# **HGSF WORKING PAPER SERIES #5**





## Home Grown School Feeding and Social Protection

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#### Abstract

Reviewing the expected and actual impacts of HGSF programmes, this paper argues that the programmes have great potential to deliver various social protection benefits, not only for schoolchildren and their families but also for food supplying farmers.



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### Executive Summary

The main objectives of school feeding are conventionally stated in terms of child nutritional and education outcomes. The original purpose of feeding children at school was to protect them against the worst consequences of household food insecurity, and as such it can be viewed as a classic 'social safety net'. However, the recognition that school feeding also achieves positive educational outcomes shifted the agenda beyond simply providing a consumption safety net, towards a more holistic 'social protection' plus 'livelihood promotion' function, given that educational outcomes build resilience and livelihood opportunities for the future. Recently the school feeding discourse has shifted again, this time to 'home-grown' school feeding, reflecting the recent convergence in policy debates between agricultural and social protection policies, especially in Africa.

In this paper we review the expected and actual impacts of HGSF and argue that these programmes have great potential to deliver various social protection benefits, not only for schoolchildren and their families but also for food supplying farmers. However, although there is a large and well substantiated evidence base for the nutritional, educational and household food security impacts on 'primary beneficiaries' – school-aged children – of conventional school feeding programmes, much less is known about the impacts of HGSF on the newly created 'secondary' beneficiary groups, such as local farmers, suppliers and caterers.

We propose an analytical framework for exploring the social protection impacts of home-grown school feeding – disaggregating impacts into 'provision', 'prevention', 'promotion' and 'transformation', and analysing the impacts by 'primary beneficiaries' (school-aged children and their families) and 'secondary beneficiaries' (food supplying farmers and their families, also caterers and their families). The paper also highlights the importance of alternative procurement models in affecting social protection outcomes. Examination of specific HGSF case studies reveals that there are multiple procurement models, each with different implications for agricultural development, food supplies and costs, and outcomes for different stakeholder groups. Because the selection of procurement model is associated with trade-offs between competing objectives (e.g. the 'transformative' potential of local ownership *versus* the cost-effectiveness of bulk purchase at regional or national level), there is no 'best practice' modality. The selection of procurement model should be based on a clear prioritisation of programme objectives (e.g. agricultural development, social protection, education, nutrition) and a rigorous assessment of relevant aspects of the local context (e.g. production and marketing constraints).

The relative complexity of HGSF compared to conventional school feeding programmes, in terms of additional beneficiary groups and choices between alternative procurement models, also complicates the calculation of cost-effectiveness and cost-efficiency of HGSF programmes. Local purchase of food commodities could be cheaper than imported food items, or it could be more expensive if these commodities are provided by donors as food aid. Purchasing from local smallholders might cost more than purchasing in bulk from commercial farmers or traders. On the other hand, the benefits of local purchasing and of buying from smallholders might be considered to justify the additional cost. This suggests that new methods for assessing the costs and benefits of HGSF programmes need to be devised, to compare their effectiveness and value for money – relative to other school feeding programmes, and also with respect to other social protection programmes.

## 1. Introduction

School feeding has multiple objectives and can achieve multiple impacts, many of which can be analysed in terms of social protection objectives and impacts.<sup>1</sup> School feeding provides an explicit or implicit transfer to households of a specified food value. The main objectives of school feeding are conventionally stated in terms of child nutritional and education outcomes. The original purpose of feeding children at school was to protect them against the worst consequences of household food insecurity, and as such it can be viewed as a classic 'social safety net'. However, the recognition that school feeding also achieves positive educational outcomes shifted the agenda beyond simply providing a consumption safety net, towards a more holistic 'social protection' plus 'livelihood promotion' function, given that educational outcomes build resilience and livelihood opportunities for the future.

Recently the school feeding discourse has shifted again, this time to 'home-grown' school feeding, reflecting the recent convergence in policy debates between agricultural and social protection policies, especially in Africa.<sup>2</sup> As reviewed by Sumberg and Sabates-Wheeler (2010) in a complementary paper, HGSF has been defined in a variety of ways. While there is no agreed definition, the common element that underpins all definitions is the idea that HGSF is an attempt, actively and explicitly, to link agricultural development with school feeding. The novelty in this agenda is in leveraging positive outcomes from the relationship between 'social' and 'economic' policies, whereby children, their households and poor farmers (often carers of the targeted children) benefit in a synergistic way from an improved programme of delivering positive outcomes on a variety of fronts. Unlike school feeding programmes, HGSF seeks to deliver simultaneously on 'local' economic growth and social protection or poverty reduction objectives.<sup>3</sup> As such, it brings together very different agendas that are at times contradictory and in tension with each other.<sup>4</sup>

This paper has the following purposes.

- Illustrate the theory of change motivating the relationship between 'home-grown school feeding' and social protection outcomes/objectives (which can be multiple).
  - This will be explored at a conceptual level, by mapping the pathways through which HGSF (linking agricultural development and school feeding) generates positive outcomes for vulnerable, poor and food insecure groups, with particular attention to alternative procurement models.
  - It will also be illustrated by use of country-specific examples, recognising that the 'home-grown' aspect of HGSF depends on a range of scale and threshold effects

School feeding impacts on agriculture are explored in a complementary working paper by James Sumberg and Rachel Sabates-Wheeler: Linking Agricultural Development to School Feeding, HGSF Working Paper, June 2010. In this paper we will focus particularly on the social protection objectives of HGSF (that is, providing safety nets and resilient livelihoods for vulnerable groups), as opposed to the objectives related to agricultural development. Clearly the two go hand in hand.

<sup>&</sup>lt;sup>2</sup> See Dorward *et al.* (2006); Sabates-Wheeler *et al.* (2009).

<sup>&</sup>lt;sup>3</sup> For a discussion of the meanings of 'local' see Sumberg and Sabates-Wheeler (2010).

<sup>&</sup>lt;sup>4</sup> "There is less agreement in relation to the **scale** at which this linkage might take place ('local'; 'within a country'; 'domestically produced') and the **nature of the linkage mechanisms** is seldom specified" (Sumberg and Sabates-Wheeler, 2010: 3).

and procurement models, and therefore the way that the theory of change plays out in practice is much more nuanced.

- Take stock of the evidence supporting the pathways from HGSF to social protection outcomes.
- Explore some critical cross-cutting issues that moderate the pathways between HGSF and social protection outcomes.
- Identify a forward-looking agenda for research and impact evaluation.

#### 2. <u>How home-grown school feeding contributes to social protection</u>

Social protection is fundamentally a policy response to 'vulnerability' – the ultimate goal is to enable individuals and households better manage risks to avoid irreversible negative impacts on their lives and livelihoods. How best to achieve this is not straightforward as it depends, among other things, on how vulnerability is conceptualised, on financing constraints and on political will (Barrientos 2010; Cichon *et al.* 2004; Devereux and White 2010).

