



Osun State Home Grown School Feeding and Health Programme Case study



Executive summary

Background: 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. 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. In 2004, the Federal Government of Nigeria initiated the Home Grown School Feeding and Health Programme through the Universal Basic Education Act. The Federal Ministry of Education decided on a phased-pilot rollout for the programme, beginning with 13 states. Out of the 13 original pilots the Osun State Home Grown School Feeding and Health Programme (OSHGSFHP) is the only one to continue to date and represents a model of good practice amongst other school feeding initiatives in Nigeria.

Objectives: Provide an overview of the HGSF programme in Osun State, describing the programme theory as well as the main institutional and procurement systems involved. Identify innovative features that show some promise in terms of benefits to smallholder farmers, the agriculture sector, and the local community.

Methodology: The analysis was guided by the multi-sectoral approach developed by the World Bank, World Food Programme and Partnership for Child Development (PCD), and conducted following guidelines developed by PCD and the Institute of Development Studies to maximise cross-country comparability and lesson sharing. The case study involved both primary and secondary data collection undertaken between October 2009 and June 2010. Collection of primary data was mostly limited to qualitative methods, including key informant interviews and focus group discussions with a wide range of stakeholders. Field visits included schools, programme offices and farmer groups organised in collaboration with the OSHGSFHP Officer and the Director of the Osun State Agricultural Programme. Initial findings were validated at a stakeholder meeting and feedback was incorporated into the analysis.

Findings: The main targets of the OSHGSFHP are primary school children from kindergarten through to primary 2 in all public schools. Other target groups include cooks employed to provide the school meal service. Potential beneficiaries also include smallholder farmers from within the assisted communities, though no specific programme activities have been explicitly designed yet to address this target group. While there are no specific quality standards for the programme, the programme mandates a menu based on the national guidelines adjusted to accommodate seasonality and local availability. School cooks purchase all meal items and decide on appropriate substitutions based on the menu requirements, ingredient availability and price. Prior to certification, the cooks undertake a three-month training course on food quality, preparation and basic hygiene and must also pass a health check-up. Once the training is completed, the cooks are responsible for managing budgets and procuring ingredients for the daily meals. Each cook is provided a flat budget of N30 (US\$0.20) per student per meal (N150 per week per child) irrespective of the actual price of food. The programme currently provides one meal a day for 129,318 children in kindergarten through to primary 2 in all 1,352 public schools in the state. Emerging field level experience on the benefits of the OSHGSFHP includes improved school participation and learning for school children receiving the school meals. Perceptions within the community suggested that the improved health, nutrition and sanitary practices of the pupils had also impacted positively on the health status of the community, through reduced health maintenance cost and reduced infant mortality rate, for example. Job creation and empowerment of the women cooks were also acknowledged as an important benefit of the programme. In addition, farmers, especially poultry operators, were also reported to have a ready market for their products. Based on budget figures obtained from programme staff, the

total programme cost is approximately US\$45 per child per year, equivalent to about 43% of the estimated per student cost of education in Nigeria.

At the Federal level, a national school health policy was launched in 2006 that recognises the pivotal role of school health and nutrition in terms of achieving health and education for all goals. The policy identifies cross-sectoral responsibilities in the delivery of the school feeding services, including the Ministry of Agriculture and Rural Development amongst others. At state level, Osun State has positioned the HGSF programme separate from other Ministries with the State Programme Officer within the programme secretariat reporting directly to the Governor. Supporting institutions include the Ministry of Education, Ministry of Health and Ministry of Agriculture operating at different levels in the state. At State level, a law, including budget provisions, is currently being drafted by the State Attorney General and is expected to be passed by the Osun State House of Assembly later this year to ensure the permanence of the programme. Osun State has continued funding beyond the Federal Government's initial contribution of N88 million made in February 2006, spending N3.2 billion to date. Strong support from the State's Governor and other leading political figures has ensured continued funding for the programme and has reduced potential political blockages. In order to address the funding challenges arising from the proposed scale up, the programme aims to increase resources through partnerships and introduce cost savings through procurement innovations. While communities have not been asked to provide financial resources, community members play an important role in the programme through their participation in the PTA and the School Based Monitoring Committee.

