



Home Grown School Feeding: linking small holder agriculture to school food provision

Aulo Gelli¹

Kristie Neeser¹

Lesley Drake¹

September 2010

Abstract

To support the transition from externally driven school feeding to HG SF, PCD has launched a new programme that will support government action to deliver sustainable, nationally owned school feeding programmes sourced from local farmers in sub-Saharan Africa. The programme, supported in part by the Bill & Melinda Gates Foundation, is providing direct, evidence-based and context-specific support and expertise for the design and management of school feeding programmes linked to local agricultural production.

¹ Partnership for Child Development, Imperial College London

Executive summary

The recent food, fuel and financial crises have highlighted the importance of school feeding programmes both as a social safety net for children living in poverty and food insecurity, and as part of national educational policies and plans. School feeding programs can help to get children into school and help to keep them there, through enhancing enrolment and reducing absenteeism; and once the children are in school, the programs can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially deworming and providing micronutrients. As school feeding programmes run for a fixed number of days a year and have a pre-determined food basket, they can also provide the opportunity to benefit farmers and producers by generating a structured and predictable demand for their products, thereby building the market and the enabling systems around it. This is the concept behind Home Grown School Feeding (HGSF), identified by the Millennium Hunger Task Force as a quick win in the fight against poverty and hunger.

A recent analysis developed by the World Bank, World Food Programme and the Partnership for Child Development identified that today, perhaps for the first time in history, every country for which we have information is seeking to provide food, in some way and at some scale, to its schoolchildren. Coverage is most complete in the rich and middle income countries – indeed it seems that most countries that can afford to provide food for their school children, do so. Where the need is greatest, in terms of hunger, poverty and poor social indicators, however, the programmes tend to be the smallest, though usually targeted to the most food insecure regions. In most countries in sub-Saharan Africa, existing school feeding programmes tend to rely on external funding and implementation. Past experience shows that countries do not seek to exit from providing food to their schoolchildren, but rather to transition from externally supported projects to nationally owned programs. Low-income countries transitioning toward sustainable, government-funded implementation of school feeding programs provide the perfect opportunity to strengthen links between school feeding, agricultural and community development.

In 2003, African governments included locally-sourced school feeding programs in the Comprehensive Africa Agriculture Development Programme (CAADP). That same year, the New Partnership for Africa's Development, together with the World Food Programme and the Millennium Hunger Task Force, launched a pilot Home-Grown School Feeding and Health Programme designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food. Twelve pilot countries were invited to implement the novel program. So far, Cote d'Ivoire, Ghana, Kenya, Mali and Nigeria are already implementing programs. HGSF is clearly demand driven from Africa, with many countries repeatedly asking for support from development partners.

From the operational perspective, there is a clear need to strengthen the evidence base on optimal implementation and effectiveness of HGSF to improve policy and programme support. The impact of HGSF across the supply chain linking small holder farmers to food provision in schools includes a varied range of potential direct benefits, spillovers, and trade-offs, that are not yet very well understood. To support the transition from externally driven

school feeding to HGSF, PCD has launched a new programme that will support government action to deliver sustainable, nationally owned school feeding programmes sourced from local farmers in sub-Saharan Africa. The programme, supported in part by the Bill & Melinda Gates Foundation, is providing direct, evidence-based and context-specific support and expertise for the design and management of school feeding programmes linked to local agricultural production. As a first step in this programme, PCD has been coordinating a scoping analysis designed to develop a better understanding of the HGSF system in its different, context specific configurations. The HGSF framework for analysis was developed by engaging different stakeholders working across the traditional disciplines of education, health, nutrition and agriculture. Stakeholders involved in the process included policymakers, practitioners, researchers, civil society and the media, from different countries and continents. The scoping activities followed a standard programme evaluation approach that sets out to capture the needs of the programme and the characteristics of the target population, and then develops the programme theory for HGSF, covering both impact and process dimensions. The analysis also followed the set of standards developed in Rethinking School Feeding to examine school feeding programmes, namely design and implementation, policy frameworks, institutional capacity and coordination, funding, and community participation.

The emerging policy consensus amongst the different stakeholders involved in the scoping process suggested that HGSF in SSA is a key tool in the transition towards nationally owned school feeding programmes. Three distinct target groups were identified in this exercise, including not only school children, but also small holder farmers and community based groups delivering support services to school feeding. At impact level, HGSF had the potential to improve food security for small holders and other community groups, however in order for this to happen an explicit component, other than food procurement, was required to support agriculture and community development. This component included providing sensitisation campaigns around improved production practices, income generation activities in support to school feeding and on improved nutrition practices. This finding confirms the key role of Ministries of Agriculture, the relevance of HGSF as a key intervention within Pillar 3 of the CAADP framework, and the importance of mainstreaming HGSF within country level CAADP compacts.