Drawing on earlier work by two of the authors, this paper argues that there should be two main elements to a social protection agenda, both linked to a concern for long-term and sustainable poverty reduction. The first links risk management explicitly with economic growth, and argues that reducing risk (vulnerability) or protecting the poor against income and consumption variability will allow them to invest and accumulate – a 'trampoline' out of poverty. Despite being vigorously promoted in international development publications, this link has not yet become a key component of anti-poverty programming in practice. In low-income countries, social protection continues to be perceived by many governments and donors as comprising fiscally unsustainable 'consumption' transfers to the economically inactive or unproductive poor, which diverts scarce public resources from 'productive' investment for economic growth, and therefore deserves lower priority as a poverty reduction tool.

At the same time, most advocates of social protection do not consider the second element, which is of fundamental importance to long-term poverty reduction, namely the positive relationship between livelihood security and enhanced autonomy or empowerment. While understandings of 'poverty' have moved to incorporate social dimensions of wellbeing together with rights-based approaches, social protection continues to be conceptualised by many development agencies in terms of public responses to livelihood shocks – the conventional economic 'safety net' function. But this is 'economic protection', not 'social protection', and it is not socially transformative. An appreciation of this second element can help create the policy conditions for a virtuous cycle of pro-poor growth, governance systems that are accountable and responsive to poorer as well as wealthier citizens, and an approach to development that is grounded in concerns for social justice.

From the discussion above, the main elements in a social protection system should include: progressive agendas to move the vulnerable out of dependency and chronic disadvantage; social as well as economic goals for movement into productive spheres of activity, and a focus on needs, assets and rights as a complementary set of initiatives to support social protection initiatives. A strong case can be made for incorporating responses to structural disadvantage within any social protection initiative (Sabates-Wheeler and Devereux 2008). This has led us to propose a 'transformative agenda' as a complement to the typically narrowly defined social protection focus on economic welfare.

Social protection describes all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups. (Devereux and Sabates-Wheeler, 2004)

Thus social protection includes four categories of instruments: 'provision' measures, which provide relief from deprivation; preventive measures, which attempt to prevent deprivation; promotive measures, which aim to enhance incomes and capabilities; and transformative measures, which seek to address concerns of social justice and exclusion (Devereux and Sabates-Wheeler, 2004). The aims and impacts of HGSF can be classified using these four categories, also disaggregating by different beneficiary groups – schoolchildren, and farmers.

## 2.1. Provision

The delivery of food transfers to individuals who are poor and food insecure has the potential to alleviate immediate hunger and reduce acute malnutrition. School meals target children in school and – if they are well targeted – can be expected to reduce hunger and wasting among these children. A systematic review of evidence from 18 randomized controlled trials in low income countries found that "children who were fed at school gained an average of 0.39 kg more than controls over 19 months" (Kristjansson *et al.* 2006: 7). Food-for-education or 'take-home rations' transfers food to entire households, increasing the family's food availability and enhancing short-term household food security.

Home-grown school feeding adds another beneficiary group – food supplying farmers. If these farmers are themselves poor and food insecure, HGSF will reduce their household income and food deficits, and should benefit their families in a similar way to take-home rations. However, since HGSF is a relatively recent innovation, there is significantly less evidence to date on this set of impacts compared to conventional school feeding programmes.

## 2.2. Prevention

If assistance is provided to families during times of economic stress or crisis, this can help them to avoid damaging 'coping strategies' such as selling productive assets to raise money for food. Poor families that are unemployed, self-employed or working in the informal sector typically do not have access to social security or private insurance, so well-timed transfers of food or cash can serve a 'social insurance' function. There is evidence that school feeding schemes allow poor families to retain children in school during livelihood crises, instead of withdrawing them, since the food provided at school reduces the pressure on food and income at home. During the 2002 food crisis in Malawi, for instance, children in areas where school feeding programmes were operational were less likely to be withdrawn from school in order to work (75% remained in school compared to only 55% in areas with no school feeding). "The presence of a school based feeding programme did play a role in keeping children in school over the period" (Gallagher *et al.* 2003: 52).

As for 'secondary beneficiaries', if the farmers supplying food for HGSF are poor, the additional income they earn might allow their children to remain in school, rather than being withdrawn to save money or earn income when times are tight. Indirect evidence for this income effect comes from an evaluation of an "emergency cash transfer" programme in Lesotho. Following a drought in 2008, households that received a cash transfer were much less likely to withdraw their

children from school than poor households that did not receive cash transfers. "15-17% of nonbeneficiaries withdrew their children from school and sent them to work or to relatives, while only 2-5% of cash and food recipients did any of these" (Devereux & Mhlanga 2008: 37).

These impacts could be quantified for HGSF by comparing school attendance and child nutrition status before, during and after a livelihood shock such as a drought, or the annual 'hungry season'. Beneficiaries – both primary and secondary – of home-grown school feeding schemes would be expected to record less variation in outcome indicators like school attendance and wasting, over time and compared to non-beneficiaries.

## 2.3. Promotion

The 'transformative social protection' approach does not include all development interventions that promote livelihoods, but it recognises that many social protection mechanisms can deliver both 'livelihood protection' and 'livelihood promotion' benefits. School feeding is a classic case: it supports both food security in the short-term and human capital formation in the long-term. Impacts on long-term nutrition (e.g. stunting) and health can be predicted, but are not easy to demonstrate, partly because meals at school often substitute for meals at home, so the calories transferred are not 100% additional. More significant nutritional benefits might be derived if the food used to prepare school meals is fortified (e.g. with micronutrients). Adelman *et al.* (2007: 3) reports that: "increases in height and body composition have been detected only when micronutrient-fortified or animal-source foods are provided", and these effects can be strengthened if school feeding is linked to de-worming treatment.

However, many positive impacts of school feeding on education have been recorded, including: (a) increased school enrolment rates; (b) improved attendance at school; (c) improved cognitive performance – all leading to improved learning outcomes. The empirical evidence is strongest for school enrolment and attendance, but less persuasive (though still positive) for cognitive performance and educational achievement (Bundy 2009), possibly because learning outcomes are strongly influenced by other factors such as the quality of education. The benefits of education will be realised only years later, but there is overwhelming evidence that educated farmers produce higher yields (Omamo 2006), educated mothers have higher birth-weight babies and better nourished children (WFP 2006), and educated household heads earn higher incomes and are more likely to be food secure (Psacharopoulos 1994).

Similar beneficial impacts could be derived by the 'secondary beneficiary' group – farmers supplying food for HGSF – but indirectly, through higher incomes and food consumption by children at home (rather than at school). Of course, if the children of food supplying farmers also receive meals at school – which is quite possible if all children in local schools benefit, or if poor children receive school meals and they are assessed as coming from poor families – then there is a double impact (direct and indirect).

## 2.4. Transformation

Depending on specific design features, social protection interventions can be tailored to address social inequities and contribute to social transformation. In many societies, boys enjoy preferential access to education, as reflected in gender-biased enrolment ratios. School feeding has been used to address gender gaps in education, for instance by targeting the intervention at girls – e.g. offering take-home rations for secondary schoolgirls, conditional on enrolment and attendance. A Take-Home Ration (THR) programme in Malawi that targeted girls and double-

orphaned boys found that: "Participation in school appears to be significantly higher for girls in THR sites, with girls overtaking boys to practically universal school participation (at 98%) in THR sites" (Edström *et al.* 2007: 16).