Conclusions: The endurance of the OSHGSFHP is in itself a credit to a programme that has continued to provide beneficial services to over a hundred and thirty thousand school children. The benefits of the OSHGSFHP documented in this analysis include children's education, health and nutrition, as well as community and agriculture development. The innovative system of checks and balances that has been developed over the years has ensured that the governance of the OSHGSFHP has become a model of good practice within the country and the region. The OSHGSFHP has not only benefitted from the inspiring leadership of the programme; the engagement in the programme monitoring from different stakeholders at many levels has provided a strong platform for improved transparency and accountability. The decentralised procurement model where cooks procure the food every two weeks has resulted, on the one hand, in improved transparency and accountability; on the other it affected the quality, quantity and frequency of the food procurement which in turn limited the opportunities for smallholder farmers' engagement in the sourcing process. This trade-off has been tackled in other countries with different degrees of success, and it is important that in the future the OSHGSFHP can incorporate the lessons from these experiences.

This analysis has found very little quantitative data on the school feeding outcomes and processes, underscoring the need for more robust data collection, analysis and reporting as part of the programme monitoring activities. The lack of strong empirical evidence on the impact of the OSHGSFHP also highlights the pressing requirement for more systematic and rigorous evaluations to be undertaken. This is particularly important as the OSHGSFHP is planning to scale-up its coverage to reach all primary school children in the state. This case study is the first step in the systematic planning of a set of support activities in support to the OSHGSFHP. In order to maintain the momentum on ground whilst the longer term plan is being developed, some short-term support actions, including learning visits and other knowledge exchange activities have already been underway.

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Background and objectives

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 (Bundy et al., 2009). 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 (Espejo et al., 2009). 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. At impact level, HGSF programmes in sub-Saharan Africa are driven by the New Partnership for Africa's Development's (NEPAD) vision for nationally owned, sustainable HGSF aimed at improving smallholder farmer food security (NEPAD, 2003). The following three goals aim to capture the breadth of NEPAD's vision:

- Improve education, health and nutrition of school age children
- Improve smallholder farmer income through structuring market demand from HGSF programmes
- Improve nutrition, quality and quantity amongst smallholder farmers

At least twenty sub-Saharan African countries are interested in or are already implementing HGSF. Low-income countries transitioning toward these locally-sustainable, governmentfunded implementation of school feeding programmes provide the perfect opportunity to strengthen links between school feeding, agricultural, and community development. The recent joint World Bank/WFP analysis identifies five stages in this transition process (see Figure 1) and draws three main conclusions (Bundy et al., 2009). First, programmes in lowincome countries exhibit large variation in cost, with concomitant opportunities for cost containment during the transition process. Second, programmes 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 programmes are mainstreaming school feeding in national policies and plans (especially education sector 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 programmes with local agricultural production.

	Stage 1 Programs rely mostly on extemal funding and implementation		Stage 2	Stage 3		Stage 4	Stage 5	
						Programs rely on government funding and implementation		
Policy framework for school feeding	limited		increased	strong		strong	strong	
Government financial capacity	limited		moderate	increased		strong	strong	
Government institutional capacity	limited		limited	moderate		increased	strong	
Countries	Afghanistan	Malawi	Mali	Kenya	Lesotho		Nigeria	India
	CAR	Ethiopia	Cambodia	Côte d'Ivoire	Ghana	El Salvador		Chile
	DRC	Haiti	Rwanda	Madag	jascar	Ecuador	Jamaica	Braz
	Sudan	Tanzania	Niger	Senegal	Honduras		Botswar	na
	Zimbabwe		Pakistan	Mauritania			Namibia	
Case study examples	Sudan, Haiti (see chapter 6)		Cambodia, Mali (see chapter 3)	Kenya (see chapter 3		dor, El Salvador e chapter 4)	India, Braz (see chapte	

Note: CAR = Central African Republic; DRC = Democratic Republic of Congo. The allocation of countries to a particular stage is a work in progress.

Figure 1: The transition of school feeding (Source: Bundy et al., 2009)

With support from the Bill & Melinda Gates Foundation, the Partnership for Child Development (PCD) has launched a new programme to support government action to deliver sustainable, nationally owned HGSF in sub-Saharan Africa. The programme is providing direct, evidence-based, and context-specific support and expertise for the design

and management of HGSF programmes. One key activity in the PCD programme involves strengthening the evidence on the costs and benefits of HGSF. This is particularly relevant as, despite recent efforts, there are still gaps in the evidence-base on optimal implementation and measures of effectiveness of HGSF, as well as a need to support research undertakings that have the potential to help countries make evidence-based decisions about HGSF programmes. More specifically, there is a need to support the learning and knowledge exchange processes between countries that have been implementing HGSF for many years with others that are only recently beginning to implement HGSF.