The scoping analysis coordinated by PCD has provided the time and space to strengthen multisectoral partnerships and catalyse action on the ground at regional and country level. The analysis is continuing: This framework is proving the basis for the design of the HGSF impact evaluations and feed into the integrated country level assessments of gaps, needs, and constraints that led to the development of HGSF technical assistance country plans. The detailed design of the HGSF impact evaluations is expected to begin during the last quarter of 2010 in Ghana, Kenya, Mali and Nigeria. Though the bulk of the findings of the evaluation will only be available once follow-up surveys have been completed in late 2014, smaller scale operational research, including case studies and modelling work is already underway. As the trade-offs associated with the different HGSF models become better understood, the PCD HGSF programme will incorporate this new knowledge in the HGSF framework for analysis.

Background and rationale

The recent launch of the \$900 million global trust fund to help the world's poorest farmers grow more and earn more so they can lift themselves—and their countries—out of hunger and poverty provides a clear signal repositioning agriculture at the heart of development. Proposed by the G20 last year after the economic crisis and rising food prices pushed the number of hungry people to 1 billion, the Global Agriculture and Food Security Program is a concrete step to translate \$22 billion in food security pledges into action. The recent food, fuel and financial crises have also highlighted the importance of school feeding programmes both as a social safety net for children living in poverty and food insecurity, and as part of national educational policies and plans. The World Bank Group recently launched a Global Food Crisis Response Facility that mobilized approximately \$2 billion to help countries respond to the food and fuel crises, including by scaling-up school feeding programmes.

Rethinking school feeding and opportunities for boosting local food production

A recent analysis developed by the World Bank, World Food Programme (WFP) and the Partnership for Child Development (PCD) identified that today, perhaps for the first time in history, every country for which we have information is seeking to provide food, in some way and at some scale, to its schoolchildren (Bundy et al., 2009). The coverage is most complete in the rich and middle income countries – indeed it seems that most countries that can afford to provide food for their school children, do so. Where the need is greatest, in terms of hunger, poverty and poor social indicators, however, the programmes tend to be the smallest, though usually targeted to the most food insecure regions. In most countries in sub-Saharan Africa, the existing school feeding programmes tend to rely on external funding and implementation. *Rethinking School Feeding* highlighted past experience that shows that countries do not seek to exit from providing food to their schoolchildren, but rather tend to transition from externally supported projects to nationally owned programs.

Low-income countries transitioning toward sustainable, government-funded implementation of school feeding programs provide the perfect opportunity to strengthen links between school feeding, agricultural and community development. School feeding programmes run for a fixed number of days a year and normally have a pre-determined food basket, providing the opportunity to benefit local farmers and producers by generating a stable, structured, and predictable demand for their products, thereby building the market and the enabling systems around it. The recent World Bank/WFP/PCD analysis identifies five stages in this transition process, and draws three main conclusions. First, programs in low-income countries exhibit large variation in cost, with concomitant opportunities for cost containment during the transition process. Second, programs become relatively more affordable with economic growth, which argues for focused support to help low-income countries to move through the transition. Finally, the main pre-conditions for the transition to sustainable national programs are mainstreaming school feeding in national policies and plans, national financing, and national implementation capacity. Countries that have made this transition have all become less dependent on external sources of food by linking the programs with local agricultural production. This is the main drive behind Home Grown School Feeding (HGSF).

Country action on Home Grown School Feeding

In 2003, African governments included locally-sourced school feeding programs in the Comprehensive Africa Agriculture Development Programme (CAADP). That same year, the New Partnership for Africa's Development (NEPAD), together with WFP and the Millennium Hunger Task Force, launched a pilot Home-Grown School Feeding and Health Programme designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food (NEPAD, 2003). 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 program. So far, Cote d'Ivoire, Ghana, Kenya, Mali and Nigeria are already implementing programs. HGSF is clearly demand driven from Africa, with many countries repeatedly asking for support from development partners. To support the transition from externally driven school feeding to HGSF, PCD has launched a new programme that will support government action to deliver sustainable, nationally owned school feeding programmes sourced from local farmers in sub-Saharan Africa. The programme, supported in part by the Bill & Melinda Gates Foundation, is providing direct, evidence-based and context-specific support and expertise for the design and management of school feeding programmes linked to local agricultural production.