Finally, home-grown school feeding has the potential to transform local communities, both economically and socially, by involving several groups within the community in the programme. These groups include: (a) children who receive school meals and their families; (b) local farmers who are contracted to provide food for HGSF; (c) local workers – probably mainly women – who are employed as caterers at participating schools.

All these predicted social protection impacts of HGSF on primary and secondary beneficiaries are summarised in Figure 1.

Social protection category	Primary beneficiaries: School children and their families	Secondary beneficiaries: Food supplying farmers
Provision	<ul> <li>Alleviates immediate hunger</li> <li>Reduces children's acute undernutrition</li> <li>Enhances household food security</li> </ul>	<ul> <li>Increased food production and income for supplying farmers reduces their food insecurity</li> </ul>
Prevention	<ul> <li>Children are retained in school during times of economic stress or crisis</li> <li>Avoids damaging 'coping strategies'</li> </ul>	<ul> <li>Higher incomes could increase retention of children in school during times of stress or crisis</li> </ul>
Promotion	<ul> <li>Increased school enrolment rates</li> <li>Improved school attendance</li> <li>Improved learning outcomes</li> </ul>	<ul> <li>Same as primary beneficiaries through indirect income effect</li> <li>Possible 'double impact' – if children also get school meals</li> </ul>
Transformation	<ul> <li>Gender gaps in education are narrowed if school feeding targets girls</li> </ul>	<ul> <li>Community participation could transform local economies and social relations</li> </ul>

#### Figure 1. Summary of social protection impacts of HGSF

## 3. HGSF and social protection: theory of change

HGSF has the potential to deliver benefits to many categories of beneficiary, not only learners. Ranked in terms of presumed priority for HGSF programmers, these beneficiary groups include:

- <u>Primary beneficiaries</u>: **Children** (especially learners from poor families)
- <u>Secondary beneficiaries</u>: **Farmers** (especially small-scale local smallholders)
- <u>Tertiary beneficiaries</u>: Caterers (predominantly local women)
- <u>Additional beneficiaries</u>: **Suppliers** (traders, or farmers' associations)

Home-grown school feeding is expected to generate a number of 'impact pathways', some of which relate to agricultural growth while others relate to food security and social protection. The main pathways are shown in Figure 2, which illustrates, in a simplified way, the theory of change underpinning home-grown school feeding programmes. As discussed at length in Sumberg and Sabates-Wheeler (2010), a fundamental pillar to HGSF is a 'structured demand' for food (in this case provided to schools) and the conditions by which this translates into a supply response by farmers at a level 'local' enough to effect positive spin-offs and multipliers that will facilitate

agricultural development. In Figure 2, these effects are represented by impact pathways (1), (2), (4) and (6).

Recognising the importance of the way that demand is structured for production and development outcomes, and the issues of spatial and threshold factors that can facilitate(or constrain) this relationship, in this paper we focus specifically on the theory of change for social protection outcomes – for food insecure children, poor and vulnerable farm households, and food insecure communities. These social protection outcomes are illustrated in Figure 2 by impact pathways (3), (5) and (7).

- (3) = Structured demand leads to improved income and nutritional status for smallholders.
- (5) = School feeding leads to improved education, health and nutrition outcomes for children.
- (7) = Synergies between (3) and (5): many schoolchildren come from smallholder families.



#### Source: Sumberg 2010

A further positive impact pathway can be created if HGSF is used as a vehicle for introducing nutrition education through the school system, to support improved nutritional outcomes at the household level. This has already been done in several countries, and policy-makers are generally enthusiastic about the potential for enhancing both the education and nutrition of poor children and their families. The power of this linkage derives from the fact that the two interventions are mutually reinforcing: HGSF promotes improved access to education, while nutrition education promotes improved diets at home – and the combination of meals at school plus better diets at home should produce better nourished learners and improved learning outcomes.

HGSF can achieve three broad sets of outcomes: immediate and long-term poverty reduction, income support and stabilisation, and social transformation. While the analysis of income support effect is standard, the analysis of income stabilisation, social transformation and long term poverty reduction effects is not. Income stabilisation includes: risk reduction; the avoidance of costly mitigating and coping strategies; and avoidance of poverty traps. Social transformation includes higher participation by women and vulnerable groups in community life and in income sharing. Long-term poverty reduction includes a potential transformation in the productive structure of small farms – for example, structured demand may lead to the adoption of better technologies or the operation at larger scale that results in permanent increase in income generating capacity. Income stabilisation and social transformation bring equality of incomes and opportunities, as potential outcomes of HGSF projects. This makes HGSF innovative in social protection terms.

While schoolchildren and smallholder families are usually identified as the primary intended beneficiaries of HGSF, under a social protection theory of change other beneficiaries can also be identified, as noted above, including farm associations, traders, caterers and local communities, broadly defined. Potential positive impacts on these secondary beneficiaries should also be modelled and analysed in HGSF impact evaluations.

Some of these additional impact pathways include:

- **Caterers** who are employed to deliver meals to schools will benefit from this "structured demand" for their services this will raise and stabilise their incomes and, especially if they are women, should increase their economic empowerment and autonomy.
- **Suppliers** who take contracts to procure food will not only earn income for themselves, their activity will strengthen local markets, which is an important long-term benefit in food insecure areas that are typically characterised by weak and fragmented markets.
- **Communities** where schools, farmers and caterers are located are expected to benefit in the form of enhanced social cohesion and economic multipliers from increased economic activity especially in cases where the HGSF programme is truly "local".

#### 4. <u>Procurement models and social protection outcomes</u>

The impact of HGSF on any particular group is in many ways determined by the structure of the procurement model underpinning the system. If food is procured from farmers located in the same village as the school then the social protection impact pathways and outcomes will be very different to a model in which food is procured from large-scale national-level suppliers. For example, local farmers can be expected to benefit more from the 'local' than the 'national' procurement model. But this is not necessarily the case – it depends on the range of supporting

institutions, market dynamism, complementary support to producers and the ability of farmers to become independently embedded in markets over the medium term (a major challenge for a poor, small-scale farm household). On the other hand, while the latter model may intuitively appear less promising in terms of welfare outcomes, it is possible that the economies of scale, price advantage and market power of a large supplier may stimulate more agricultural development (if the supplier is required to purchase from 'local' or 'regional' producers) and cheaper school meals. These trade-offs and difficulties in procurement design are discussed at length in Sumberg and Sabates-Wheeler (2010).

Given the multiple objectives and potential positive impacts of HGSF, it is important to select a procurement model that:

- 1. maximises the hunger safety net function of HGSF;
- 2. maximises the education impacts and multiplier effects of HGSF;
- 3. maximises the social equity outcomes of HGSF; and
- 4. reaches the target group(s) most efficiently;

while recognising that there might be trade-off between these objectives in practice.

This section analyses the social protection impacts for food supplying farmers of three main procurement models, classified by scale (small, medium or large), buyer-supplier interaction (purchases by schools, caterers or agencies; from local markets, farmers' associations, traders and other suppliers) and geographical location (local, district or region, national).