Home Grown School Feeding in Nigeria

In 2004, the Federal Government of Nigeria initiated the Home Grown School Feeding and Health Programme (HGSFHP) through the Universal Basic Education (UBE) Act. The legislation stipulated that at a minimum all state primary schools must provide one meal a day to each student. To begin the national programme the Federal Ministry of Education decided on a phased-pilot rollout for the programme, beginning with 13 states. The pilot states were selected from the six geo-political zones and included Enugu, Imo, Rivers, Osun, Ogun, Kogi, Nasarawa, Bauchi, Yobe, Cross River, Kano, Kebbi and the Federal Capital Territory (FCT). Out of the 13 original pilots, the Osun State Home Grown School Feeding and Health Programme (OSHGSFHP) is the only one to continue and represents a model of good practice amongst other school feeding initiatives in Nigeria. To date, however, no impact evaluations have been undertaken on the programme and as a result there is little or no empirical evidence on the impact of the OSHGSFHP in the literature.

Objectives

This case study is the first step in addressing this gap in the evidence base on HGSF in Nigeria and is aimed at providing an overview of the OSHGSFHP.¹ It is mostly descriptive in focus, therefore not an impact evaluation, and is divided into two sections: a profile of the HGSF programme in Osun State, and a list of "intervention nuggets" across the HGSF supply chain that have led to the programme's success.

The HGSF profile section describes the programme theory as well as the main institutional and procurement systems involved. Specific research objectives of this part of the case study are to:

- 1. document the country's experience with school feeding and with HGSF programmes;
- 2. document relevant experiences on multi-sectoral coordination;
- 3. document the procurement arrangements for school feeding programmes.

HGSF intervention nuggets describe innovative features that show some promise in terms of benefits to smallholder farmers, the agriculture sector, and the local community. Specific research objectives of this part of the study are to:

- 1. explore potential benefits of HGSF on local agriculture and document any evidence;
- 2. explore potential benefits of HGSF on local communities and document any evidence;
- 3. document any experience on inclusion of local foods in school feeding programmes.

This paper is structured as follows: the next section describes the research methods used in this analysis, followed by a description of the main findings. We then discuss the results also in light of the recent analytical work on the different HGSF models, highlight the main limitations of this work and then conclude.

¹ Similar case studies are being undertaken in other countries with HGSF programmes.

Methodology

The high level structure of the case study was guided by the analysis jointly undertaken by the World Bank, WFP and PCD (*Rethinking School Feeding*, Bundy et al., 2009). To maximise cross-country comparability and lesson sharing, the case study was conducted following the overall HGSF case study approach developed by PCD and the Institute of Development Studies (IDS) (Devereux, 2010).

The analytical framework for the case study follows 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 has been examined using the HGSF framework for analysis approach developed by PCD and partners.² 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) grouped under the "Enabling Environment", cross-cut the HGSF supply chain. This conceptualisation provided the overall framework for the case study, as shown schematically in Figure 2.

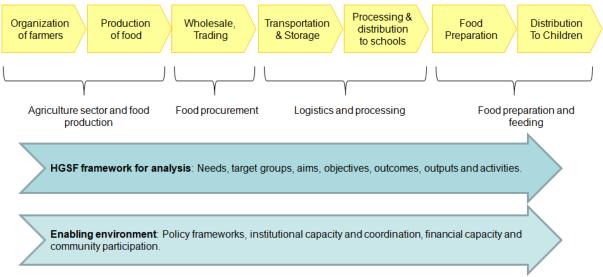
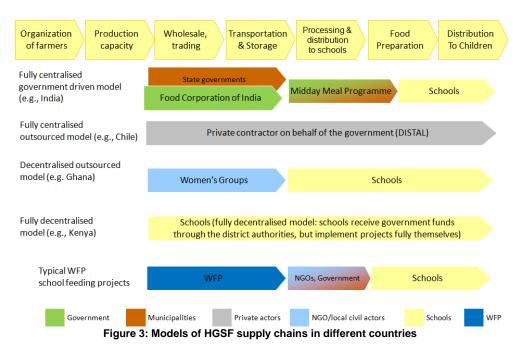


Figure 2: Analytical framework for the case study, including elements of the HGSF supply chain, framework for analysis and enabling environment.

In practice HGSF programmes can exhibit different, context-specific configurations (see Figure 3). 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 other agencies like WFP are complementing the national HGSF programmes (e.g. Ghana and Kenya). One aspect of this research 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.

² The aim of the PCD HGSF framework for analysis work is to provide an improved understanding of the programme theory, or results chain, between HGSF and the aim of improving smallholder farmer food security (PCD, 2010).



