresses the purchasing process that supplies food to the school feeding programmes. In WFP's HGSF programmes, this means addressing the purchasing process in such a way that small-scale farmers may benefit. The specific intent to benefit small-scale farmers is what makes this procurement process "strategic". The objectives are to:

- buy directly from smallholder organizations and reduce the roles of other participants in the supply chain that diminish their purchasing power;
- create an enabling environment for small-scale farmers to access markets by providing market information and training, promoting aggregate supply and advocating for rules, regulations and incentives for smallholder procurement.

Procurement strategies, no matter how advanced or innovative, run the risk of delivering only short-term benefits to small-scale farmers and farmers' groups if the focus is only on making a purchase of food. HGSF programmes aim to improve the welfare of small-scale farmer households long after the purchase has been concluded. To have long-term impact, procurement interventions must:

- create a market for small-scale farmers;
- contribute to changing market structures so that a larger proportion of the market price goes to local farmers;
- create a stronger role for local farmers in the supply chain by reducing the relevance of intermediaries in the purchasing process;
- ensure that small-scale farmers produce a sufficient supply of good-quality products to enable them to respond to market demand.

To achieve these goals, the HGSF programme should ensure that:

- small-scale farmers have better information about the market;
- small-scale farmers improve quality management and post-harvest handling skills;
- small-scale farmers improve management, organizational, marketing and general entrepreneurial skills;
- there is an adequate level of rural infrastructure and storage facilities;
- there is an enabling institutional environment.

Procurement approaches and systems tailored to favour smallholders, such as contract farming, may help overcome market imperfections, minimize transaction costs and gain market access for small-scale farmers. While HGSF programmes can procure food directly from small-scale farmers using ad hoc procurement mechanisms, they can also establish pro-smallholder tendering practices that enable small-scale farmers to successfully compete in the HGSF market. For example, in certain situations WFP has relaxed its standard

procurement guidelines by tendering for smaller amounts, relieving vendors of obligations to transport food, allowing partial payments, waiving bag marking requirements and providing bags.

5.2 WHERE TO BEGIN

Work in this area begins by conducting baseline market surveys to assess current conditions and by disseminating information to farmers about HGSF's demand for products, the price available for products, the expected quality and the timing and conditions of purchases. Each time this is done, the HGSF programme gathers information about the reactions of small-scale farmers, the amount of food that was purchased, the reasons why some associations might not have been able to access the market and specific restrictions that might be affecting the farmers. Specific activities should be designed, piloted and tested on a small scale to gather information about what is necessary to adapt the school feeding programme for HGSF. The programme can then slowly tailor strategies specific to the situation and can learn continually from the process.

HGSF should be started in an area that has surplus agricultural production so that the focus can be on increasing market access for small-scale farmers rather than on immediately addressing agricultural supply and production problems.

Important Actions

- Adjust the composition of the food ration to include locally grown foods, without hampering quality or nutritional value. Micronutrient local fortification could be implemented if needed.
- Conduct supplier surveys and crop assessments to identify small-scale farmers' associations, their productivity levels and the barriers for them to access the market.
- Disseminate information about HGSF activities to small-scale farmers, including the benefits of HGSF, programme requirements, size of the demand, procurement mechanisms, available resources and timing.
- Redesign regulatory and procurement mechanisms to address barriers to access.
- Open a tender for an amount of food which is proportionate to the production capacity. A gradual opening of the school feeding market will minimize price changes brought on by excess demand.
- Secure the majority of the schools' food needs through traditional procurement mechanisms.
- Establish partnerships with existing national and international institutions and programmes that help small-scale farmers increase production and gain access to the school feeding market.
- Actively involve and train staff at the central and local levels on the HGSF concept and its different stages and requirements.

Costs

Investment is needed to cover the costs of establishing the programme. Costs associated with this stage are related to:

- disseminating information;
- conducting initial assessments and surveys;
- higher procurement costs;
- training small-scale farmers and cooperatives;
- enhancing smallholder productivity;
- building institutional capacity.

Risks

Potential risks include:

- the first small-scale farmers who participate may not be satisfied with the results. For example, they may perceive that the programme has too many requirements for them to participate, offers prices that are too low, or delays making payments;
- resources may not be spent in a timely manner or on appropriate activities;
- the programme and its potential benefits might not be well understood by all stakeholders;
- institutions and other partners might not be engaged in the supply and procurement process;
- the programme may lose momentum and energy.

5.3 THE FOOD BASKET

In many cases, the type of food selected for the school feeding programme will determine whether the food can be purchased from small-scale farmers. If the food selected is not normally grown or consumed by children and their families, very little can be done to link the school feeding programme with agricultural interventions benefiting small-scale farmers. This is why adjusting or modifying the food basket is one of the initial steps.

The choice of commodities should be guided by the following considerations:

- **Nutritional situation:** In countries where the local diet is poor in micronutrients and where micronutrient deficiencies are a public health problem, school meals can contribute to reducing micronutrient deficiencies. When composing the food ration, it is important to consider prevailing micronutrient deficiencies among the target groups. If vitamin A deficiency and iron deficiency anaemia are significant public health problems, fortified blended foods or fortified cereal flours that are donated or locally processed and procured should be provided. "Sprinkles" of micronutrients are a handy alternative as well. At the same time, parents can be encouraged to contribute micronutrient-rich local foods such as fresh vegetables and fruits and groundnuts. If iodine deficiency

disorder is a significant public health problem (i.e. the prevalence of goitre among school-age children is above 5 percent), iodized salt should be included in the ration.

- **Local food preferences:** The composition of rations should be determined primarily by local food habits and preferences..
- **Cooking time and fuel efficiency:** Food commodities should be easy to prepare and with a minimum use of fuel; for example, blended foods or cereal flours are easier and quicker to prepare than whole grain cereals. Ease of preparation is especially important when meals have to be served before classes start or during the mid-morning break, as in half-day schools.
- **Bulkiness of cooked food:** While one should aim to reach the recommended ranges of nutrient requirements, excessive quantities of foods in one meal should be avoided. The bulkiness of cooked items should be thought about when considering increments in the amounts of the dry ration size to increase its nutritive or income transfer value (i.e. what the food is worth in the market). For example, the volume of rice could increase almost three-fold upon cooking (100 grams of dry rice provides 230-250 grams of cooked rice, or 300 ml in volume), while maize meal prepared into a soft porridge could increase 4.5 times in volume (100 grams of dry maize meal provides about 500-600 grams of soft porridge, or 440-460 ml in volume).
- **Meal diversity:** Meal diversity is particularly important in day and boarding schools. While diversity in meal preparation is primarily the responsibility of communities such as parent-teacher associations, some food commodities lend themselves to a wider range of cooking possibilities than others. For example, maize meal and sorghum flour can be prepared in the form of porridge (sour, sweetened, soft or stiff), dough (dumplings or fritters), or other preparations adapted to local food habits. On the other hand, rice and bulgur wheat have more limited cooking possibilities. With those foods, meal variety depends on the diversity of accompanying sauces made with ingredients (e.g. vegetables, condiments and spices) provided by the community or purchased from schools' budgets that national authorities have provided for that purpose.
- **Logistics:** The greater the number of commodities, the more complex and expensive are their transport, storage and accounting. The number of commodities should be as minimal as possible, particularly for projects in which the main role of food assistance is to relieve short-term hunger, such as in half-day schools.



Case study 3: School feeding menus in Ghana

The Ghana school feeding programme provides children with a lunchtime meal worth approximately 3,000 cedis (US\$ 0.32) per child per day (a percentage of this money is used for overhead). The range of food, nutritional balance, and the extent to which it is grown locally varies according to the region of Ghana and the time of year. Basically the food will consist of carbohydrates such as rice, plantain, or yam accompanied by a stew with protein and vegetables (e.g. stew based on palm oil, tomato and onion, with fish or meat). Iodized salt may be used, as may other fortified foods such as palm oil and fortified corn-soy blend.

The menu is designed by the nutrition specialists from the District Ghana Health Services in each region and given to the LEGON University to provide input and comments. It may vary at the local level according to food availability. As an example, the menu for the Northern Region is as follows:

Monday: TZ (corn mousse) & ayoyo (shredded green leaves) soup with fish/meat, or groundnut soup with rice, or rice balls with fish and beef;
Tuesday: Tubani (steamed bean/bambara bean dough wrapped in plant leaves), Gabil (steamed bean/bambara bean dough) and stew, or bean stew with fish yam/rice or banku (fermented hard maize cake);
Wednesday: Waakye (beans and rice) with stew and boiled egg, or bean stew with boiled egg, gari (cassava) and fried plantain or rice;
Thursday: Okro (vegetable) soup and fish, meat with leaves, banku (fermented hard maize cake)/TZ (corn mousse) or fish/bean stew with rice or yam;
Friday: Garden egg stew with boiled egg, boiled yam/rice/banku, or rice and stew with boiled egg.

5.4 SURVEYING TARGET AREAS

Because it is necessary to identify areas where agricultural production exists and areas that are food-insecure, there is a need to conduct surveys on the socio-economic condition of smallholder agriculture. Such a survey helps in the design of the programme and provides the baseline data for monitoring and evaluation activities during the programme's implementation. In the most remote areas of sub-Saharan Africa in particular, it is not easy to find comprehensive information on the structure and performance of smallholder agriculture. A good understanding of the economic structure of the productive environment is essential to avoid potential unintended effects on the welfare of poor households.

Production and market surveys help understand the main characteristics of agricultural production, market access and options. At the same time, qualitative social assessments are very important in the early stages of programme design. They will help ensure that the programme's objectives are acceptable to potential beneficiaries and that the design considers any possible social impacts that the programme may have. Social assessments also detect small-scale farmers' main needs, expectations and problems in accessing markets and increasing yields.

The structure of the survey, the selection of the appropriate indicators and subsequent monitoring and evaluation are context-specific. However, the following list provides examples of relevant indicators:

Agricultural structures and production performance:

- number of smallholders and average size of farms;
- relative proportion of small and large holders;
- main cropping patterns and average yields in smallholder agriculture.

Market structure:

- market position of households, including percentage share of sellers, net buyers and net sellers;
- price dynamics for main crops.

Household income:

- average income of smallholders;
- percentage of income obtained from extra-farming activities.

Agricultural policy and development initiatives:

- current agricultural policy framework in the region;
- farmer organizations, including type, size and composition;
- existing agricultural development efforts, including objectives and scope.