#### 4.1. Procurement done at school/community level

In principle this approach enables more direct contact with food-supplying farmers from the community where the programme is implemented, and can bring market opportunities and development for them. The proximity of the farmers to the school represents an advantage in terms of lower transport and commercial costs, as purchases are made directly from the producer. It also guarantees that the food supplied is produced within the community and that the income generated contributes to the local economy. The resulting increase in production will provide a higher income to the farmers which can bring positive 'protective', 'preventive' and 'promotive' social protection impacts. However, depending on the context (i.e. regulation, capacity of local production, scale, geographical location), schools may consider adopting different procurement models, such as suppliers, traders or caterers, which may not provide the same level of benefits to local farmers.

The extent to which the procurement model adopted by the school or community staff will benefit local farmers will mainly depend on the amount of food supplied to the school that is produced by the local farmer and the mechanisms of income distribution among different actors within the procurement process.

• <u>If schools buy food in the local market</u>: In principle this model should yield direct income benefits and subsequent social protection impacts to the food supplying farmers. Ideally the increase in production should enable a sufficient level of accumulation of capital. This strongly depends on multiple factors such as the scale of the demand, the production capacity of the farmers and appropriate support interventions (aiming to equilibrate demand and supply, provide infrastructure, access to technology, and so on).

- <u>If schools buy from local farmers' associations</u>: In principle farmers' associations have the advantage of larger structures in terms of organisation and performance. They have the capacity to produce and market larger amounts; therefore they can compete with conventional suppliers and also with traders. Moreover, since the food comes directly from the local food-supplying farmers (which are partners in the associations) a higher proportion of income benefits resulting from the sale should in principle revert to them. Therefore this model can provide high benefits for the local farmers in terms of income. As indicated by Morgan *et al* (2007: 297, 316) complementary investments in local and regional food infrastructure (i.e. warehousing arrangements) and technical capacity are needed in order for producer associations to be effective.
- If schools buy from conventional provincial/district suppliers (not farmer associations): Benefits for local farmers will depend on the amount of the food sold by the supplier that is produced by local farmers and the proportion of income that reverts to local farmers in the community where the programme is implemented. Therefore, characteristics in terms of organisation, efficiency, size and location of the supplier matter. Suppliers can buy from traders (who at the same time can buy from local farmers or markets) or directly from local farmers. It could be assumed that the benefits for local farmers may be lower than in two previous approaches, as part of the benefit is retained by the suppliers, who act as middlemen between the farmers and the schools. On the other hand, as indicated by Morgan in the case of the Ghana School Feeding Programme, suppliers have a better capacity to ensure a more stable supply of food in areas where local production may not be sufficient; this could translate in a more stable source of income to the farmers who provide food regularly to the suppliers.
- <u>If schools buy from traders</u>: The effects should be similar to those described under the supplier model. Again, except in the case of farmer-traders who market their own produce, traders represent an additional step in the procurement process between the producer and the buyer, and therefore it can be assumed that the share of income that reverts to the farmer will be lower. As indicated by a WFP report (see Morgan *et al.* 2007: 298), traders can play a positive role for local farmers in terms of capacity development, helping to integrate them in the food supply chain. However, there is little evidence in the literature of traders playing this kind of 'support agent' role for farmers.
- <u>If schools buy from caterers</u>: The benefits for local farmers, as in the case of traders and suppliers, will depend on the share of production income that reverts to local farmers. Caterers are mainly used in urban areas, where schools are in close proximity to each other. Since caterers normally purchase, process, store, transport, cook and in some cases serve the food, it can be assumed that this model will not generate benefits to other actors in the community involved in the food chain. On the other hand, caterers emerge in this model as a significant additional beneficiary group from HGSF.

The involvement and participation of members of the community in the programme can have a 'transformative' impact in terms of social protection, as it should contribute to improved social relations within the community; it should also stimulate local markets and the local economy. Some supply modalities can bring opportunities to vulnerable social groups such as women in terms of social integration and economic development. At the same time, the involvement of the community is expected to contribute towards better sustainability and ownership of the project. This is the case of the school feeding programme in Thailand, where individual schools supported by community volunteers are responsible for sourcing, cooking and serving the food, or in parts of Ghana, where similar tasks are formally designated to School Implementation

Committees (SICs), composed of members of the school staff and the community (Morgan *et al.* 2007: 218; 97).

Even if procurement is the responsibility of the school or community, their level of involvement and participation – and subsequent social protection impacts – will depend on whether:

- the design and financial management of the procurement, and other issues such as the decisions regarding the menu or the number of meals, are the responsibility of the school or community staff or a central level authority (i.e. the district or national programme management);
- the food is cooked and served at the school by school or community staff or delivered, cooked and served by a caterer (which is especially common in urban areas);
- the type of delivery, storage, and processing of the food: whether the food is regularly purchased by the cook or a designated person in the school/community market, delivered by a supplier, caterer or a local farmer at the school warehouse, stored by the supplier, caterer or by the school/community, processed (milled or fortified) by the supplier, caterer or by school/community staff.

It should also be noted that there are potentially negative effects of community involvement, which can compromise the positive impacts. For instance, a heavy engagement of school staff in procurement, management and delivery of a school feeding programme may undermine teachers' focus on education, or there may be adverse consequences for women's wellbeing if their workload increases excessively when they take on school catering responsibilities.

## 4.2. Procurement done at district/provincial level

When the responsibility for food procurement is managed at the district or provincial level, the community does not have, in principle, the same level of involvement as when procurement is done by the school or community members. The district- or provincial-level authorities take control over decisions regarding the design, financial management and procurement model, and direct contact with local food suppliers, except for the case of farmers' associations, is less likely to happen. Generally, when procurement is managed at a district or provincial level the food is purchased through suppliers, traders or caterers. As an additional constraint of this model for food supplying farmers, it could be assumed that when the procurement is done at a district or provincial level, the procurement follows more formal tender procedures. (There is some evidence for this from Ghana, Brazil, and Thailand). This fact can represent an entry barrier for small-scale farmers associations and local suppliers. Moreover, if food procurement is done at district or more centralised levels, bulk purchases would be more likely as there are more schools to supply. This is likely to exclude small-scale farmers, traders and suppliers as larger enterprises would be better placed to meet the demand and deliver large volumes of food at a more cost-effective price.

Therefore the social protection impacts for farmers and local communities are expected to be lower, as they will receive a lower share of the income generated by 'home grown' purchases. However, as for the previous case, the level of impact will depend on the characteristics of the procurement model: whether the supplier contract specifies that a proportion of food supplied to the school should be sourced from local farmers or local markets, whether the food is cooked and served by school or community staff or delivered by a caterer, and so on.

In many states in Brazil the responsibility for procurement resides with the municipality, while in Ghana procurement is very often managed at the district level. In both country cases the

coordination with the local level, in terms of logistic and infrastructure development for local farmers and farmer's association, and in terms of institutional coordination between district or municipality administrations and school or community staff, has been identified a key factor in ensuring that social and economic benefits are directed towards small farmers and local communities (Morgan *et al.* 2007, 94, 96; SNV 2008: 24). In some cases procurement rules are explicitly designed to favour smallholders. In Brazil, for instance, each district is required to purchase at least 30% of its food for school feeding from a list of "family farmers".

### 4.3. Procurement done at national level

In general, when procurement is the responsibility of the national authorities, they coordinate at the same time with the authorities at different geographic levels – e.g. provinces or districts. There are relatively few examples of this model, where procurement responsibility is managed at national level – the Food Corporation of India (FCI) is the exception rather than the rule. This procurement model is very complex, with multi-level and decentralised governance systems.