The purpose of this paper is to provide an overview of the PCD HGSF programme approach aimed at clarifying what HGSF is, "unpacking" the different elements involved in the HGSF system as a set of interventions aimed at delivering benefits across education, health, nutrition and agriculture development. This paper is structured as follows: we first describe the scoping analytical framework that was developed to examine the HGSF framework and possible designs for HGSF impact evaluations, we then describe some of the findings of the initial scoping analysis and then conclude.

The Home Grown School Feeding framework approach

Despite recent efforts, there are several important gaps in the knowledge on optimal implementation and measures of effectiveness of Home-Grown School Feeding. The programme theory on the educational benefits of school feeding is generally well established and underpinned by an increasingly robust evidence base. School feeding programs can help to get children into school and help to keep them there, through enhancing enrolment and reducing absenteeism; and once the children are in school, the programs can contribute to their learning, through avoiding hunger and enhancing cognitive abilities¹. These effects may be potentiated by complementary actions, especially deworming and providing micronutrients (Jukes et al., 2008). On the other hand, the impact of HGSF across the food supply chain starting with small holder farmers and ending with food provision in schools, includes a varied range of potential direct benefits, spillovers, and trade-offs, that are not yet very well understood (Caldes and Ahmed, 2004). There is also a need to support high-impact research undertakings that have the potential to help policymakers make the right decisions about programme implementation.

¹ See (Adelman et al., 2008) for a detailed review of school feeding impact.

Understanding the HGSF system

As a first step strengthening the evidence base on HGSF and support the design of impact evaluations, the PCD programme has been scoping the theory of change, or the HGSF programme theory. This work was driven by inputs from government policy stakeholders within existing programmes worldwide, and consolidated by the core team of technical partners. Right from the programme's inception meeting in Nairobi in March 2010, the activities brought together stakeholders at different levels, including policymakers, researchers, civil society organisations, development agencies and the media. This was critical to ensure a grounding of the analytical work into a real world, operational context, and also to support a robust collaboration mechanism to share information, ideas, best practice, contacts, evidence and gaps. This also provided a space to develop the multisectoral partnerships and operational mechanisms necessary to improve the translation and innovative use of scientific evidence, and strengthen learning processes within current HGSF programmes.

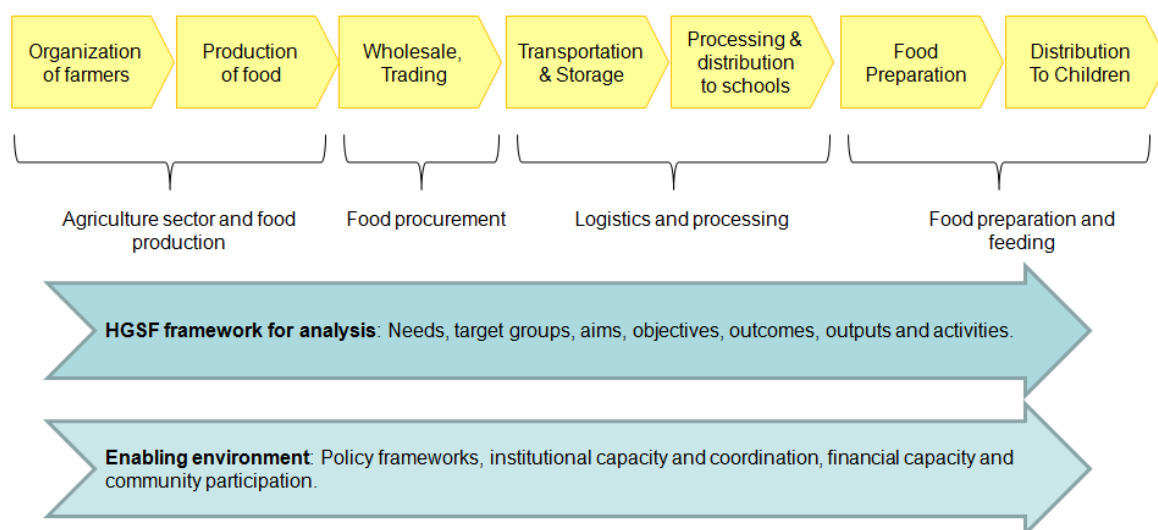


Figure 1: Capturing elements of the HGSF supply chain, framework for analysis and enabling environment.