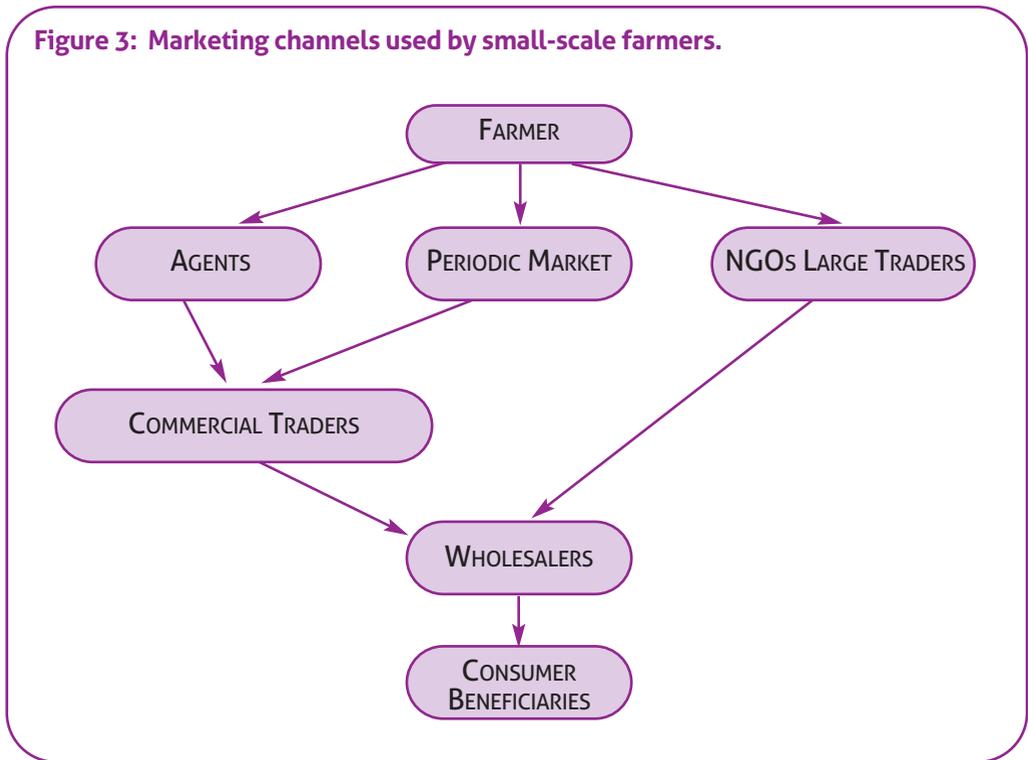
5.5 THE PURCHASING SUPPLY CHAIN

WFP's HGSF procurement interventions strive to ensure that small-scale farmers retain a greater share of the final price of the product. Generally, farmers are at the end of a long supply chain where their share of the final price paid by consumers is disproportionately small. This system uses several kinds of trading partners:

- **Agents:** Commercial traders employ free-lance agents who travel to the farms, paying cash to the farmers for their surplus crops. The agents then transport the food by bicycle and pickup truck to a trading centre to aggregate the purchases into larger volumes, which are then transported to or picked up by larger traders and private companies. Often, agents use their market power to drive down the prices they pay to farmers, particularly to poorer farmers who have small surpluses and who live in the most remote rural areas.
- **Periodic markets:** Local governments set up markets periodically to promote trade in the district. Small-scale farmers travel to these markets on foot or by bike to sell their products. Farmers who must travel long distances to reach the market will more likely sell their products at a low price because they do not want to travel back to their homes carrying bags of unsold products.

- **NGOs and large traders:** Staff from NGOs travel with pickup trucks to collect crops from farms that have surpluses.

Figure 3: Marketing channels used by small-scale farmers.



Trading partners, such as agents, middlemen and traders, fulfil a useful role: they aggregate small quantities of a commodity¹⁴ into efficient trading volumes, incur the cost of visiting farmers and farmer groups to collect products and assume the risk of purchasing poor-quality commodities. Nevertheless, farmers remain unequal trading partners and suffer most from the effects of inefficient agricultural markets in sub-Saharan Africa.

5.6 PLANNING AN HGSF PROCUREMENT STRATEGY

An HGSF procurement strategy must consider three things:

- Who is in charge of purchasing food for the school feeding programme?
- How much food should be purchased and what share should be purchased from smallholders?
- From where and from whom should this food be procured?

¹⁴ For instance, a trader can conclude a purchase of a farm product judging that it is of reasonably good quality, but he or she won't be able to verify on the spot whether it is infested with aflatoxin.

Who is in charge of purchasing food for the school feeding programme?

Purchasers of food and commodities for school feeding may include:

- central government;
- local government;
- commercial or private intermediaries;
- NGOs;
- community groups, such as CBOs or women's groups;
- schools, through school management committees, parent-teacher associations, headmasters, etc.

The food buyer for each HGSF programme may be different, depending on the local environment and on the maturity of the programme. Well established HGSF programmes are more likely to use organized and ad hoc procurement groups to purchase the food, while nascent programmes are more likely to use the school hosting the programme.

The majority of African countries with weak institutional structures are more likely to have a very decentralized procurement approach, using schools or community groups, with little or no coordination with central or local government. These simpler procurement approaches have lower risks of corruption, bureaucratic hurdles and delivery negligence than the more complex approaches. Greater ownership and accountability at the grassroots level play an important role in preventing mistakes that could jeopardize feeding schoolchildren. At the same time, these simpler approaches have greater difficulty in controlling food quality, predicting food quantities, guaranteeing that food is coming directly from small-scale farmers, having a food storage place at the school or in the community and having staff fully dedicated to food procurement.

How much food should be purchased and what share should be purchased from smallholders?

Each school feeding programme determines the type and amount of food it needs, based on an analysis of factors such as the quality and quantity of available products, the number of children it needs to feed and the type of meals it will offer. However, it is advisable for a new HGSF programme to begin by purchasing relatively small amounts of food from small-scale farmers, scaling up as the programme develops. This initially cautious approach:

- lowers the risk of reduced food availability for schools at the beginning of the programme;
- allows time to learn to manage the complex activity of procuring from smallholders;
- avoids excessive market interferences that could generate problems for the programme and for smallholders themselves.

This last point is particularly important. Regardless of how imperfect and thin the markets may be, smallholders are, in many cases, already involved in market transactions. Furthermore, the more imperfect and thin the markets, the higher the probability that certain players, such as large traders, exert great influence. Trying to abruptly and substantially

alter existing market processes could generate adverse reactions among these players. The Chilean HGSP programme addresses this issue by inviting only smallholders to participate in the first procurement phase, while offering larger operators the chance to supply whatever portion of the demand the smallholders are unable to fill at predetermined price and quality levels. This approach minimizes the potential friction between the different market players and ensures an adequate supply regardless of the production capacity of small-scale farmers.

From where and from whom should this food be procured?

Food is usually procured from productive farming areas that can immediately supply the school feeding programme, but which are often located far from the schools of food-insecure areas. While procuring from productive areas is necessary to meet the school feeding needs, it may also be more expensive due to the costs of transporting the food to the schools.

HGSP should source food as directly as possible from small-scale farmers or from farmers' associations, cooperatives or warehouses, targeting groups that could become regular partners with the programme. HGSP must offer agricultural development support to help small-scale farmers increase their production and meet the demand of the school feeding programmes. When this occurs, food can be procured more regularly from these smallholders. Selection criteria may include farmers who:

- own less than 3 hectares of land;
- face food insecurity and/or are living on less than US\$2/day;
- have a reputation for hard work;
- have potential for increasing yields;
- belong to a membership-based cooperative;
- are willing to join a membership-based cooperative;
- are located in areas where other agricultural aid agencies are present.

5.7 COSTS OF DIRECT PROCUREMENT FROM FARMER GROUPS

Sourcing food directly from farmer groups is riskier and more costly than procuring it from commercial traders. An exercise to compare the costs of procuring from traders and farmer cooperatives produced the following findings:

- food costs are significantly lower for farmer cooperatives than for traders;
- procurement costs are higher for cooperatives than for traders;
- transportation and default costs are higher among cooperatives;
- the risk of side-selling incidents and other forms of default is higher among cooperatives, which is one of the main reasons why procurement from small-scale farmers could be a difficult process.

The reasons for the higher procurement costs from cooperatives can be understood by considering the following assumption: farmer cooperatives provide relatively small quantities of food, i.e. 10-1,000 metric tonnes (MT), compared to a commercial trader.

Supply fragmentation has economic consequences for a procurement agency. For example, splitting one tender for 2,000 MT into ten tenders of 200 MT each will entail more work and higher costs for the procurement staff to issue the tenders and process the bids, assess the quality of and monitor ten different lots, organize a more complex transport plan possibly covering long distances on poor roads, etc. Also, higher costs are associated with training programmes for cooperatives and the higher incidence of default among the farmer groups.

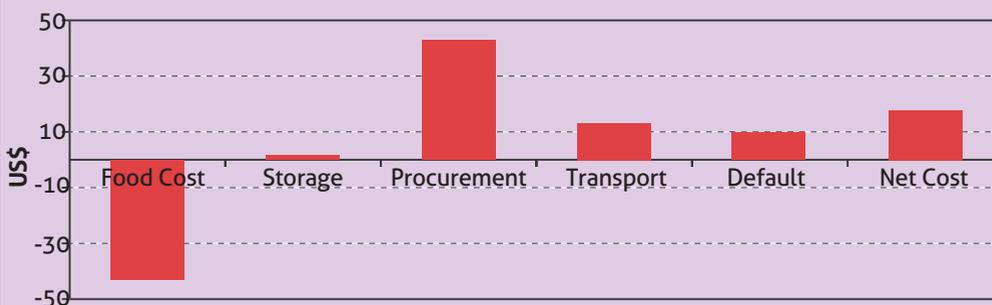
Even if procurement costs are higher for cooperatives, engaging farmer groups in procurement activities can generate short- and long-term benefits for small-scale farmers such as higher income, improved marketing skills and access to better information. HGSF programmes must analyse the higher procurement costs against the programme objectives and impact on poverty reduction. Furthermore, the risk and the costs of default can be expected to decline if careful investments are made in training, building trust and building capacity in management, accounting, quality control and legal matters.

The HGSF programme must ensure that procurement information is available and constantly updated. While there is often a wealth of information about school feeding programmes,

Case study 4: Comparing procurement costs for millet in Mali

A comparative cost analysis was done for two procurement channels: farmer groups and traders. Information was collected in four countries where WFP operates (Ghana, Malawi, Mali and Uganda). The table below summarizes the comparative data collected for the procurement of millet in Mali in the summer of 2007.

Differential (Farmer Cooperatives-Traders) Food & Procurement Costs for Millet in Mali
July 2007 (\$/MT)



Preliminary results indicate that in every country, food costs¹⁵ were significantly lower for farmer cooperatives than for traders. Food price differentials ranged from US\$12/MT (maize in Uganda) to US\$80/MT (maize in Malawi). On the other hand, costs associated with procurement were notably higher for cooperatives than for traders. Transportation and default costs also were higher among cooperatives, reflecting the difficulties of reaching farmers in rural areas and the costs associated with counteracting side-selling incidents and other forms of default among farmer cooperatives.