In cases where a single national entity is entirely responsible for the management of the procurement process, the level of involvement of the community and subsequent impacts in terms of social protection can be expected to be low. However, this will also depend on the different responsibilities of the community in other steps of the food chain and other activities apart from procurement, such as cooking and organisation of the school meals.

As for the production and income benefits for local farmers, the effects will depend on similar factors as for the case where district or provincial authorities are responsible for the purchase, with the disadvantages mentioned related to more centralised systems. For instance, district authorities purchasing food from farmer-based organisations should in principle increase the production and income of local farmers, but the impact could be limited if for example there are no formal procedures that ensure transparency in the selection process of the food supplier and therefore encourages the competition and efficiency among different associations, or if the scale of demand is not enough to enable the accumulation of capital, or if the increase in the demand is not accompanied by a proportionate increase in the production, and food prices for the community increase.

It is important to repeat that the above impacts not only depend on the procurement modality but on multiple other factors, such as context, scale, parallel interventions in terms of capacity building or coordination among different stakeholders.

## 4.4. Advantages and disadvantages of alternative procurement models

As indicated above, there are three dominant procurement models, according to which agency procures the food: suppliers, caterers, or schools.

#### 4.4.1. Supplier model

The supplier model – where a trader or an association buys the food from local and non-local producers and delivers it to the schools, where it is stored and cooked by programme staff (not teachers) (WFP 2007: 24) – has several advantages, including:

• teachers have more time to focus on academic activities;

- a more reliable and timely supply of food is assured, as the stronger financial capacity of the suppliers makes them less vulnerable to possible delays in public spending process (SNV 2008; Morgan and Sonnino 2008);
- a more reliable supply of food is ensured in areas where local production may not be sufficient to respond to HGSF demand.

There are also several disadvantages to the supplier model, including:

- The schools generally have no information regarding the content and conditions of the contract (SNV 2008: 24), and there is no guarantee that the food provided by suppliers is locally sourced as requested by the programme (Morgan *et al* 2007: 36). Even if mechanisms are in place to ensure the compliance of the deliveries in terms of quantity and quality, these mechanisms are often not implemented and enforced (SNV 2008).
- If the food is purchased by suppliers outside the beneficiary community, the supplier model provides no "direct market opportunities to local farmers" (Morgan and Sonnino 2008: 160), which is one of the main objectives of the programme.
- The community has no involvement in decisions related to the supply process; they just receive the food and cook it. This can compromise the sustainability of the programme. Moreover the supplier model hampers communications between the district and the community level (WFP 2007: 24).
- In Ghana, suppliers and caterers are paid a fix amount per child, which is determined by the GSFP project (30 Ghp per child) and there is no clear information on the amount suppliers and caterers earmark for the purchase of food. A study by SNV (2008: 24) indicated that some caterers claimed that due to the increase in food prices it was difficult to ensure the quantity and quality of the food at the cost fixed by the project. Considering the lack of quality control procedures, the GSFP fixed price mechanism can compromise the quality of the food supplied to the schools.
- The supplier model is also more costly, as most suppliers and caterers usually buy the food from traders (WFP 2007: 51).

#### 4.4.2. Caterer model

The caterer model is attractive for district authorities (Morgan *et al.* 2007: 306). De Hauwere (2009: 352) indicates that caterers are usually hired and paid at a national level. However, the caterer model is most convenient when schools are close to each other, for instance in urban areas. The model includes not only the purchase but also the storage, cooking and delivery of the food to the schools.

This model has the same advantages as procurement by suppliers, with the additional benefit that caterers can provide more nutritious and balanced meals for the children, since the meals are prepared by more experienced staff (WFP 2007: 26). Moreover, the model simplifies the work of school staff since they don't have to cook or store the food.

The disadvantages are similar to those of the supplier model, in terms of limited benefits to the local farmers, but with the additional problem that caterers can also buy imported food, thereby undermining incentives to domestic farmers in the same way that imported food aid can do (Morgan and Sonnino).

#### 4.4.3. School-based model

Under the school-based model, most of the food items are purchased by the HGSF school or its agents from the local community. Advantages of this model include:

- It better ensures the secondary goals of the HGSF programme, in terms of buying locally produced food for local schools and creating a market for local small-scale farmers (WFP 2007: 28).
- The food is mainly purchased within the local community, lowering the transport and commercial costs as the purchase is done directly from the producer (WFP 2007: 161) without the involvement of a middleman. WFP recommends purchasing from farmers' organisations and farmers' cooperatives as the most cost-effective system.
- The model promotes a stronger involvement of the local community, ensuring this way a better sustainability of the programme.
- The school-based model ensures better quality food and a more nutritionally balanced diet, as concluded in a study conducted of 10 schools in Ghana (Morgan *et al.* 2007).
- The food is also fresher than in other procurement models, and is better linked to the gastronomic culture of the community.

Disadvantages of the school-based model include:

- Morgan *et al.* (2007: 101) reports that in some districts of Ghana, the authorities withheld the transfer of funds to schools, as they believed that procurement at school level could open the door to corruption due to a lack of formal procedures.
- The school-based procurement model requires a considerable amount of time and dedication from teachers. This could have a negative impact on other programme objectives related to education.
- A report from Ghana found that most of the food was purchased not in local villages but in neighbouring communities, due to high prices and food unavailability. The report identified the need for a better connection between local agricultural production and the school feeding programme. It also encouraged measures to enhance productivity of small scale farmers, such as the assistance of an Agriculture Extension Officer in the local and school communities or the organisation of local cooperatives (University of California 2006: 3, 27, 29).
- Despite the fact that the food is mainly purchased from local producers, there still no strong evidence on the scale of the impact on small-scale local producers (Aberman 2007: 35; SNV 2008: 37).
- It is more difficult to establish a formal procurement process than in the other models.
- It is more difficult to process and ensure the quality standards of the food, due to lack of access to laboratories or experienced staff.

Figure 3 summarises the predicted social protection impacts of HGSF, disaggregated by these three procurement models.