The scoping activities followed a standard programme evaluation approach (Rossi et al., 2004) that sets out to capture the needs of the programme and the characteristics of the target population, and then develop the programme theory for HGSF, covering both impact and process dimensions. The analysis also followed the set of standards developed in Rethinking School Feeding to examine school feeding programmes, namely design and implementation, policy frameworks, institutional capacity and coordination, funding, and community participation. Design and implementation were examined separately to allow for a more detailed analysis of the HGSF supply chain. In particular, the design of the programme was examined using the “HGSF framework for analysis” approach developed by PCD and partners (as shown schematically in Figure 1).

This approach builds on the key findings from past and ongoing HGSF experiences in different countries to identify a set of key elements (see Annex 1), or building blocks, of the HGSF supply chain (Espejo et al., 2009). They represent a first attempt to capture the scope of the activities that HGSF programmes cover, and begin to articulate the links between the activities and the HGSF objectives. From this perspective, the HGSF supply chain begins with agriculture and food production activities, followed by trading, logistics, food management and distribution to the children in schools. The remaining four standards (policy frameworks, institutional capacity and coordination, funding, and community participation) were grouped under the “Enabling Environment”, cross-cutting the HGSF supply chain.

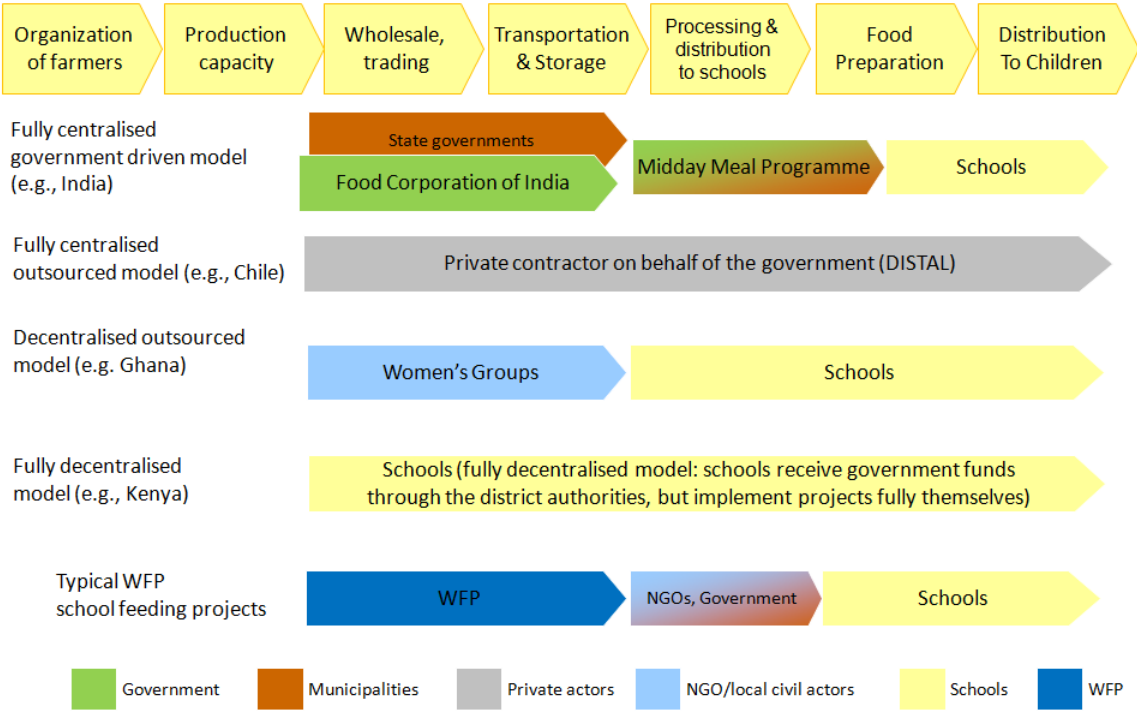


Figure 2: Models of HGSF supply chains in different countries (Source: Espejo et al., 2009)

HGSF programmes exhibit different, context-specific configurations (see Figure 2). Different approaches can even co-exist in the same country, where, for instance, HGSF implementation is owned by decentralised institutions (e.g. individual states in Brazil or India), or where agencies like WFP are complementing the national HGSF programmes (e.g. Ghana and Kenya). One aspect of this work is not to determine which HGSF model is 'best' (since, for example, the India model is unlikely to be politically viable in Kenya), but what efficiencies or innovations can be shared across the different country contexts. This conceptualization has also provided the basis for the integrated country level assessments of gaps, needs, and constraints coordinated by PCD that fed into the development of country level HGSF technical assistance plans (see Figure 3). This framework also provided the reference to address the knowledge gaps on HGSF through operational research, including the development and field testing of methodologies and tools that can be used to explore the necessary linkages between schools, local procurement and small holder farmers.