¹⁵ Food costs include farm-gate price, cleaning, drying, fumigation, inspection, bag & bagging and marking.

there are very limited data about local procurement. Cost tables are often incomplete and inaccurate, which makes it difficult to assess and select procurement sources. Regardless of the selected procurement strategy, the following factors must be considered when assessing costs for procurement, processing, marketing and transportation:

- farm gate price;
- food treatment;
- quality and quantity inspections;
- marking;
- loading and offloading;
- storage;
- storage losses;
- market dues and taxes;
- tips and incentives;¹⁶
- retailers/brokers;
- procurement labour;¹⁷
- transport to traders;
- transport to schools or other distribution points.

WFP's "P4P" Initiative: Maximizing the benefits of local procurement

In line with WFP's future strategic direction to better use its purchasing power to support the sustainable development of food security, WFP is launching a set of pilot activities, primarily in Africa, to further explore programming and procurement modalities. This effort is known as "Purchase for Progress", or P4P.

WFP plans to combine its food assistance programmes with innovations in local and regional procurement and market development. P4P will take a more strategic look at WFP food purchases to see that it maximizes its positive impact on development. WFP will enhance marketing tools to promote agricultural development.

New partnerships are needed to raise farmer productivity and income through improved farming systems, supply of farm inputs, training of farmers and increased availability of markets. Working with national governments and alongside bilateral partners, United Nations agencies, NGOs, farmers, traders, processors and research institutions, P4P will help create demand for food staples grown by small farmers in countries where WFP has operations. The aim is to help reduce the risks they face and boost farmers' incentives to invest in technologies and practices to increase and improve production. Using WFP's current procurement and gender practices as a basis, and with a particular focus on low-income and smallholder farmers, the P4P aims to:

- identify and share best practices for WFP, NGOs, governments and agricultural market stakeholders to increase profitable engagement in markets;
- strengthen farmers' capacities to raise their income from agricultural markets;
- identify and implement best practices for increasing sales by low-income farmers to WFP; and
- transform the WFP food purchase model in a way that supports sustainable production and addresses the root causes of hunger.

¹⁶ No inference is made about a procurement agency tipping or giving incentives under the table; however, there may be supply chains in which tips and incentives are indeed doled out.

¹⁷ By "procurement labour cost" we mean the procurement costs incurred (e.g. staff, office rent and administrative costs related to procurement).

5.8 MAIN INTERVENTIONS AND CHALLENGES

This section describes two procurement strategies that could be used by HGSF programmes, including the specific advantages, disadvantages, risks and opportunities of each:

- direct procurement from farmer cooperatives;
- contract farming.

TABLE 2: TWO PROCUREMENT STRATEGIES FOR HGSF

Procurement Strategy	Procurement Agent	Advantages	Constraints & Risks
Direct procurement from farmer groups	<ul style="list-style-type: none"> • NGOs • WFP • schools • private sector 	<ul style="list-style-type: none"> • no need to rely on other partners • shortened and simplified supply chain 	<ul style="list-style-type: none"> • high default risk in the initial stage • lack of scalability
Contract farming	<ul style="list-style-type: none"> • WFP • agribusiness • private sector 	<ul style="list-style-type: none"> • provision of inputs and services • access to credit • new technology and skills transfer • potential access to markets 	<ul style="list-style-type: none"> • more suitable for agribusiness companies • need high levels of trust between sellers and buyers • lack of contract enforcement and appropriate code of conduct among both parties

Direct procurement from farmer cooperatives

Direct procurement from individual small-scale farmers to meet the food requirements of the school feeding programme is impractical. The surpluses produced by the majority of small-scale farmers can be so small that the logistical resources necessary to collect the tonnage needed would make the procurement effort prohibitively time-consuming and expensive. However, it is still possible to directly target smallholders by procuring from farmer cooperatives (Coulter J. et al, 1999a; Coulter J. et al, 1999b).

Farmer cooperatives (also known as farmer groups or associations) help overcome traditional barriers to market entry for individual small-scale farmers by pooling together the small quantities produced by them, reducing transactions costs and raising their bargaining power. Farmer groups provide various services required by farmers, such as distributing agricultural inputs, collecting and marketing members' agricultural produce, conducting grading and quality control and, at times, providing transportation. Through farmer groups, smallholders can be more attractive to customers and companies offering credit for agricultural inputs.

Establishing and operating effective farmer cooperatives has a number of challenges, including:

- smallholders need technical support and training to establish and manage an effective, truly representative farmer group;
- cooperatives require good leadership, management skills and institutional support;
- there are high initial costs to establish a farmer cooperative; ideally these costs are covered by donors or NGOs.

To enhance farmer groups' successful participation in its tenders, WFP has adopted a set of special provisions:

- purchase as near as possible to project sites;
- issue tenders for smaller lots that are better tailored to the capacity of farmer groups;
- waive performance bonds;
- waive the obligation of bag markings;
- allow extended delivery periods;
- make payments in local currency;
- permit the possibility of partial payments.

While these changes have eased the participation of farmer groups, some corporate procedural constraints still remain. WFP cannot:

- guarantee demand or set prices as it issues competitive tenders;
- pay in advance of delivery;
- renegotiate the price of a commodity once the bids have been offered;
- renegotiate contract terms if market conditions change.

Contract farming

In contract farming, a trader or processor purchases farmers' harvests according to terms arranged in advance through contracts. The farmer harvests and delivers to the contractor a certain amount of product, based on anticipated yield and cultivated acreage, at a pre-agreed price.

Contracting is fundamentally a way of allocating risk between the farmer and the contractor. The farmer assumes the risks of production, while the contractor bears the risks of marketing. The allocation of risk is specified in the contract and can vary widely; some contracts specify a certain volume of production while others specify only a price (which can be, for example, market price, average price over a period of time, or the difference between a basic price and a market price).

Contract farming offers advantages to farmers, including a guaranteed up-front price and direct access to market. Advantages for the contractor include protection from market price fluctuations and the ability to plan for the long term. However, small-scale farming

Features of successful farmer cooperatives

Activities

- conduct relatively simple marketing, input supply and credit operations, coordinating with market intermediaries higher up the marketing chain;
- tend to begin with a single activity;
- often fail with more complex operations, such as operating jointly owned fixed assets or processing (e.g. milling);
- tend to concentrate on relatively high-value produce (e.g. seed-maize, dried fruit, oil palm and cotton) rather than low-value staples.

Structure

- generally created from existing organizations, where members already know each other and share considerable trust;
- tend to have small, homogenous membership (i.e. 10-30 members).

Member participation

- clear member-driven agenda;
- strong democratic processes;
- written constitutions, rules and records to help clarify roles and enhance transparency.

Relationships with external agents

- absence of political patronage;
- high degree of self-financing; successful cases are not associated with interest rate subsidies, but with viable business objectives that make subsidies unnecessary;
- external training activities, particularly to integrate the group into the wider economy by developing links with financial and market intermediaries.

Source: Coulter J., et al., 1999b

has certain characteristics that make it difficult for farmers to be included in contract farming arrangements. Transaction costs, in areas such as service delivery and monitoring, may be too high for many small-scale farmers. Larger-scale farmers usually have better crop management skills and greater access to extension services which reduce the risk of crop failure, while the risks of smallholder cultivation may be higher, especially on rain-fed marginal lands. Contract farming programmes are more likely to be successful if they start by including a small group of farmers who are well selected for the programme.

Challenges in contract farming arise when the parties do not maintain the terms of the contract. Problems occur when contractors fail to procure, or when farmers fail to produce, the expected volume and quality of crops; when contractors begin to buy, or farmers begin to sell, products on the side; or when farmers default on repaying their

loans. In all these cases, the main issue is lack of contract enforcement and poor conduct by both parties. A major factor in ensuring contract compliance is the degree to which the smallholder wants the contract to be renewed. The contract must be sufficiently attractive to the smallholder so that the costs of defaulting (such as being excluded from contracts in future seasons) exceed the benefits of defaulting (such as being able to pocket forward payments). If a contract offers only marginal profitability, the risk of default is higher.

TABLE 3: APPROACHES TO REDUCE SMALL-SCALE FARMER DEFAULT RATES

Lending through groups – Peer pressure within the group screens out potential defaulters and can reduce the risk of default, particularly when the group has to put up joint collateral. Economies of scale and cost reductions can be achieved by delivering services to the group. Farmers may also benefit by having a stronger hand in negotiating with companies through the group.

Good communication and close monitoring of farmers – Good communication between the purchasing agent and the farmers helps foster good company-farmer relations and a sense of trust. Also, group members can monitor each other to ensure good product quality.

Range and quality of services offered – The farmer risks more by breaking an arrangement if there is a closer relationship between the farmer and the business, and if there is a better and larger range of services offered to the farmer. Delivering timely services that respond to farmers' needs creates incentives for farmers to honour contracts.

Incentives for repayment and penalties for default – Repayment rates can increase when incentives are given for repayment and when penalties, such as asset seizure and group exclusion, are applied in the case of default.

Cooperation between buyers – While this is not common, cooperation between buyers, such as in agreeing not to purchase from farmers under contract with other buyers, may provide benefits to all the parties. Sharing information on defaulters is another way to ultimately benefit all companies involved in contract farming, both within and across sectors.

(Coulter J., 1999 a,b)

Case study 5: Midday Meals in India

India has a long tradition of school feeding programmes (some since as early as the 1920s), largely funded by state governments with some external assistance. In 1995, the central government launched the 'National Programme of Nutritional Support to Primary Education,' or 'Midday Meals' (MDM) scheme.

The MDM operates through the Food Corporation of India (FCI), which procures food domestically and then distributes it to a network of FCI stores, where it is then transported to individual schools and villages. MDM is largely decentralized by state and so operations vary throughout the country. The central government supports the states by providing free food grains (e.g. rice or wheat) to implementing state agencies and reimbursing the costs of transportation to the district authorities. States pay for any additional food items required and for food preparation. States can choose from providing cooked meals at school or dry rations. Most states choose dry ration distribution, except for Orissa and Gujarat, which have opted for cooked meals. The scheme now covers some 130 million school children throughout India.

When examining the procurement alternatives, it was found that procuring rice directly from the farmers is not feasible because the food for the MDM is mandated to be channelled through the public distribution system. However, the decentralized nature of the programme allows for some differentiation on programme design and procurement practices. For example, in Kerala, procurement arrangements involve local farmers selling paddy directly to mill owners, who in turn sell rice to authorized wholesalers who then distribute it to fair-price shops.

Unfortunately, programme flaws have seriously limited the local procurement aspect. These include:

- lack of smooth flow of funds, resulting in difficulties in maintaining steady procurement commitments which are necessary for local small-scale farmers;
- risk for the municipality that local agriculture initiatives might not be able to supply required amounts of produce at all times;
- risk for local farmers that they might not be able to honour contract commitments at all times;
- difficulty in adjusting supply and demand during vacation time and unexpected school holidays.

The major rice-producing districts in Kerala are Palghat and Alleppey. Local rice can be procured through existing arrangements and channelled to other districts that do not produce enough. The quantity of rice required by the MDM programme in the state in 2005/2006 was 27,620 tons. Total rice production in the state during the same period was 629,000 tons. Therefore, the rice requirement for MDM is less than 5 percent of the total production (even in a food-deficit state). The report concludes that demand from the MDM programme is too small to make a significant contribution to reviving the agriculture sector in terms of rice.