Social	Farmer- School	'Supplier'		Caterer
protection category		Large association	<u>Trader</u>	
Provision	<ul> <li>demand at local level higher food production and income</li> <li>concentration of demand may increase liquidity and reciprocity thus safety-net multiplier</li> <li>synergies between household and associated child food security</li> </ul>	<ul> <li>farm households involved = higher food production and income</li> <li>demand may or may not be concentrated in one area, thus positive externalities may not occur</li> <li>enhances household food security but not necessarily synergies with child</li> </ul>	<ul> <li>local farm households may or may not be involved</li> <li>traders with contracts benefit from regular and higher incomes</li> <li>do obvious synergies with associated child</li> </ul>	<ul> <li>local farm households may or may not be involved, depends on what is available in the market</li> <li>well trained caterer can increase the nutrition and dietary diversity of children</li> </ul>
Prevention	<ul> <li>provides secure price and sustained demand for produce of a group of very 'local' farmers (insurance)</li> <li>'subsidy' underwrites risk to risk adverse farming</li> <li>Higher incomes could increase retention of children in school during times of stress or crisis</li> </ul>	<ul> <li>provides secure price and sustained demand for produce of a group of farmers who could be geographically dispersed</li> <li>sustained demand may enable association to increase market power</li> <li>no obvious links to child outcomes</li> </ul>	<ul> <li>if trader is contracted, provides secure price and sustained demand</li> <li>trader may not have formal agreement with producerslimited positive impacts for producers</li> </ul>	<ul> <li>security is limited to caterers themselves</li> <li>local knowledge and training (if provided) may have positive spillovers to children</li> </ul>
Promotion	<ul> <li>'subsidy' allows farmers to establish sustainable livelihoods</li> <li>'local' synergies between farm households, schools and community could promote development in local economies</li> </ul>	<ul> <li>'subsidy' enables association members to grow activities and establish sustainable livelihoods</li> <li>Synergies between association members and school children depend on spatial model of procurement-production</li> <li>If association is close to school may be a better model than farmer model</li> </ul>	<ul> <li>If traders network are 'thick' at 'local' level, opportunities for market dynamism</li> <li>Dynamism in trading may enable more diverse and nutritious food bundle</li> </ul>	<ul> <li>Possible cost to programme if caterer sources cheapest products and keeps savings</li> <li>local knowledge and training (if provided) may have positive spillovers to children</li> </ul>
Transformation	<ul> <li>Synergy between better nourished and educated child and farm household may transform opportu-nities for children, especially girls</li> <li>'Local' synergies between farm households, schools &amp; community could transform local social relations</li> </ul>	<ul> <li>Depends on spatial scale of procurement-production.</li> <li>Possible advantages to association in the form of increased market power.</li> </ul>	<ul> <li>Possible advantages to market dynamism, but could also lead to exclusion of certain groups of producers</li> </ul>	<ul> <li>Limited transformational opportunities</li> </ul>

Figure 3. Summa	ary of social protection potential in	npacts on secondary beneficiaries, by HGSF	procurement model
Social	Farmer- School	'Supplier'	Cateror

## 5. Evidence on social protection outcomes of HGSF

This section reviews the evidence from four case study programmes in Africa – in Ghana, Kenya, Mali and Nigeria – on the 'provision', 'prevention', 'promotion' and 'transformation' impacts of HGSF, either in design or (where evaluations have been conducted) in actual achievements.<sup>5</sup>

## 5.1. Provision

In Ghana, Kenya, Mali and Nigeria, hundreds of thousands of schoolchildren are receiving direct social protection benefits from HGSF, in the form of unconditional food transfers.

- In **Ghana**, HGSF delivers a hot, nutritious meal each day to almost 600,000 pre-primary and primary school children in poor areas of Ghana, using locally grown food.
- In **Kenya**, HGSF provides a mid-day meal and mid-morning snacks to pre-primary and primary school children in poor pastoral areas and slum schools in major cities.
- In **Mali** in 2008, over 100,000 children in more than 700 schools were receiving balanced daily meals, in areas targeted for their poverty and food insecurity the aim being to ensure that hunger is no longer a barrier to education.
- In Nigeria, HGSF aimed to reduce hunger among poor schoolchildren.

## 5.2. Prevention

In Ghana the HGSF design document notes that the programme provides a form of insurance against seasonal hunger. The logic is that higher incomes will strengthen the capacity of poor farming households to purchase food during the lean season, when food prices and hunger are at their annual peak.

The Ghana and Nigeria HGSF programmes have complementary interventions that could be classified as aiming to prevent food insecurity indirectly. The GSFP in Ghana will provide health and nutrition education to children and their parents or guardians in participating schools. In Nigeria the programme also provides capacity strengthening at school and community levels, to improve nutrition, health and agricultural practices (through model gardens and farms).

## 5.3. Promotion

School feeding programmes are expected to promote livelihood opportunities of children in the long-term – i.e. in adult life – through enhanced <u>access</u> to education and improved educational <u>outcomes</u>. These effects are independent of the source of the food used in school meals – the impacts are likely to be the same for conventional school feeding and for HGSF.

Empirical evidence from the wider school feeding literature demonstrates convincingly that school feeding increases access to education for poorer children – as measured by indicators

<sup>&</sup>lt;sup>5</sup> The evidence presented here is summarised in tabular format as Annex 1.

such as enrolment rates, attendance<sup>6</sup> and retention – and that these benefits often accrue disproportionately to girls rather than boys, thereby redressing gender disparities in education (Bundy *et al.* 2009). The evidence for school feeding impacts on education performance is more ambiguous, but several studies have found that pass rates and test scores rise after school meals are introduced (Kristjansson *et al.* 2007).

HGSF programmes have promoted access to education in several African countries, but there are too few evaluations as yet to conclude whether there are positive impacts on learner performance.

- The **Ghana** School Feeding Programme (GSFP) is designed to increase school enrolment, attendance and retention. An evaluation found that enrolment increased by 13% for girls and 14% for boys after the GSFP started.
- HGSF in **Kenya** has several educational objectives, including improving school enrolment, attendance, transition, retention and learning capacity.
- In **Mali**, HGSF aims to improve access to education, particularly for girls and for children living in food insecurity, and to improve their learning outcomes. Enrolment in assisted schools increased by 23% for girls and 17% for boys, at a time when national enrolment rates increased by 8% for girls and 5% for boys.
- In **Nigeria**, HGSF is designed to increase school enrolment, attendance, retention and completion, particularly of rural children and children in poor urban neighbourhoods.

As noted, the 'home-grown' aspect of HGSF results in a second beneficiary group – participating farmers, whose livelihoods are supported through higher incomes and having a guaranteed buyer of their produce.

- In **Ghana**, HGSF was intended to increase farmers' incomes and local food production but an initial evaluation found that in more than half the HGSF schools, less than 20% of the food was purchased locally, so this objective was under-achieved.
- In **Mali**, HGSF aimed to improve the food production capacity of poor rural communities, raise farmers' incomes, and provide reliable food stocks for local schools. The programme is also intended to provide income generation and employment opportunities around food production and school feeding support services.
- In **Nigeria**, HGSF was designed to boost local food production and farmers' incomes. It is also the intention that the programme will stimulate the development of small and medium-scale enterprises (SMEs) in participating communities.

## 5.4. Transformation

School feeding programmes can contribute to social transformation if they incorporate 'social' objectives, such as redressing gender inequities in education, or targeting marginalised groups. Our four case study HGSF programmes in Africa all have explicit gender goals.

• In **Ghana**, the GSFP targets schools in areas where the gender parity index is lower than the national average. The GSFP also targets women farmers as suppliers of food, with preferential access to credit and complementary services.

<sup>&</sup>lt;sup>6</sup> Reviewing the evidence on attendance across rigorous empirical studies, Kristjansson *et al.* (2007: 7) found that: "Children who were fed at school attended school more frequently than those in control groups; this finding translated to an average increase of 4 to 6 days a year per child."

- In **Kenya**, the HGSF aims to promote equity by supporting access to quality education and nutrition for girls, orphans and vulnerable children, especially those living in the arid and semi-arid lands (ASALs) and other poor and marginalised areas.
- In **Mali**, the HGSF targets areas where enrolment of girls is low, and has devised strategies alongside school feeding to promote access to school for girls. This has had tangible results the average enrolment gender ratio has improved to 1.1 in assisted schools.
- In **Nigeria**, the school feeding programme aims to accelerate the attainment of gender parity in education through increased enrolment, retention and completion of basic education by girls.