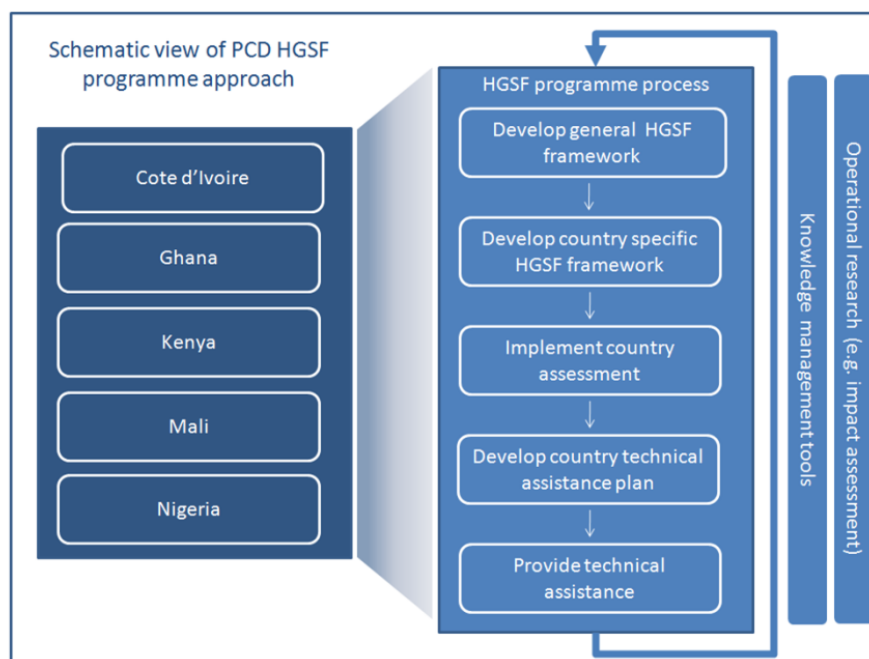


Figure 3: PCD HGSF program approach

Measuring HGSF programme impact

The scoping analysis guided the development of metrics that capture the multiple benefits and beneficiaries of HGSF. As outlined in this paper, and explored in more detail in a series of papers by PCD and partners², these benefits not only have different spatial dimensions (e.g. farms and schools) but also have different temporal dimensions, spanning different age groups and generations. Beneficiaries range from smallholder farmers to processors and cooks to schoolchildren. Opportunities for targeting specific populations within these beneficiary groups also exist, as, for instance, a large proportion of the potential small-holder farmers or school caterers in HGSF are women. By incorporating community level nutrition education in addition to food procurement, HGSF interventions can potentially deliver both immediate benefits in terms of household income through increased demand for food, but also lasting, intergenerational, benefits by supporting household level nutrition. Programme experience in countries in Latin America and South Asia has indicated the opportunity for this type of spillover. The issue is to now rigorously assess these issues in order to provide guidance to national governments looking to design and implement HGSF.

² See (Sumberg and Sabates-Wheeler, 2010) for an analysis exploring the links between school feeding and agricultural development that are at the heart of HGSF. See (Rashid, 2010) for an analysis on the costs, benefits and trade-offs associated with some of the different HGSF procurement models. See (Gelli, 2010) for programme theory for the school feeding side of the supply chain based on the current evidence of programme impact. See (Galloway 2010) for guidance on developing rations for HGSF, and see (Devereux, Sabates-Wheeler and Pascual Martinez, 2010) for the theory of change motivating the relationship between 'home-grown school feeding' and social protection outcomes/objectives.

Box 1: Designing HGSF impact evaluations

The impact evaluations will aim to quantify the differences in outcomes attributable to HGSF programmes. This involves comparing the outcomes for beneficiaries of HGSF to the outcomes from a control group not receiving the programme. As described in recent reviews the impacts of school feeding in different contexts are quite heterogeneous (Adelman et al., 2008). The gender dimension is critical: School feeding has been shown to be particularly effective in supporting school participation of girls in rural areas with large gender disparities in access to education. In addition, school feeding impact has also been found to vary with pupil age, as household schooling decisions are also affected by the opportunity costs of education, that tend to change with both age and gender. School feeding programmes have also been found to have interesting spillovers from the nutritional perspective. Younger siblings of school children have also been found to benefit in terms of food consumption as school feeding rations were shared by their older brothers and sisters. Measuring these potential spillovers, and those linking HGSF to agriculture and community level food security will be a main focus of the impact evaluations.