(Chettiparamb A., 2007)



6. FOCUS AREA 2: AGRICULTURAL DEVELOPMENT

6.1 OVERVIEW

While HGSF programmes must begin in areas where agricultural productivity levels can meet the demands of existing school feeding programmes, the second HGSF focus area takes the longer-term perspective. Because WFP's approach to HGSF focuses on smallholders, the longer-term aim of these programmes is to include more small-scale farmers in food-insecure areas. However this is not possible unless agricultural development efforts have helped those farmers increase their yields and quality so that they may be reliable and adequate suppliers to school feeding programmes. The proportion of food bought from small-scale farmers will gradually increase if the barriers to accessing the market can be lowered, if there is adequate support to improve productivity, and if the response from small-scale farmers is positive.

The objective of this focus area is to promote agriculture development so that the demand for food by schools in food-insecure areas can be satisfied by purchasing local food produced by small-scale farmers in both food-secure and -insecure areas. In this regard, the focus area is composed of activities intended to help small-scale farmers:

- increase productivity;
- increase market access;
- produce better-quality crops;
- adopt new technologies;
- manage natural resources;
- mitigate risks;
- invest in a sustainable way.

This focus area takes into consideration the fact that local agricultural systems and markets in which small-scale farmers operate differ on many dimensions – market conditions, presence of regional storage and transportation capacities, capacity to meet increased demand, natural resources, climatic conditions, agricultural policies and political settings. Consequently, agricultural development interventions must vary, and procurement strategies developed in stage 1 must continue to evolve and expand.

HGSF also recognizes that agricultural development activities should be conducted without doing harm to net buyers by causing a price increase. A significant portion of farm households purchase the same staple crops that HGSF programmes purchase. There is a risk that by increasing the demand for staple food, HGSF may create an increase in commodity market prices. If this were to occur, producers who are net buyers would be hurt more than helped. An increase in demand therefore needs to be balanced by an increase in supply.

6.2 WHERE TO BEGIN

In this focus area, WFP's HGSF approach targets those small-scale farmers who were not able to respond before by creating programmes tailored to address their specific challenges in accessing the market and improving production capacity. Because this focus area involves

significant efforts to support small-scale farmers, it is probably the most costly and time-consuming in the HGSF programme.

When designing an HGSF programme, an initial consideration is whether the HGSF programme will link to existing agricultural development initiatives or if there is a need to design new agricultural development initiatives. If there are existing initiatives, HGSF should begin by linking to them to simplify implementation challenges, reduce costs and strengthen existing development efforts. Linking to existing agricultural development initiatives will require strong partnerships between programme implementers, financiers and local and central endorsing institutions. In addition, issues related to accountability, responsibilities, functions, objectives and budget-sharing must be clear. Complementary activities can include:

- generating and disseminating improved production technologies;
- disseminating market information, outreach and information campaigns about the potential opportunities for smallholders through HSGF;
- strengthening the capacity of producer organizations;
- providing financial support for selected productive investments.

If there are no agricultural development programmes in the area to access and stimulate smallholder production, then it is necessary to create specific actions to support smallholders' agricultural efforts. These are especially challenging in persistently food insecure areas. Also, if the demand of the HGSF programme is too small to accommodate an increase in supply, this can present another challenge to reviving the agriculture of certain areas.¹⁸

Important Actions

- Incorporate lessons learned in stage 1.
- Regularly monitor the market to make sure that purchases do not exceed surplus in a given area.
- Establish partnerships with existing national and international institutions and programmes that support the small-scale farmer to increase access to markets and production in food-insecure areas near the schools.
- Provide support to small-scale farmer cooperatives in storage, warehousing, training, information and transport.
- Provide support (e.g. better inputs and technology) to increase small-scale farmers' production.
- Train small-scale farmers on desirable business practices to deter them from activities that may have negative consequences, such as substituting crops, selling food destined for consumption, or misusing additional income.
- Include the HGSF programme in poverty reduction strategies and sector plans for education, agriculture, and local development.
- Create incentives to benefit small-scale farmers such as regulations allowing sole-sourcing from target groups, fiscal incentives for cooperatives and the relaxation of procurement standards.

¹⁸ This is what happens in India for the Midday Meal program which is too small to make a significant contribution in reviving the agriculture sector as far as rice is concerned.

- Design risk management strategies. Link the HGSP programme with existing national strategic grain reserves or other risk mitigation mechanisms to avoid interrupting the schools' food supply due to unexpected shocks, such as drought or floods.
- Consolidate institutional functions and roles at the central level.
- Clearly define the functions and strengthen the capacities of local government entities in charge of implementing and monitoring the programme.
- Clearly define the function and strengthen the capacity of the community to manage the day-to-day implementation of the programme.

Costs

This focus area is the most costly, since the need to support small-scale farmers is significantly expanded. Funds will be required for:

- higher procurement costs;
- more training for small-scale farmers and cooperatives;
- information dissemination;
- programmes to enhance smallholder productivity.

Risks

Potential risks include:

- food basket nutritional value might be compromised due to greater reliance on local products. Food might need to be fortified or processed;
- the prices of staple commodities may increase due to low supply. This can hamper school feeding and may further impoverish small-scale farmers who are net buyers;
- incentives offered by the school feeding programme may lead small-scale farmers to grow different crops to meet the school feeding demand or sell a larger share of their products, increasing their households' food insecurity;
- relying on products from small-scale farmers may increase the school feeding programme's vulnerability to food supply interruptions due to sudden shocks, such as drought, floods or cyclones.

6.3 INCREASING SMALLHOLDER PRODUCTIVITY

There are two areas that can be addressed to induce supply shifts that can help meet the increased demand for school feeding:

- **Technology-related supply shifts.** Technology can be improved so that the same combination of inputs produces a larger output, for example by adopting new crop husbandry and management practices that increase production. It is also possible to improve the quality of physical inputs (e.g. by using an improved seed variety) or to introduce a completely new input, such as a chemical fertilizer. These technology-related supply shifts can occur independently or simultaneously.

- **Shifts induced by institutional reform.** Institutional factors also can trigger supply shifts. Providing insurance that reduces risks for a farmer will typically embolden that farmer to use technologies to increase production, even if those technologies are somewhat riskier. Likewise, institutional change that improves access to credit makes it easier for farmers to acquire farm inputs and can result in positive supply shifts. Another good example of institutional reform is clarifying land titling and clearly establishing property rights. When property rights are well-defined, farmers generally have better incentives to make lasting investments in land, leading to higher output at any given set of prices.

Some of the most important supply-side support services that can increase the yields of small-scale farmers include:

- providing inputs (e.g. fertilizers, seeds) and technology transfers (e.g. improved seeds);
- developing knowledge and technology, through demonstration plots;
- increasing access to credit;
- offering extension services, training and trials;
- providing equipment and training for extension workers;
- increasing security of property rights;
- mitigating risks, such as by providing weather insurance.

These and other supply-side interventions are discussed in the following section.

Case study 6: The AGRA initiative

On 12 September 2006, the Rockefeller Foundation and the Bill and Melinda Gates Foundation launched a new partnership to help Africa start its own green revolution. The Alliance for a Green Revolution in Africa (AGRA) began with a US\$150 million commitment focused on what agricultural scientists call seed systems: developing appropriate seeds to attain the best yields in the diverse environments of Africa and working to make sure these high-quality seeds are delivered to farmers who need them most.

Eventually, Rockefeller and Gates resources and experience will be able to address the whole range of issues that has made agricultural development such a challenge in Africa. The partnership's first initiative will focus on:

- breeding better crops that are adapted to the variety of local conditions in Africa. The goal is to develop 100 new varieties in five years;
- training African breeders and agricultural scientists who can lead this process in the future;
- guaranteeing reliable ways to get high-quality, locally adapted seeds to small-scale farmers through seed companies, public organizations, community organizations and a network of 10,000 agro-dealers (the small merchants largely responsible for providing supplies and knowledge to Africa's farmers).

Source: www.gatesfoundation.org



6.4 MAIN INTERVENTIONS AND CHALLENGES

Interventions in the agricultural development area address three main challenges: poor information and institutional bottlenecks, lack of access to inputs and lack of production and management skills.

Addressing poor information and institutional bottlenecks

Lack of knowledge about technology, inadequate legal systems for contract enforcement and insecure land tenure conditions can prevent farmers from taking advantage of available markets and technologies. The following interventions are recommended to address these difficulties:

- **Strengthen information dissemination:** Improve access to information about prices, new technologies and available programmes. Information can be disseminated using various communication instruments such as radio programmes, mobile phones and programme mobile units. The TradeNet programme in Ghana is an example of this kind of intervention.
- **Strengthen community-based farmer learning networks:** A key factor in encouraging farmers to adopt new techniques in agro-forestry, organic matter management, water management and other areas is to involve them in developing the technologies and sharing their observations about their experiences. Initiatives to promote improved management systems need to emphasize the “self-reliance” model, in which farmers, once empowered with new knowledge and convinced of the benefits of farming and resource innovations, become champions for their adoption within the community (Saxena, R.S., 2002). Farmers and rural communities need support and training to take the lead in jointly identifying strategic interventions of high local interest and strategic locations in the community for their implementation.

Case study 7: TradeNet in Ghana

TradeNet, a Ghana-based trading platform, allows users to sign up for short message service (SMS) alerts about commodities and markets of their choice and to receive instant alerts on their mobile phones for offers to buy or sell as soon as anyone else on the network has submitted an offer. Users can also request and receive real-time prices for more than 80 commodities from 400 markets across West Africa. Individual users can advertise their goods and offers on free web sites with their own internet addresses and farmer and trader groups can create web sites to manage all these services for their members.

The Ghana Agricultural Producers and Traders Organization (www.tradenet.biz/gapto) is a major beneficiary of this service. In 2006, it concluded trade deals worth US\$60,000 with other producer and trader organizations in Burkina Faso, Mali and Nigeria. These deals involved purchasing tomatoes, onions and potatoes without middlemen, reducing transaction costs substantially.

WB 2007a)

Case study 8: Offering marketing credit in Mozambique

In 2002, a formal financial institution extended commercial credit to farmer associations for the first time in Mozambique's post-colonial history. A total of US\$118,000 of marketing credit was provided to 23 groups of assisted rural enterprises (AREs) that were receiving organizational and marketing assistance from USAID grantee Cooperative League of the USA. The money was used to purchase agricultural commodities in nearby communities.

The advantage of the credit was that it enabled associations to consolidate and store sizeable quantities of their product and then to select buyers, rather than having to sell to the first trader who wanted to buy. Most associations turned over the money a number of times, buying maize, groundnuts, beans and sesame at different periods in the harvest cycle.