## 6. <u>Cross-cutting issues</u>

This section discusses two issues that affect the design and implementation of all school feeding programmes, but are especially relevant for home-grown school feeding – targeting, and graduation and dependency.

## 6.1. Targeting

Under conventional school feeding programmes, there is only one intended beneficiary group – targeted children in participating schools. With home-grown school feeding, there is a second beneficiary group – the farming families who provide food for the schools. This provides an opportunity to expand the social protection impact of the school feeding programme, but it also raises a dilemma for HGSF programme managers, whose primary responsibility is to deliver adequate supplies of good quality food, punctually and regularly, to participating schools. If the programme sources food from poor smallholders, this raises their incomes, reduces their food insecurity and lowers the incidence of hunger and malnutrition in their families.

However, sourcing food from poor smallholders rather than large commercial farmers could increase the possibility of disruption to supplies, as smallholders have less working capital to invest in fertilisers and irrigation, so generally face lower and more erratic yields. This means that the attraction of adding a second group of poor beneficiaries to the HGSF – a feature that is not available to conventional school feeding programmes that depend on imported food aid – could inadvertently compromise the positive impacts on the primary target group.

The point is that identifying two target groups rather than one introduces the risk of trade-offs between the target groups. For example, school feeding programmes are usually implemented in areas characterised by high chronic food insecurity (e.g. in semi-arid areas), where food production capacity is low – so opportunities for local procurement might be limited. To minimise this dilemma, HGSF programmes could be targeted to areas with good production potential but localised "pockets of poverty" – where there are large numbers of poor children and poor smallholders (often living in the same households). This strategy is being successfully adopted in Kenya's *Njaa Marufuku* programme.

This is not an argument against using HGSF to extend social protection to smallholder families – on the contrary, this is a unique opportunity that should be maximised. Instead, every HGSF programme should be more explicit during the design stage about all the target groups it aims to reach, it should prioritise these target groups and ensure that trade-offs or compromises between target groups are minimised, and then the procurement system should be designed accordingly. Too often, the procurement model is selected first, and this drives the design of the

HGSF programme, rather than (as we propose here) the other way round: identifying the objectives and target groups first, then designing the programme – including selecting the optimal procurement system – to achieve these objectives and reach all the target groups.

Finally, it should be noted that HGSF faces the same challenge as conventional school feeding programmes in terms of under-coverage or exclusion errors. Providing school meals only benefits children attending those schools. This gives rise to two sources of exclusion error. First, unless all schools in the country are covered, poor children attending non-participating schools will not be reached. Second, it is well known from evaluations of school feeding programmes that the incentive of a meal is not sufficient to attract all poor children to schools, especially if they come from socially marginalised groups, so there will inevitably be some highly vulnerable children who do not benefit either educationally or nutritionally – other interventions are needed for such cases. This concern is not specific to home-grown school feeding, but it could be exacerbated by decisions about locating the HGSF programme near to farmers from whom the food is being procured.

## 6.2. Graduation and dependency

Policy-makers and programme managers are increasingly concerned to minimise 'dependency' on social protection programmes, and one way this can be achieved is by 'graduating' those beneficiaries who are able to attain self-reliance. The primary beneficiaries of school feeding programmes are school-aged children from poor and vulnerable families. These children are not expected to graduate, but they do have a predicted 'pathway out of poverty'. By acquiring skills and knowledge at school that they would otherwise have missed, children who went to school – or stayed in school – because of school feeding programmes can be expected to enjoy better income-earning prospects and more viable livelihoods. Over their lifetimes, therefore, these children are less likely to be dependent on public assistance, thanks to school feeding.

This is a general argument that applies to all school feeding programmes. Local procurement of food on home-grown school feeding schemes provides an opportunity for farmers to benefit as well. If these farmers are poor and food insecure then the 'structured demand' that HGSF offers provides a safety net for farmers and an opportunity to raise their incomes through crop sales. This raises the possibility that poor farmers who are targeted as food suppliers by HGSF will be in a position to 'graduate' off reliance on this guaranteed buyer, eventually joining farmers' associations or becoming integrated into commercial markets as independent producers. To date, however, this is an untested hypothesis – more research is needed into the impacts of HGSF on farmers and other secondary beneficiaries.<sup>7</sup>

## 7. <u>Conclusions</u>

It is clear from this overview of expected and actual impacts of HGSF that these programmes have great potential to deliver various social protection benefits, not only for schoolchildren and their families but also for food supplying farmers. However, although there is a large and well substantiated evidence base for the nutritional, educational and household food security impacts on 'primary beneficiaries' – school-aged children – of conventional school feeding

<sup>&</sup>lt;sup>7</sup> The Future Agricultures Consortium is conducting a research study to investigate this issue, titled: 'Graduation pathways out of poverty: Home Grown School Feeding Programme in Kenya'.

programmes, much less is known about the impacts of HGSF on the newly created 'secondary' beneficiary groups, such as local farmers, suppliers and caterers.

This paper has proposed an analytical framework for exploring the social protection impacts of home-grown school feeding – disaggregating impacts into 'provision', 'prevention', 'promotion' and 'transformation', and analysing the impacts by 'primary beneficiaries' (school-aged children and their families) and 'secondary beneficiaries' (food supplying farmers and their families, also caterers and their families).

This paper has also highlighted the importance of alternative procurement models in affecting social protection outcomes. Examination of specific HGSF case studies reveals that there are multiple procurement models, each with different implications for agricultural development, food supplies and costs, and outcomes for different stakeholder groups. Because the selection of procurement model is associated with trade-offs between competing objectives (e.g. the 'transformative' potential of local ownership *versus* the cost-effectiveness of bulk purchase at regional or national level), there is no 'best practice' modality. The selection of procurement model should be based on a clear prioritisation of programme objectives (e.g. agricultural development, social protection, education, nutrition) and a rigorous assessment of relevant aspects of the local context (e.g. production and marketing constraints).

The relative complexity of HGSF compared to conventional school feeding programmes, in terms of additional beneficiary groups and choices between alternative procurement models, also complicates the calculation of cost-effectiveness and cost-efficiency of HGSF programmes. Local purchase of food commodities could be cheaper than imported food items, or it could be more expensive if these commodities are provided by donors as food aid. Purchasing from local smallholders might cost more than purchasing in bulk from commercial farmers or traders. On the other hand, the benefits of local purchasing and of buying from smallholders might be considered to justify the additional cost. This suggests that new methods for assessing the costs and benefits of HGSF programmes need to be devised, to compare their effectiveness and value for money – relative to other school feeding programmes, and also with respect to other social protection programmes.

There is a need to generate more empirical evidence of the consequences for social protection outcomes of alternative procurement models. Possible research questions could include:

- 1. Who are the secondary beneficiaries of HGSF under alternative procurement models, and how significant are the social protection impacts that accrue to each beneficiary group?
- 2. Which procurement model is most empowering of local communities, and how can these 'transformative' social protection impacts be maximised?
- 3. Under what conditions can HGSF support the 'graduation' of poor food supplying farmers into food security and self-reliance?
- 4. What are the implications of different procurement models for: reliability of food supplies; costs of purchasing and delivering food supplies; workloads of school staff; employment creation and income generation for local farmers and caterers?