The detailed design of the evaluations covered by the PCD programme will not necessarily be limited to a randomized controlled trial; rather the evaluation methodology will be tailored to the specific context of the HGSF programme that will be evaluated, and both experimental and quasi-experimental approaches will be considered. To enable evaluators to control for pre-programme characteristics in the HGSF beneficiary population, it will be necessary to collect data before the HGSF intervention begins and after a period of implementation. In order to capture the different levels and types of impact, the evaluations will follow a mixed method approach. Instruments used in the evaluations will collect information on context, programme and beneficiary characteristics to enable an analysis of the treatment effect within different groups of interest. Quantitative data will be collected at household and school level. The pupil household instrument will include a household roster and questions exploring issues including the household socio-economic background and children school participation. Nutritional status will also be assessed for all children in the households and their mothers or primary female caretakers, including data collection on height and weight, and measures of micronutrient status. The school survey will generally cover outcome and process dimensions, including educational indicators, particularly enrolment and attendance, as well as indicators exploring the issue of short-term hunger in the classroom. Though school level surveys are less complex and costly than household data collection, they are also limited in terms of the validity of the findings they can provide. For example, at the school level it is very difficult to control for children moving schools- though they may appear as new enrolments in the school feeding schools, they may have in fact migrated from other schools that were not selected for assistance. Participative approaches will be used to explore “softer” type changes within rural communities, involving farmer and women groups, small traders and food processors, as well as students, parents and teachers.

Home Grown School Feeding: an emerging policy consensus

Clear lessons have begun to emerge from the ongoing scoping analysis begun at the HGSF technical workshop held in Nairobi in March 2010. From the policy perspective, in the context of Sub-Saharan Africa where the majority of school feeding is externally driven and funded, the emphasis in the HGSF concept was found to be primarily on national ownership. For example, though the primary focus of HGSF food procurement should include linking with production and small holder farmers located in the communities surrounding the assisted schools, there would be a need to progressively broaden the focus from this type of “local” procurement if the environment is too constrained to provide the uninterrupted supply of quality food necessary for HGSF. The ultimate boundary for food procurement for HGSF was identified as the country as a whole³. This understanding of HGSF highlights the importance of developing decision support tools for food procurement at different spatial levels, spanning the school year and different agricultural cycles.

In terms of programme theory, HGSF was seen as a tool to reach three different target groups: school children, small scale farmers and community groups involved in food preparation and other income generating activities involved in school feeding service provision. At impact level, policy level goals for HGSF include the well documented benefits in terms of children’s education, health and nutrition. In addition, there was a consensus amongst the different stakeholders that the goal of HGSF from the small holder farmer and community groups perspective was to improve food security, including food availability (e.g. production), food access (e.g. income) and utilisation (e.g. nutritional status).

HGSF activities

In order to achieve improved food security, for small holder farmers and community based service providers, explicit agriculture and community development components were required that complemented the cash for food procurement and benefits resulting from structured demand (Sumberg and Sabates-Wheeler, 2010). This additional component includes at a very minimum the provision of sensitisation and capacity building on three main themes:

- **Sensitisation aimed at preparing the communities surrounding schools to increase food production quantity and quality:** Emerging experience from the different HGSF models in Sub-Saharan Africa indicates that providing funds for food procurement is not enough to ensure that small holder farmers and the community can benefit from HGSF. Stakeholders identified a need to develop the systems for food production, processing and preservation, where possible building on traditional methods, and empower farmers and the local communities to actively participate in the HGSF system. Whilst increasing food production sustainably was essential, it was also critical that quality standards be strengthened across the supply chain. Explicit support activities were needed to address the different constraints including improving inadequate production practices by introducing new technologies (e.g. improved seed varieties, water harvesting technologies ...etc...) or reducing post-harvest losses by improving commodity storage and handling.

³ See slides from the HGSF Technical Workshop in Nairobi for country specific examples available for download on www.hgsf-global.org.

- **Sensitisation aimed at improving income-generation activities within the school community:** Building community level capacity was recognised as key to strengthen the community ownership of the programme and improve the HGSF service provision sustainably. HGSF support services at school include a number of income generating activities including, amongst others, employment opportunities for cooks, security staff and artisans building energy-efficient stoves.
- **Sensitisation aimed at improving household nutrition and health:** HGSF was identified as an entry point for integrated interventions aimed at improving health and nutrition practices within a community, including mother-child health services, diversification of diet, improved food and water quality and others. Through such activities the HGSF programme would aim on the long run at improving household nutrition status including childhood malnutrition.