One group of AREs in Monapo District increased its sales by 60 percent over the previous year – from US\$67 to US\$107 per member. This enterprise used approximately US\$7,000 in short-term credit to sell close to US\$20,000 in commodities and to realize a net profit of US\$5,300. With credit, associations are realizing margins of up to 35 percent on their transactions, which had previously averaged 10 percent.

The financial institution was very pleased with the results of the experience. Repayment rates were more than 98 percent based on a 3 percent monthly interest rate. Interest payments were made in a timely fashion by all the AREs

Source: (Uaiene R., 2006)

- **Assign clear property rights on agricultural land:** In many countries in sub Saharan Africa, land possession does not easily translate into secured ownership. Assignment of ownership rights that leads to tenure security will significantly improve incentives for farming families to make investments in increasing the productivity of their land; greater tenure security is credited with the unprecedented increase in agricultural productivity in China. Establishing transferability of ownership also allows farmers to obtain external capital to expand business by using the land as collateral. Assigning clearly measured parcels of land to households can be a complicated task, but community-based approaches hold promise in achieving this in a credible and cost-effective manner. Steps should also be taken to make land transferable by sale or other market transactions.
- **Strengthen legal system to enforce contracts:** Market development will falter without well-enforced social contracts that bind parties to their obligations. Only governments have the mandate and the power to legally bind people and entities to market-based contracts. It is important to create a legal framework with a commercial code that defines contract sanctity and has the capacity to adjudicate contract disputes.
- **Initiate land policy reform:** In places where land is distributed unequally, it is necessary to create land policy reform that promotes increased access to land by the



poor and improves tenure conditions. Land ownership and tenure policies must promote efficient markets by facilitating transactions (e.g. selling, renting, mortgaging and leasing land) and by establishing mechanisms for resolving land disputes.

Addressing lack of access to inputs

Small-scale farmers often lack access to production inputs such as appropriate fertilizers, seeds, water, machinery, land and credit. The following actions may address these problems:

- **Increase the use of fertilizers:** In many areas of sub-Saharan Africa, relatively quick increases in agricultural production can be achieved by increasing the use of fertilizer, especially if fertilizer is used with high-yield varieties of seed and water. The challenge is to deliver fertilizers at prices that make it worthwhile for the farmers to use them and in a timely manner that is in step with the cycle of maize production, since maize is the principal crop for which fertilizer is used. This is a complex task, requiring efficient synchronization of imports, storage, in-land transportation and final retail-level delivery to farmers. Greater impact can be assured if fertilizer distribution is complemented by agricultural extension services that educate farmers on the best ways to combine inputs and financial services that allow cash-strapped farmers to purchase the inputs.
- **Distribute high-value seeds:** Appropriate seeds could be developed to improve small scale farmers' productivity in marginal and low-potential areas. These would primarily be seeds of widely-grown basic grain and tuber crops that have been developed for their resistance to pests, disease and drought. For drought-prone areas, seeds for short duration crops, such as sorghum, maize and cowpeas, would also be of great value. Where well-adapted germplasm exists, better systems are needed to produce and distribute high-quality seeds to large numbers of poor farmers at low cost. Strategies include community nurseries and networks of on-farm seed producers, including commercial enterprises developed by local farmers.
- **Introduce irrigation systems:** Small-scale irrigation and water management systems are among the most important technological improvements to introduce. While this requires large investments initially, the returns on such investments can be exceedingly high. Providing irrigation is particularly important because it can reduce the risks associated with adopting new agricultural technology and relax the constraints of land by increasing cropping intensity. Once farmers have access to irrigation, they are more likely to adopt other agricultural technologies (such as fertilizers and improved seeds) that will raise production.

HGSF programmes can identify and join efforts with initiatives to increase farmers' access to inputs. Examples of such initiatives are the AGRA initiative and programmes that have been developed in Kenya, Malawi and Uganda with the support of the Rockefeller Foundation. Also, the flourishing activity of micro-credit is providing remarkable results.

Case study 9: Supporting supply of agricultural inputs in Kenya, Malawi and Uganda

The Rockefeller Foundation is supporting projects to develop agricultural input supply pipelines in rural Kenya, Malawi and Uganda. The projects are being conducted by the Citizens Network for Foreign Affairs (CNFA)/Agricultural Market Development Trust (AGMARK) in Kenya, AT-Uganda in Uganda and CNFA/Rural Market Development Trust (RUMARK) in Malawi.

In Malawi where the CNFA/RUMARK project started in 2001, 322 agro dealers have been trained and certified across the country. A recent survey of rural markets showed that the majority of farmers now buy their inputs from agro-dealers, instead of buying directly from the government owned Agricultural Development and Marketing Agency (ADMARK) or the commercial companies. As a result, the distances that the poor must travel for inputs have been significantly reduced in many districts; in Kenya, for example, average distances to the nearest dealer declined from 8 to 4 km between 1997 and 2004.

There has also been improvement in the selection, volume, quality and prices of agricultural inputs available in rural areas. Within two seasons, agro-dealers moved seeds and fertilizers worth close to US\$900,000 into rural areas, facilitated by credit guarantees. In addition, larger volumes of seeds, fertilizers and agrochemicals were supplied to rural areas by agricultural input supply companies, without the need for credit guarantees. The sale of fertilizers by certified rural stockists rose from US\$125,000 at the end of April 2003 to US\$676,000 at the end of April 2004 – an increase of 441 percent. The default rate on credit guarantees over the past three years has been less than 1 percent. This is associated with the quality of technical and business management training the agro-dealers receive and their use of collective action to ensure repayment.

The expansion of the agro-dealers has also led to an increase in rural employment because they employ casual labourers to assist in loading and off-loading inputs, while also employing permanent sales staff for their operations.

The agro-dealers have also become the most important extension centres for the rural poor. Several local and multi-national seed, fertilizer and agro-chemical companies now conduct demonstrations of new technologies with the agro-dealers in rural areas. In western Kenya, GIS-based "rural input access maps" have been developed, which make it possible to determine the distances farmers in various locations have to travel to purchase inputs. These maps will be of great value to the government and donors in their attempts to better target fertilizer subsidy programmes. They will also assist the private sector in determining where they should focus their attention to reach under-served markets.

Source: World Bank (2006) Africa Fertilizer Policy Toolkit.



Addressing lack of production and management skills

Marginalized farmers may suffer from poor farming management skills, have scarce knowledge of advanced production techniques or lack the necessary coping mechanisms to use their resources in more productive ways. In such circumstances, HGSP may adopt a development approach that focuses on linking with farming extension and product diversification programmes. An example of this is the Eastern Diaconia Services project in Zambia. Strategies to manage price and production risk are also highly beneficial; the Malawi NASFAM-World Bank drought insurance project is a good example of this kind of initiative.

Case study10: Improving soil fertility in Zambia

In the Chipungo village of Zambia, land degradation is a major challenge; the soil will simply not produce enough food to meet needs. Farmers can harvest about 120-150 kg of corn per acre from their fields in May, which is their primary food for the entire year, but by mid-summer the harvest may be finished and people depend on finding unskilled and low paying jobs to support themselves.

Working with Eastern Diaconia Services in partnership with Christian Reformed World Relief Committee, farmers learned to use agro-forestry techniques like 'improved fallowing'. This farming technique uses tree species planted on fallow land to improve soil fertility. During land preparation, from September to November, the trees are cut and laid in the planting furrows to allow the leaves to fall into the trenches. Later, the stems are collected and used for firewood, while the leaves are buried as organic matter and a source of nitrogen in the planting ridges.

After using these techniques for several years, the farmers were able to harvest up to 2,000 kg per acre. They now have 12 months of food from their own fields and are able to sell some of their surplus in the local market to meet other family expenses. This experience is being taught by the farmers to other farmers in field schools in the region. One hundred farm families now use this technique to heal the soil sufficiently to meet the needs for a whole family.

Source: Adapted from Lobe, 2007

7. FOCUS AREA 3: INSTITUTIONAL AND POLICY DEVELOPMENT

7.1 OVERVIEW

HGSF initiatives are institutional innovations that require adequate policies, rules, regulations, skills and capacities. HGSF's third focus area comprises the organizational, human and material resources at the institutional level that are needed to design, implement, monitor and evaluate HGSF programmes.

HGSF programmes depend on efficiently integrating and coordinating services in school feeding, strategic procurement and agricultural development. They have governance structures and processes to guide the delivery of these services which focus on the roles of public, private and civil society organizations in areas such as funding, administration, M&E and procurement. Good coordination among the various institutional and non-institutional stakeholders is important to:

- ensure smooth planning, allocation of resources and legislative and policy support for the interventions;
- combine human and financial resources from different departments to support the integrated approach of HGSF ;effectively mobilize resources from various sectors for implementation.

The overall objective of the institutional and policy development focus area is to develop an institutional framework for HGSF. This objective can be achieved by:

- positioning the programme within sectoral mandates;
- identifying an institutional home for the programme to be accountable for programme design and implementation;
- strengthening institutional coordination mechanisms to coordinate the actions of different stakeholders, particularly agriculture and education;
- developing a national strategy for HGSF to mainstream the HGSF approach, facilitate broad participation and ensure sustainability;
- obtaining legislative support for HGSF to establish its legitimacy, define the beneficiaries and allocate funds;
- developing a national awareness campaign to ensure broad understanding of the programme and support for continued funding.

The first three of these activities are described in detail in Chapter 4, as they are most appropriately conducted at the outset. The last three will be discussed in this chapter, as they are more appropriately carried out once the HGSF programme is operating.

7.2 WHERE TO BEGIN

At this point, the HGSF programme will have ideally developed sufficient capacity to be able to rely on the self-initiated responses of small-scale farmers and without sacrificing the

quality, quantity and timeliness of food being delivered to the schools. Support to small-scale farmers should be effective enough to enable them to easily access the school feeding market and provide the appropriate quantities and quality of food. Their position in the market should be stronger due to increased information, training, extension services, storage and marketing, and technological improvements.

The success of the programme so far may have encouraged further institutionalization through legislation to enhance the programme's sustainability. It is important at this stage to gather information about the results of the programme with respect to the other two focus areas and to improve current practices, increase political commitment and possibly secure more funding.

Important Actions

- Develop a legal and institutional framework.
- Regularly monitor the market to ensure that purchases do not exceed surplus capacity.
- Provide support to smallholder cooperatives or informal groups to become legal entities, which would enable them to compete in other food markets.
- Promote support to small-scale farmers with low yields (net buyers).
- Evaluate the HGSP programme to identify needs for further resource allocation and lessons learned that may be used in other countries.

Costs

Costs at this stage will probably be less than in the other stages due to the presence of: economies of scale in transportation, storage and support for agricultural production, greater institutional capacity and knowledge and fewer set up costs. Funds will be needed for:

- evaluation and dissemination of information from the previous two stages;
- further support to small-scale farmers in terms of technology, storage capacity, irrigation systems, and the like;
- building institutional capacity (e.g. staff training, enhanced reporting systems and enhanced control systems such as audit and financial management);
- creating the national awareness campaign.
- institutional capacity development activities including training and information management systems.