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<b>CD</b>	Ghana		Kenya <sup>8</sup>		Mali <sup>9</sup>		Nigeria <sup>10</sup>	
category	School children	Farmers	School children	Farmers	School children	Farmers	School children	Farmers
Provision	<u>Design</u> : Provide children in public primary schools and kindergartens in the poorest areas of the country with one hot, nutritious meal per day using locally- grown foodstuffs <sup>11</sup> <u>Result</u> : The total number of kindergarten and primary school pupils being fed daily is 596,501 <sup>13</sup>	Design: Income of local farmers increased; production of local farmers increased <sup>11</sup> <u>Result</u> (proxy): With the exception of the Eastern region where more than 20% of food was bought from local farmers, in all other regions in more than 50% of the schools, less than 20% of food was purchased locally <sup>13</sup>	Design: Provide mid-day meal and mid –morning snacks to pre- primary and primary school children in ASALs and targeted slum schools in Nairobi and Mombasa		Design: SF balanced daily ration to ensure that hunger is no longer a barrier to education, targeted in areas of poverty and food insecurity <u>Result</u> : In 2007-2008 729 schools were being assisted with SF. The total number of school children being fed daily is 117, 180 <sup>12</sup>	Design: Improve food production capacity of beneficiary community to improve income and provide food stocks for SF	Design: Reduce hunger among Nigerian school children	Design: Stimulate local food production and boost income of farmers
Prevention		Design: Increased incomes will strengthen [poor rural households] capacity to purchase food during the lean seasons when hunger is at its peak						

## Annex 1. Country programmes within the HGSF–SP framework

<sup>&</sup>lt;sup>8</sup> Source: DRAFT National Strategy on School Health, Nutrition and Meals.

<sup>&</sup>lt;sup>9</sup> Source: Mali National SF policy, 2009.

<sup>&</sup>lt;sup>10</sup> National Guidelines for school meal planning and implementation, 2007.

<sup>&</sup>lt;sup>11</sup> Source: Ghana Annual Operation Plan, 2009.

<sup>&</sup>lt;sup>12</sup> GoM/WFP, personal correspondence.

SD.	Gha	Ghana Kenya Mali		i	Nigeria			
category	School children	Farmers	School children	Farmers	School children	Farmers	School children	Farmers
Promotion	Design: Increase enrolment, attendance and retention <sup>11</sup> <u>Result</u> : In GFSP schools, enrolment increased by 13% for girls and 14% for boys since programme inception <sup>13</sup>	Design: GSFP will provide health and nutrition education to children and their parents/guardians in the participating schools to increase awareness in the community and complement school feeding <sup>13</sup>	Design: improve school enrolment, attendance, transition, retention and learning capacity		Design: Improve access to school, particularly for girls and for children living in food insecurity; Improve learning <u>Result</u> : In assisted schools, enrolment increased by 23% for girls and 17% for boys, compared to the national average of 8% for girls and 5% for boys.	Design: Strengthen capacity of community to provide improved support services for SF	Design: Increase school enrolment, attendance, retention and completion, particularly of children in rural communities and poor urban neighbourhoods	Design: Provide capacity strengthening at school and community level to improve nutrition, health, agricultural practices (through model gardens/ farms)
Transform- ation	<u>Design</u> : Target schools in areas of low gender parity index <sup>13</sup>	Design: Specially target women farmers supplying the food for provision of credit and other services <sup>13</sup>	Design: promote equity by supporting access to quality education and nutrition with special emphasis on girls, orphans and vulnerable children in ASALs, pockets of poverty and other marginalised areas		Design: Target areas with low enrolment of girls; Develop strategies alongside SF to support access to school particularly for girls <u>Result</u> : Average enrolment gender ratio of 1.1 in assisted schools.	Design: Provide income generation and employment opportunities around food production and SF support services	Design: Accelerate the attainment of gender parity in education through increased girl- child enrolment, retention and completion of basic education	Design: Stimulate the development of Small and Medium-Scale Enterprises (SMEs)

<sup>&</sup>lt;sup>13</sup> Source: GSFP programme document, 2007.

## Annex 2. Indicators for assessing outcomes

We distinguish here between welfare effects deriving from school feeding per se ("primary beneficiaries" in the text) and welfare effects deriving from generation of structured demand for small farmers ("secondary beneficiaries"). However, the effects and the indicators are very similar and the distinction is made (in the tables below) only for clarity and completeness. The indicators provided are at a high level of generality, and would need to be operationalised in each HGSF programming context.

	Primary beneficiaries	Assumptions	Indicators
Inputs	School feeding	Project is correctly implemented and targeted	Monitoring tools
Outputs	Higher school attendance	Children from poor communities attend school	Higher enrolment and lower dropout rates
	Food intake	Intra-household distribution of food and resource is equitable	Consumption of food rations by children and families
Outcomes	Social transformation	If girls and vulnerable groups are targeted by HGSF programs	<ul> <li>Reduction in educational gender gap</li> <li>Higher education among children of vulnerable groups</li> </ul>
	Income support	Food supplied is equivalent to a given income amount and household can substitute	Higher consumption of goods     based on existing elasticities
	Income stability	Contracts stabilise income expectations and encourage further investments and changes in portfolio allocation	<ul> <li>Changes in income expecta- tions and risk perceptions</li> <li>Household level investments</li> <li>Avoidance of coping and mitigating strategies</li> <li>Avoidance of poverty traps</li> </ul>
Welfare outcomes	Household well-being		<ul> <li>Poverty reduction</li> <li>Income risk reduction</li> <li>Higher equality of income and opportunities</li> </ul>

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	Primary Assumpt		Indicators
	beneficiaries		
Inputs	Structured demand	Poor small farmers are offered opportunities to produce food on a profitable and sustainable basis	Monitoring tools
Outputs	Outputs Farmers groups Individual farmers are equa responsive to incentives offered by the program		<ul> <li>Farmers' response and groups formation</li> </ul>
	Food production	Elastic supply response	<ul><li>Quantities produced of food</li><li>Market sales</li></ul>
Outcomes	Social transformation	Women, poor farmers and marginal groups are involved as food suppliers or caterers	<ul> <li>Participation of women and vulnerable groups in community life</li> <li>Women obtain a higher share of household income</li> </ul>
	Income support	In the short term farmers increase food security.	<ul> <li>Higher and more stable consumption</li> </ul>
	Income promotion	In the long term farmers adopt new technologies and invest in their farms.	<ul> <li>Farmers operate on a larger scale</li> <li>Farmers adopt new technologies</li> </ul>
	Income stability	Contracts stabilise income expectations and encourage further investments and changes in portfolio allocation	<ul> <li>Changes in income expectations and risk perceptions</li> <li>Household investments in human capital</li> <li>Avoidance of coping and mitigating strategies</li> <li>Avoidance of poverty traps</li> </ul>
Welfare outcomes	Household well-being		<ul> <li>Poverty reduction</li> <li>Income risk reduction</li> <li>Higher equality of income and opportunities</li> </ul>

## Table 2. Social protection effects of HGSF: secondary beneficiaries





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