Conclusions

The evidence base on school feeding includes a broad range of benefits that can potentially be delivered to vulnerable school age children simultaneously across education, health and nutrition dimensions. In addition, field level experiences from middle and high income countries suggests that school feeding may also benefit agriculture and community development. Building the evidence base on the agricultural benefits of school feeding, as well as tackling the issue of cost-effectiveness metrics, are two important areas of ongoing research.

The emerging policy consensus amongst the different stakeholders involved in the PCD coordinated scoping analysis confirmed that HGSF in Sub-Saharan Africa is seen as a key tool in the transition towards nationally owned school feeding programmes. Three distinct target groups were also identified in this process, including not only school children, but also small holder farmers and community based groups delivering support services to school feeding. At impact level, from the policy perspective, HGSF had the potential to improve food security for small holders and other community groups. The findings also highlighted the need for at least one other explicit HGSF programme component other than a cash grant for food procurement in order to provide small holder food security benefits. This involved providing sensitisation campaigns around improved production practices, income generation activities in support to school feeding and on improved nutrition practices. This finding confirms the key role of Ministries of Agriculture, the relevance of HGSF as a key intervention within Pillar 3 of the CAADP framework, and the importance of mainstreaming HGSF within country level CAADP compacts⁴.

The scoping work coordinated by PCD has provided the time and space to strengthen multisectoral partnerships and catalyse action on the ground at regional and country level. The analysis is continuing: This framework is proving the basis for the design of the HGSF impact evaluations and feed into the integrated country level assessments of gaps, needs, and constraints that led to the development of HGSF technical assistance country plans. The detailed design of the HGSF impact evaluations is expected to begin during the last quarter of 2010 in Ghana, Kenya, Mali and Nigeria. Though the bulk of the findings of the evaluation will only be available once follow-up surveys have been completed in late 2014, smaller scale operational research, including case studies and modelling work is already underway. As the trade-offs associated with the different HGSF models become better understood, the PCD HGSF programme will incorporate this new knowledge in the HGSF framework for analysis.

⁴ During the CAADP country round tables key players come together to assess the realities of their own particular situation and develop a road map for going forward. This process leads to the identification of priority areas for investment through a 'CAADP Compact' agreement that is signed by all key partners (Source <http://www.nepad-caadp.net/library-country-status-updates.php>).

References

Adelman, S. W., D. O. Gilligan, and K. Lehrer. 2008. "How Effective Are Food for Education Programs?" A Critical Assessment of the Evidence from Developing Countries." Food Policy Review No. 9, International Food Policy Research Institute, Washington, DC.

Bundy, D., C. Burbano, M. Grosh, A. Gelli, M. Jukes, and L. Drake. 2009. Rethinking School Feeding: Social Safety Nets, Child Development, and the Education Sector. Directions in Development Series. Washington, DC: World Bank.

Caldes, N. and A. Ahmed. 2004. Food for Education: A Review of Programme Impact. International Food Policy Research Institute, Washington, DC.

Devereux, S., R. Sabates-Wheeler, and A. Pascual Martínez. 2010. Home Grown School Feeding and Social Protection. Brighton: Institute of Development Studies.

Espejo, F., C. Burbano, and E. Galliano. 2009. Home-grown school feeding: A framework for action. Rome: United Nations World Food Programme.

Galloway, R. 2010. Developing the rations for Home Grown School Feeding. Washington, DC: Programme for Applied Technology.

Gelli A. 2010. Food provision in schools in low and middle income countries: developing an evidence based programme framework. London: Partnership for Child Development.