Risks

Potential risks include:

- monitoring and quality control of the programme might be difficult if the proper institutional mechanisms are not in place, given the programme's size and multiple objectives;
- lack of coordinated functions and responsibilities could jeopardize the efficiency and quality of the programme;
- benefits might concentrate on the "better off" small-scale farmers, not reaching the poorest or the net buyers;

- incentives offered by the school feeding programme may lead small-scale farmers to grow different crops to meet the school feeding demand or sell a larger share of their products, increasing their households' food insecurity;
- the prices of staple commodities may increase due to low supply. This can hamper school feeding and may further impoverish small-scale farmers who are net buyers;
- relying fully on products from small-scale farmers may increase the school feeding programme's vulnerability to food supply interruptions due to sudden shocks, such as drought, floods, or cyclones.

7.3 DEVELOPING A NATIONAL STRATEGY FOR HGSF

Developing a national HGSF strategy is particularly important to mainstream the HGSF approach, develop a cross-sectoral view of the key development issues and priorities and allocate the financial and human resources required to continue implementation. The strategy should facilitate participation by policymakers, national and international stakeholders and communities to create their sense of ownership in the programme. It also forms the basis for promoting partnerships among private, public and civil groups to ensure programme sustainability. The strategy should aim to:

- foster institutional cooperation at the national, district and municipal levels by defining clear functions and responsibilities, identifying the appropriate staff in charge and allocating budgets at all levels;
- strengthen the network of local private and public partners and NGOs working in HGSF-related fields by developing a strategy for coordination and partnership with clear rules for implementation, roles, management and financial responsibilities;
- design policies and regulations, or consolidate existing policies and regulations, to support school feeding programmes and agricultural development programmes that increase small-scale farmers' market access and alleviate poverty;
- establish a coordination process among the different sector ministries and task forces to provide guidance on the main direction of the programme.

On a practical level, the national strategy also must define how to fund the financial requirements and recurrent costs of managing the HGSF programme and related activities, and identify major partners and fundraising policies.

7.4 OBTAINING LEGISLATIVE SUPPORT FOR THE PROGRAMME

HGSF should have clear political and legal foundations that establish the legitimacy of the programme and define its purpose within the policies of the social sector, which includes education, health, nutrition and social protection. The legislative and policy support for the programme is also important to enhance the sustainability of the programme since it protects its implementation over time. How HGSF is legally and politically set up depends on each country, but having a legal framework means that:

- the political will exists to make HGSF an enduring reality;
- the decision to implement HGSF has been made at the highest levels of government;
- there is support for the programme in the form of specific legislation or policy.

Legislation not only establishes the programme, but also defines the beneficiaries and allocates funds for the programme. It also can establish what institutional set-up will be created to implement it and the minimum standards for the composition of the food basket. The Thailand school feeding programme, for example, is based on an act that was passed in 1992 securing central government funding for the programme. According to the act, the annual budgetary allocation for the programme is determined on the basis of the number of children who are malnourished, which in turn is determined by a national growth monitoring system.

Case study 11: School feeding programmes created by law

Brazil

In Brazil, the school feeding programme is universal by law, part of the country's system of values and perceived as a national priority. It is mentioned in the National Constitution of 1988, which states that all school-age children in the country are entitled to receive one meal at school. The school feeding programme is part of Fome Zero (Zero Hunger),¹⁹ one of the social programmes to increase children's access to food, education and nutrition. The school feeding programme is also institutionalized by two laws of the Ministry of Education and one national resolution. These laws also created the institution in charge of implementing the programme in 2001, the National Fund for Educational Development (FNDE), and established the allocation of resources for FNDE and the main operational details of the programme. Brazil is enacting a law to establish that at least 30 percent of the food used by the school feeding programme should be procured locally.

India

Another universal school feeding programme institutionalized by law is the India National Midday Meal Programme. This programme is an example of national legislation that was passed as a result of direct involvement of civil society. In 2001, following a severe food crisis in the country, the People's Union for Civil Liberties submitted a petition to the Supreme Court demanding that the country's massive food stocks be used without delay to protect people from hunger and starvation. The political pressure to support the petition led to the creation of a large coalition of organizations and individuals called The Right to Food Campaign. The campaign initiated a wide range of activities such as public hearings, rallies, conventions, action-oriented research, media advocacy and lobbying of Members of Parliament.

As a result of these actions, on 28 November 2001 the Supreme Court directed state governments to introduce cooked midday meals in all government and government-assisted primary schools within six months. This landmark order was one of the first concrete achievements of The Right to Food Campaign. The order was followed by organized public pressure to introduce cooked midday meals in primary schools, in the form of a "national day of action on midday meals" in April 2002. In response to this pressure, and to the court orders, many state governments have initiated midday meal programmes. A few state governments have yet to comply, but there are good prospects of achieving universal coverage relatively soon.

http://www.righttofoodindia.org/mdm/mdm_intro.html

¹⁹ <http://www.fomezero.gov.br>

7.5 DESIGNING AND IMPLEMENTING A NATIONAL PUBLIC AWARENESS CAMPAIGN

It is crucial to increase awareness about poverty and hunger to gain national and international political support for HGSF programmes and to encourage local governments and institutions to work on related programmatic matters. A national public awareness and outreach campaign informs the public about the utility of HGSF programmes, their implementation activities and the kinds of existing programmes with which HGSF links at the national and local levels.

An information and education campaign also sheds light on the more general HGSF objectives to alleviate hunger and poverty and contributes to raising awareness and concern about vulnerable populations (e.g. children at risk of not enrolling in schools or dropping out of school, and small-scale farmers, especially women, who are unable to access markets and thus produce solely for their own subsistence). In addition, HGSF should engage in regular communication, outreach and awareness activities to develop models of public and private partnership and enhance local governments' participation with communities, NGOs and CBOs in managing HGSF and ensuring its sustainability.

8. DESIGN CONSIDERATIONS

8.1 COSTS

There is a knowledge gap about the overall costs of HGSF programmes. Costs are related to the specific country and context, and HGSF experiences are still very limited. Nevertheless, certain cost categories are known or can be estimated, such as the costs of school feeding. The costs, in general terms, for institutional development consist of training, staff and needed equipment. Procurement practices, while varying by country and programme, are more standardized, with relatively few activities for each procurement strategy. An exercise on identifying the cost categories for different procurement approaches in sub-Saharan Africa was conducted for this conceptual framework and yielded some general, yet useful, results (see Table 4). Agricultural development initiatives, however, consist of numerous activities and are not easy to categorize or define as a pattern of activities and practices.

Given these reservations about needing to place costs within specific contexts, the following cost categories should be considered when planning an HGSF programme.

The following table analyzes the factors that may increase or decrease costs at the different phases of implementation.

	Stage1	Stage2	Stage3
Factors that increase costs	<ul style="list-style-type: none"> • Higher procurement costs (higher transaction costs as lot sizes decline) • Assessments and market analysis • Information dissemination packages • Institutional strengthening • Initial support for smallholder productivity 	<ul style="list-style-type: none"> • Higher procurement costs (higher transaction costs as lot sizes decline) • Training (e.g. of cooperatives) • Set-up costs for cooperatives • Set-up costs for procurement mechanisms • Support for smallholder productivity • Monitoring and evaluation 	<ul style="list-style-type: none"> • Monitoring and evaluation • Support for smallholder productivity
Factors that decrease costs			<ul style="list-style-type: none"> • No set-up costs • Economies of scale (in support for smallholder productivity, transport and storage) • Developed capacity and benefiting from experience

Over time, the HGSF cost curve follows an inverted U-shape pattern (see graph on page 27). HGSF's total costs are likely to increase steeply in the first two stages of the programme and then decrease after time. Table 4 shows the factors that drive costs in each stage. Costs included in this analysis are food costs, programme and administrative costs at the school and national levels, procurement costs, distribution and storage costs; costs for agricultural development activities are not included.

For planning purposes, it is also useful to know the different cost categories for HGSF. While the school feeding categories are well known to programme designers, there is a particular need to consider costs in the areas of procurement and support to agricultural development. The following table provides a checklist.

TABLE 5: COST CATEGORIES		
Component	Categories	Items
School feeding	Food costs	The cost of purchasing the food plus the distribution, transport and handling of the food until it's delivered to the school
	School-related infrastructure and materials	Kitchens or cooking facilities (if food is to be cooked on-site) Pots, pans and firewood (if food is to be cooked on-site) Eating areas Bowls and utensils Clean water supplies Cleaning supplies
	School health and nutrition activities (Essential Package)	Deworming tablets Fortification Information and dissemination materials
	Administrative	Dedicated staff for school feeding at school and local government levels Dedicated staff at national government Other equipment
	Capacity building	Staff training Community sensitization and organization activities Communication materials and guidelines

TABLE 5: COST CATEGORIES

Component	Categories	Items
	Monitoring and evaluation	Baseline survey Mid-term evaluation Final evaluation Adaptation of current MIS system to include school feeding information, such as food distribution Progress reports
Support for agricultural development activities	Communication	Market information Awareness campaigns Site visits
Development activities	Agricultural development	Adaptation, tailoring and modification of current activities. This may include -Inputs -Fertilizers -Extension services -Technological packages Research and Development Pilots and field trials
	Establishing cooperatives	Training (e.g. in management, accounting) Fixed costs, administrative staff Organizing markets and collecting points
Procurement	Food treatment	Quality and quantity inspections Bag and bagging Marking
	Transport	Loading and off-loading Transport to traders Transport to schools or other distribution points
	Storage	Storage insurance Storage losses
	Procurement labour	Staff
	Others	Office rent Administrative costs related to procurement Market dues and taxes Tips and incentives ²⁰ Retailers and brokers

²⁰ No inference is made about a procurement agency tipping or giving incentives under the table; however there may be supply chains in which tips and incentives are indeed given

TABLE 5: COST CATEGORIES

Component	Categories	Items
Institutional development	Design of a national strategy	National, regional and municipal workshops Multi-stakeholder/donor meetings and workshops Training on how to design strategy and sectoral plans, allocate budget, identify staff capacity gaps, etc.
	Institutional coordination mechanisms set-up	Staff costs: - Project Implementation Unit with at least a project manager, procurement officer, accountant and M&E expert; - International technical advisers Training and workshop costs Office space/vehicle/office material
	National public awareness campaign	Consultants National, regional and municipal workshops Outreach and communication activities
	M&E	Design and supervision of baseline, mid-term and final evaluation surveys and assessments Training for institutional staff on M&E Workshops to discuss results of M&E

8.2 FUNDING

Overview

HGSF programmes are expensive social programmes that are likely to demand significant resources over an extended period of time. If regular school feeding programmes already require significant resources, HGSF, with its added dimension of agricultural productivity and support for small-scale farmers to access markets, can be expected to cost even more. Therefore, funding for HGSF is a very concrete challenge for many developing countries. In fact, one of the main challenges and constraints identified by participating countries in the NEPAD High Level Regional Consultative Meeting on HGSF was the limited amount of resources available for these programmes.

HGSF, with its emphasis on the main focus areas and programmatic components (school feeding, procurement, agricultural development and institutional development) should ideally be funded through multiple sources, not only through the education sector. As HGSF has a wider set of stakeholders than school feeding programmes, it should also have a wider set of contributors. Furthermore, the added benefits of HGSF are likely to attract greater donor attention or attract donors that are normally not likely to fund school feeding programmes. Since HGSF programmes are likely to be long-term, having stable funding sources is critical to sustain the programme and implement its different stages. Although

funding HGSF will undoubtedly continue to be one of the greatest challenges, the integrated nature of HGSF means that funding opportunities might be greater.

HGSF is not intended to be a programme fully designed from scratch, but rather one that can optimize existing resources in the education and agriculture sectors. Therefore, funding HGSF focuses mainly on covering the incremental costs of certain aspects of the programme: the cost of making the correct linkages between existing programmes and the cost of tailoring these programmes to the specific needs of HGSF.

Experiences of school feeding programmes

Many of the funding issues and solutions that emerge in HGSF programmes are similar to those of school feeding programmes. Experiences from the latter may prove to be useful in the context of HGSF.

School feeding programmes are funded in a variety of ways. Brazil, Chile, India, Nigeria and South Africa implement self-funded school feeding programmes. In other countries, financing packages for school feeding programmes combine international and national funding, where the donor-funded element may be in the form of cash or in-kind donations.

External funding comes from multilateral donors. Traditional implementing partners include WFP and UNICEF, which provide complementary inputs of sanitation and health services to existing food aid projects. Among the key international NGOs participating in school feeding programmes are Catholic Relief Services (CRS), World Vision International, Mercy Corps International, CARE and Save the Children. The largest bilateral donor is the United States, which in 2004 funded 57 percent of global food aid deliveries (Murphy S., 2005). Other bilateral donors for school feeding programmes include France, Germany, Italy and Switzerland.

Commitment of the national government, especially in the form of budgetary contributions and involvement in implementation, is crucial in any successful school feeding programme and especially in self-funded ones. For instance, Brazil's Zero Hunger Project, the centrepiece of the Worker's Party government, has provided crucial political and financial support for the restructuring and sustenance of the nation's long-running school feeding programme. Similarly, South Africa's National School Nutrition Programme has enjoyed the prominent status of being one of Mandela's "Presidential Lead Projects."

National government commitment is equally important in externally supported school feeding programmes. In WFP programmes, the host government leads the process while WFP provides support in areas where the government has weak capacity, such as in logistics, procurement or targeting. Government involvement is vital, of course, in instances where WFP, or any other partner, is phasing out of, or handing over, operations in the country. This has been demonstrated in cases like Botswana, Brazil, El Salvador, Jamaica and Namibia, where strong government commitment has been the decisive factor in whether the programmes continue after WFP has phased out of the country. Some cases show that, even faced with a serious lack of resources, strong government commitment may enable creative solutions. This was the case in El Salvador, where political support and collaboration from senior staff led to using non-traditional funds to continue the programme after WFP's exit.

Case study 12: Funding Ghana's HGSF programme

Ghana's HGSF programme is an example of one that utilizes several funding sources:

- WFP provides planning and implementation support.
- The Dutch government has committed to finance about half the local food costs until 2011 (on the condition that 80 percent of the food is procured locally).
- SNV (Dutch Development Co-operation) assists in implementation.
- The Government of Ghana finances the rest of the programme with Heavily Indebted Poor Countries (HIPC) funds.

In Ghana, there is an innovative multi-stakeholder platform, the "School Feeding Initiative Ghana-Netherlands" (SIGN), which unites support for the school feeding programme from the government, the private sector and academia in the Netherlands. SIGN's aim is to "accelerate economic development in hunger hot spots in Ghana through increasing agricultural productivity and providing locally-grown, nutritionally-balanced school meals."

(SIGN 2008)

8.3 DESIGN CHECKLIST

HGSF is a multi-level and integrated programme that requires effort and investment at several levels. To ensure quality implementation and sustainability of these efforts, a number of conditions should be given special attention. The following checklist suggests key areas to be considered before embarking on the design of an HGSF programme.

Design checklist

Policy environment

- Is there a national, multi-sectoral poverty reduction strategy linking agriculture development for smallholders to school feeding? Does it integrate key ministries?
- Is this strategy supported by key stakeholders in the country?
- Does the country have an educational sector policy? Is school feeding mentioned in that policy? Does it link school procurement to small-scale farmers' production?
- Does the country have an explicit school feeding programme?
- Is the country part of a supra-national collaboration network seeking to promote public and private partnership in education and/or agriculture development?

Institutional arrangements

- Does the country have a national, multi-sectoral body mandated to coordinate and manage the implementation of the home-grown school feeding policy and strategy?
- Does this body promote horizontal coordination between the Ministry of Finance, Ministry of Agriculture and Ministry of Education?
- Does this body promote interaction between the different stakeholders?

- Does this body support coordination and management among the central, regional and local levels? How?
- Is there a national M&E unit collecting relevant data on agriculture and education?
- Does this M&E unit have a mechanism to ensure that all major interested parties submit their reports to the unit?
- Is there a public extension service?
- Is there a local-level school feeding committee charged with procuring food locally and producing a yearly financial statement?

Local conditions

- What number of feeding days is covered by the government, by the community and by other contributions?
- Is water available for cooking and sanitation?
- Are there latrines?
- Do schools have storage facilities?
- Is the food cooked at school? Are there an adequate number of trained cooks?
- Is there a trained focal point at school to coordinate school feeding activities and to procure food? Is there a tendering process for food procurement?
- Are there school records on food stocks, receipt, losses and utilization?
- Are the parent-teacher association and the head teachers trained in school feeding management and recordkeeping? Do they submit regular reports to local and district authorities? Are these reports used to adjust the school feeding programme at the district, regional and national levels?
- Do local farmers produce a marketable surplus? If so, what is the total value?
- Do farmers use modern inputs, technologies and fertilizers?
- What is farmers' average distance from the market?
- What is farmers' literacy level?
- Do farmers have access to credit?
- What level of marketing and transportation expenses do farmers face?
- Are farmers organized in cooperatives or associations? If so, how are they structured and what are the dimensions? Do they have increased income?
- How can farmers get information about market prices and school requirements?

Funding

- What are the main national sources of funding for school feeding and smallholder agricultural development programmes or initiatives?
- Are there external sources of funding for these types of programmes?
- Is there a clear budget breakdown between government and donor funds?
- What is the government's annual allocation for school feeding?
- What is the government's cost per student per year for a school meal (for everything from procurement to meal preparation)?

- What is the government's annual allocation for smallholder agriculture development?
- Is there internal and external predictability of available funds for expenditure on those programmes and initiatives?
- Are there deviations between actual budget support and forecasts of donor agencies?
- Is the government's annual budget documentation comprehensive? Does it include estimates on budgetary implications for school feeding and smallholder agriculture development policy, programmes and initiatives?
- Are there specific budget lines for these programmes and initiatives?
- Is there transparent allocation of resources, including conditional and unconditional transfers, to school feeding initiatives from central government to sub-national and local governments?
- Can sub-national and local governments provide fiscal reports on these initiatives? Is this information consolidated with central government fiscal reports?
- Is this fiscal information accessible by the public?
- Does the government have a multi-year perspective in fiscal planning and functional allocation of resources?
- Is there a control system in budget execution? Is this control timely, regular and qualitative?

REFERENCES

1. Adelman, S., Gilligan, D., and K. Lehrer (2007). "How Effective Are Food-for-Education Programs", 2020 Focus Brief on the World's Poor and Hungry People. Washington, DC: IFPRI.
2. Akhter, U. Ahmed and Carlo del Ninno (2002). "Food for Education Program in Bangladesh: An Evaluation of its Impact on Educational Attainment and Food Security", FCND DP No 138. International Food Policy Research Institute, New York.
3. Arce, R. and Otsuki (2007). Home Grown School Feeding: An Analysis of the Midday Meal Programme in Brazil. In Morgan, K., Bastia, T., et al. (2007). "The New Era of School Feeding", Report submitted to the World Food Programme, HGSF/3/Report School Feeding Unit, WFP Rome.
4. Barrett, C. B. (2007). "Smallholder Market Participation: Concepts and Evidence from Eastern and Southern Africa", SAGA Working Paper, Cornell University, Ithaca, New York.
5. Barrett, C. B. (1996). "On price risk and the inverse farm-size-productivity relationship", *Journal of Development Economics*, Vol. 51, 193-215, 1996.
6. Black, R., Morris, S., & Jennifer B. (2003). "Where and Why Are 10 Million Children Dying Every Year?", *The Lancet* 361:2226-2234.
7. Bruns et al. (2003). "Achieving Universal Primary Education by 2015: A Chance for Every Child". Washington DC: World Bank.
8. Calef, D. (2007). "Background Material for the Procurement Sections of the HGSF Conceptual Framework", WFP. HGSF/1/Report School Feeding Unit, WFP Rome.
9. Chen Yu et al. (2003). "School Milk Programme – The Economic Dimension A study of the economic impact of China School Milk Programme (CSMP)". Available in http://www.fao.org/es/esc/common/ecg/188/en/The_Economic_Dimension_of_the_China_School_Milk_Progr.pdf.
10. Chettiparamb, A. and Binitha Thampi (2007). "Home Grown School Feeding: An Analysis of the Midday Meal Programme in Kerala". In Morgan, K, Bastia, T, et al. (2007). "The New Era of School Feeding", Report submitted to the World Food Programme, HGSF/3/ Report School Feeding Unit, WFP Rome.
11. Coulter, J. and G. Onumah (1999a). "The role of warehouse receipt systems in enhanced commodity marketing and rural livelihoods in Africa". *Food Policy* Volume 27, Issue 4, August 2002, Pages 319–337.
12. Coulter, J., Goodland, A., Tallontire, A. and R. Stringfellow (1999b). "Marrying farmer cooperation and contract farming for service provision in a liberalising sub-Saharan Africa". *Natural Reserves Perspectives*, No. 48, Nov, DIFID.
13. Del Rosso and Marek (1996). "Class Action: Improving School Performance in the Developing World through Better Health and Nutrition". WDC, World Bank.
14. Del Rosso, J. (1999). "School Feeding Programmes: Improving Effectiveness and Increasing the Benefit to Education". Oxford: The Partnership for Child Development.