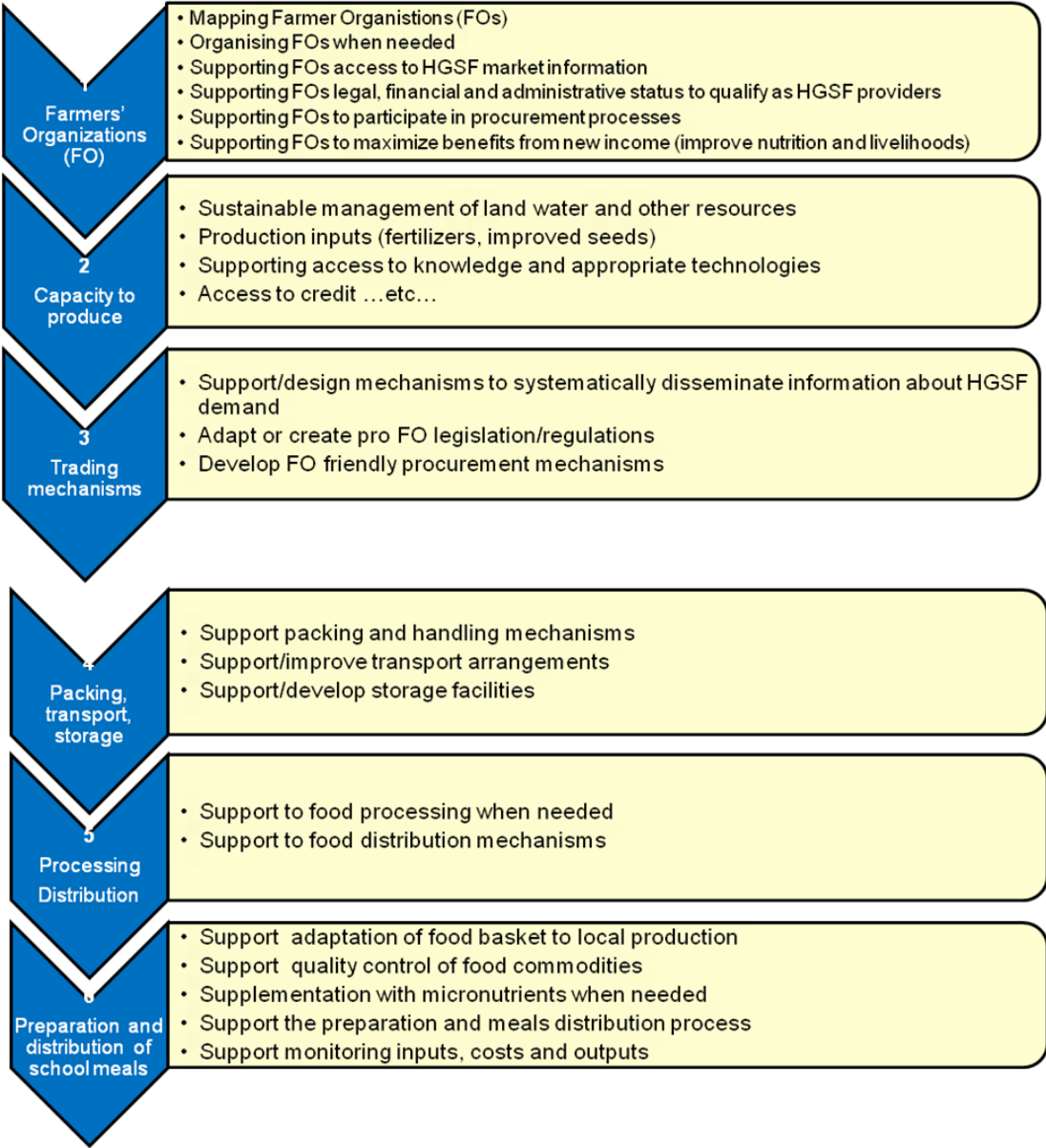
Jukes MCH, Drake LJ and Bundy DAP. School health, nutrition and education for all: levelling the playing field. CAB International, 2008.

New Partnership for Africa's Development. 2003. "The NEPAD Home-Grown School Feeding Programme: A Concept Note."

Rossi, PH., M. Lipsey and H.E. Freeman. 2004 Evaluation: a systematic approach. Sage.

Sumberg, J., and R. Sabates-Wheeler. 2010. "Linking Agricultural Development to School Feeding." Brighton: Institute of Development Studies.

Annex 1: Activities within stylised HGSF supply chain



Acknowledgements

The authors are very grateful for the strategic guidance and feedback provided by Don Bundy (World Bank), Francisco Espejo (World Food Programme), Bibi Giyose (NEPAD/CAADP), Lawrence Haddad (Institute of Development Studies), Arlene Mitchell (Bill & Melinda Gates Foundation), Nancy Walters (World Food Programme) and Patrick Webb (Tufts University). We would also like to thank Alesha Black (Bill & Melinda Gates Foundation), Carmen Burbano (World Food Programme), Stephen Devereux (Institute of Development Studies), Iain Gardiner (Partnership for Child Development), Edoardo Masset (Institute of Development Studies), Rachel Sabates-Wheeler (Institute of Development Studies) and Jim Sumberg (Institute of Development Studies) for inputs and feedback.



Other articles in the PCD working paper series:

- Linking Agricultural Development to School Feeding HGSF Working Paper 2
- Developing Rations for Home Grown School Feeding HGSF Working Paper 3
- Food Provision in Schools: Developing an Evidence-Based Programme HGSF Working Paper 4
- Home Grown School Feeding & Social Protection HGSF Working Paper 5



The working paper series and a wide range of HGSF resources are available for download from www.hgsf-global.org