15. Dollar, D. and R. Gatti (1999). "Gender Inequality, Income and Growth". Policy Research Report on Gender and Development, World Bank Development Research Group/Poverty and Human Resources. Washington D.C.
16. Drake L., C. Maier, Jukes, M., Patrikios, A., Bundy, D., Gardner, A. and C. Dolan (2002). "School-age children, their nutrition and health". SCN News No 25, available in <http://www.unsystem.org/scn>.
17. FAO (2006). "The State of Food Insecurity in the World 2006: Food aid for food security?" FAO, Rome.
18. Foster, Andrew and Mark Rozensweig (1986). In Perdana, Ari A., "Assessing education and the mystery of its missing benefits". The Jakarta Post, January 24, 2005, Centre for Strategic and International Studies (CSIS), Jakarta, Indonesia.
19. Greenhalgh, Kristjansson, and Robinson (2007). "Realist review to understand the efficacy of school feeding programmes", *BMJ*, 22 October.
20. Grigorenko, E., Sternberg, R., Ngorosho, D., Nokes, C., Jukes, M.C.H., Alcock, K.J., Lambo, J. and D.A.P. Bundy (2006). "Effects of antiparasitic treatment on dynamically and statically tested cognitive skills over time". *Journal of Applied Developmental Psychology*, 27: p. 499–526.
21. Hess, U. and H. Syroka (2005). "Weather-based Insurance in Southern Africa. The Case of Malawi". Washington DC, World Bank.
22. IFAD (2001). "Rural Poverty Report". Article 28. Oxford University Press Inc., New York.
23. IFAD (2003). "Promoting market access for the Rural Poor in Order to Achieve the Millennium Development Goals". Roundtable Discussion Paper for the Twenty-Fifth Anniversary Session of IFAD's Governing Council, Rome.
24. IFPRI (2000). "Women the key to food security"-. Washington DC, USA.
25. Jamison, D.T. and L.J. Lau (1982). "Farmer education and farm efficiency". Baltimore Md: Johns Hopkins University Press; Reported in: UN Millennium Project (2005). Task Force on Education, New York.
26. Jayne, T.S., Mather, D., Mghenyi, E., Zulu, B., Chirwa, E., and D. Tschirley (2006). "Maize Marketing and Trade Policy in a Pro-Poor Agricultural Growth Strategy: Insights from Household Surveys." Paper prepared for the Conference on "Toward Improved Maize Marketing and Trade Policies in the Southern Africa Region", sponsored by FANRPAN, June 21–22, 2005. Centurion Park Hotel, Centurion, South Africa, available in http://www.fanrpan.org/documents/d00047/Maize-marketing_Trade-policy_June2005.pdf.
27. Jean Drèze and Geeta Gandhi Kingdon (2001). "School Participation in Rural India". *Review of Development Economics*, 5 (1), 1–24.
28. Jukes, M.C.H., Drake, L.J. and A.P. Bundy (2007). "School Health, Nutrition and Education for All:



- Levelling the Playing Field". CAB International: Wallingford.
29. JUNAEB (2007a). Three Chilean Experiences of Local Production and Social Synergy. Santiago de Chile.
 30. JUNAEB (2007b). "Programa de Alimentación Escolar: Una estrategia viable para reducir la pobreza". In report of the School Feeding Conference, Santiago de Chile, June. HGSF Report/4/ School Feeding Unit, WFP, Rome.
 31. Kallmann, K. (2005). Food for Thought: A Review of the National School Nutrition Programme. In: Leatt A. & S. Rosa (eds). Towards a Means to Live: Targeting poverty alleviation to make children's rights real. Cape Town: Children's Institute, University of Cape Town [CD-ROM].
 32. Kent, L. (1998). "Why Cereal Bank Projects Rarely Work: A Summary of the These Findings". Available in http://www.foodaid.org/pdfdocs/cm_gmt/grainstoragesummary.pdf.
 33. Kevane, M. (2004). "Women and Development in Africa: How Gender Works". Lynne Rienner Publishers, Inc. London.
 34. Kherallah, M., Delgado, C., Gabre-Madhin, E., Minot, N., and M. Johnson (2000). "Agricultural Market Reform in sub-Saharan Africa: A Synthesis of Research Findings". Washington DC: International Food Policy Research Institute.
 35. Kristjansson, E., Robinson, V., Petticrew, M., Macdonald, B., Krasevec, J., Janzen, L., et al. "School feeding for improving the physical and psychosocial health of disadvantaged elementary school children". Cochrane Database Syst Rev, 2007(1):CD004676.
 36. Lacroix & Varangis (1996). "Using Warehouse Receipts in Developing and Transition Economies, The World Bank", <http://www.worldbank.org/fandd/english/0996/articles/0140996.htm>.
 37. Lee R. Martin (1992). "A survey on agriculture economics". University of Minnesota Press.
 38. Lobe, K. (2007). "A Green Revolution for Africa: Hope for Hungry Farmers?", Canadian Foodgrains Bank Working Paper, available at <http://www.foodgrainsbank.ca/global/papers>.
 39. Morgan, K., Bastia, T., et al. (2007). "The New Era of School Feeding", Report submitted to the World Food Programme, HGSF/3/Report School Feeding Unit, WFP Rome.
 40. Moussa, S. (2007). "Guidance note on using nutritional objectives and outcome indicators in school feeding programmes". Nutrition Service, WFP Rome.
 41. Nagayets, O. (2005). "Small farms: Current Status and Key Trends", Information Brief Prepared for the Future of Small Farms Research Workshop. Wye College, June 26–29. Available at http://www.ifpri.org/events/seminars/2005/smallfarms/sfproc/Appendix_InformationBrief.pdf.
 42. NEPAD (2002). "New Partnership for Africa's Development Comprehensive Africa Agriculture Development Programme", FAO Rome. Available in <http://www.fao.org/docrep/009/a0586e/a0586e00.htm>.
 43. NEPAD (2007). "HGSF High-Level Consultation Ghana", Final Report of Proceedings, October, Ghana WFP Country Office.

44. Pearce, D. and M. Reish. "Small farmers in Mozambique access credit and markets by forming associations with assistance from CLUSA". CGAP Agricultural Microfinance Case Study No 5, August 2005.
45. Psacharopoulos, G. and H. A. Patrinos (2004). "Returns to Investments in Education: a further update". Policy research working paper 1881, LAC Region, Education Sector Unit, World Bank. Available in http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2002/09/27/000094946_02091705491654/Rendared/PDF/multi0page.pdf.
46. Rank, M. and T. Hirschl (2001). "The Occurrence of Poverty across the Life Cycle: Evidence from the PSID". *Journal of Policy Analysis and Management*, Vol. 20, No. 4, 737-755.
47. Murphy, S. and K. McAfee (2005). "U.S. Food Aid: Time To Get It Right", Institute for Agriculture and Trade Policy, Minneapolis.
48. Saxena, R.S. and S. K. Pradhan (2002). "From dependence to self-reliance through restoring human values: an experience with farmers' organisations". *PLA Notes*, 43: 57-60
49. Sephardim, S. and T. Gopaldas (1989). "Impact of Iron Supplementation on Cognitive Function of Pre-School and School-aged Children: the Indian experience". *American Journal of Clinical Nutrition*, Vol. 50:675-84.
50. SIGN (2008). "School Feeding initiative Ghana-Netherlands". Available in <http://www.sign-schoolfeeding.org/> (Accessed May 2008).
51. Sonino, R. (2007). "Home Grown School Feeding: An Analysis of the Midday Meal Programme in Scotland". In Morgan, K, Bastia, T., et al. "The New Era of School Feeding", Report submitted to the World Food Programme, HGSF/3/Rome.
52. Stoppas, A. (2007). "Background Material for the Supply Sections of the HGSF Conceptual Framework". HGSF/2/Report, School Feeding Service, WFP Rome.
53. Tomlinson, Mark, PHD (2007). "School feeding in east and southern Africa: Improving food sovereignty or photo opportunity?" Health Systems Research Unit, Medical Research Council, 2007. Available in <http://www.equinet africa.org/bibl/docs/DIS46nutTOMLINSON.pdf>.
54. Uaiene, R. (2006). "Introduction of New Agricultural Technologies and Marketing Strategies in Central Mozambique", Research Report No. 2E, August, USAID. Available in http://www.aec.msu.edu/fs2/mozambique/output_report_05-06.pdf.
55. Udry, et al. (1995). "Gender Differentials in Farm Productivity: Implications for Household Efficiency and Agricultural Policy". *Food Policy* 20: 407-423.
56. UN (1989). United Nations on the Rights of the Child, Article 28. UN NY.
57. UN (2005). "World Summit Outcome, Quick-impact initiatives", UN General Assembly, 15 September, (Item 34, p9). New York.
58. UN Millennium Project (2005a). *Halving hunger: It can be done*; Task Force on Hunger. New York.



59. UN Millennium Project (2005b). "Millennium Task Force on Education report: Towards Universal Primary Education". New York
60. UN Millennium Project (2005c). "Investing in Development: A Practical Plan to Achieve the Millennium Development Goals". New York.
61. UNESCO (2005). "Children out of school, measuring exclusion from primary education", UNESCO, Institute for Statistics, Montreal.
62. UNESCO (2007). "Education for All Global Monitoring Report, 2008." UNESCO Paris.
63. Van Stuijvenberg, M.E., et al. "Long term evaluation of a micronutrient fortified biscuit used for addressing micronutrient deficiencies in primary school children". *Public Health Nutrition* 2001; 4:1201-9.
64. Von Braun, J. (2005). "The World Food Situation, an Overview"— Prepared for CGIAR Annual General Meeting, Marrakech, Morocco, December 6, IFPRI. Available in <http://www.ifpri.org/pubs/agm05/jvbagn2005.asp>.
65. Weir, Sharada (1999). "The effects of education on farmer productivity in rural Ethiopia"; The Centre for the Study of African Economies Working Paper Series, Paper 91.
66. World Bank (1999). "World Development Report: Knowledge for Development (1998–1999)". World Bank.
67. World Bank (2002). "Education and HIV/AIDS: A Window of Hope". World Bank.
68. World Bank (2006). "Africa Fertilizer Policy Toolkit". Available in <http://www.worldbank.org/html/extdr/fertilizeruse/documentspdf/RockefellerAgroDealerSupport.pdf>.
69. World Bank (2006). "Malawi Poverty and Vulnerability Assessment". World Bank.
70. World Bank (2006). "Repositioning Nutrition as Central to Development". World Bank.
71. World Bank (2007a). "World Development Report 2008: Agriculture for Development". World Bank.
72. World Bank (2007b). Africa Development indicators, World Bank. Available from : <http://go.worldbank.org/86567Y6EMO>.
73. World Bank (2007c). "From Agriculture to Nutrition: Pathways, Synergies and Outcomes". World Bank.
74. World Food Programme (2007c). "ED Decision memo on SF costs", WFP Rome.
75. World Food Programme (2007d). "Hunger hot spots SAC gaps October 2007", School Feeding Unit, HGSP 3/R. WFP Rome.
76. World Food Programme (2007a). "Food for Education Works: A review of WFP FFE programme monitoring and evaluation 2002-2006." School Feeding Unit, WFP Rome.
77. World Food Programme (2007b). "School Feeding Handbook: Guide for Programme Managers". School Feeding Service, WFP Rome.



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