In Osun State, the case study involved both primary and secondary data collection undertaken between October 2009 and June 2010. Collection of primary data was mostly limited to qualitative methods, including key informant interviews and focus group discussions with a wide range of stakeholders. Grey literature at both Federal and State levels was reviewed and fed into the design of the interview and group discussion guides. The field visits, including schools, programme offices and farmer groups were organised in collaboration with the OSHGSFHP Officer and the Director of the Osun State Agricultural Programme. While the farmer visits were an hour or more drive from Osogbo, the capital of Osun State, most of the school visits were mainly in Osogbo or in neighbouring Local Government Authorities (LGAs). Interview and focus group respondents throughout the field visits included:

- OSHGSFHP staff (Programme Officer, Operations Officer, Administrative Officer Programme monitors)
- State Government officials (Programme steering committee, Programme monitoring committee, Ministry of Education, Ministry of Agriculture, Director of Osun State Agricultural Development Programme)
- LGA Chairman
- School level staff in 5 schools (School head master, school food teacher, cooks)
- Farmers in 4 farming communities sites, including approximately 40 farmers in total

Initial findings were presented at a meeting in Osogbo in June 2010, including over one hundred and twenty people representing different stakeholder groups. The workshop provided an opportunity to strengthen both the content of the analysis and the linkages with the broader stakeholder community in Osun State. Participants were divided into groups tasked to provide feedback and validate the case study findings. The feedback was collected by a team of facilitators during the meeting and incorporated into the present analysis.

Case study findings

Introduction

Nigeria is a Low-Middle-Income Country with a population of over 154 million people, over forty percent of whom are under 14 years of age. According to UNDP, Nigeria is ranked 158th in the Human Development Index table, with an average life expectancy at birth of 48 years, adult literacy rate of 72 percent and a GDP per capita (PPP) of US\$1,969. Osun State is located in the South-Western part of Nigeria, covering an area of approximately 14,875 square kilometres (see Figure 4). Osun State has an estimated population of nearly 4 million people,³ with just over 1 million school aged children, about half of which are currently enrolled in school, and 49% of whom are girls.⁴ According to the Nigerian Demographic and Health Survey conducted in 2008, 31% of the children in Osun State are stunted and

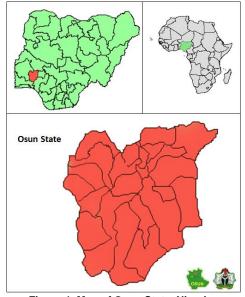


Figure 4: Map of Osun State, Nigeria.

12% are wasted.⁵ Osun State is made up of three agro-ecological zones, rainforest, derived savannah and Guinea Savannah.⁶ It enjoys a tropical climate with prominent wet and dry seasons. The rainy season generally occurs between March and October while the dry season occurs between November and February. The mean annual temperature varies between 21°C and 31°C and annual rainfall ranges between 800mm in the Savannah agro-ecology to 1,500mm in the rain forest belt.

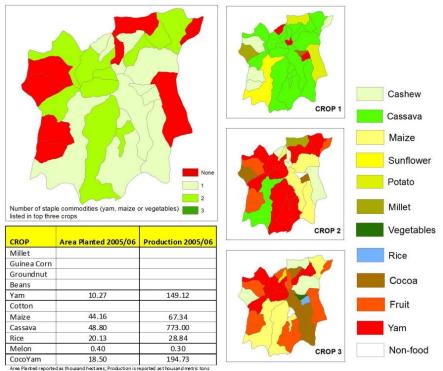


Figure 5: Crop and production statistics for Osun State, 2005/06. (Source: IITA, Smith, 2010).

³ Estimate based on census in 2004.

⁴ Osun State Ministry of Education 2008/2009 enrolment statistics.

⁵ Annex 2 includes maps of health and nutrition indicators in Osun State.

⁶ Source of Osun State agricultural perspective: R.B. Adeniyi, Ministry of Agriculture, Osun State, Nigeria.

The following sections describe the case study findings across the five standards (design and implementation, policy frameworks, institutional capacity and coordination, funding, and community participation).

HGSF Design and implementation

HGSF framework for analysis

As currently implemented, the main target group of the OSHGSFHP includes primary school children from kindergarten through to primary 2 in all public schools in the state. Other target groups include cooks employed to provide the school meal service. Other potential beneficiaries include smallholder farmers from within the assisted communities, though no specific programme activities have been explicitly designed as yet to address this target group.

The objectives of the OSHGSFHP map to the current objectives of the national school health policy (see 'Policy frameworks' section below) and include:

- increase school enrolment, attendance, and completion of studies;
- improve pupil performance and a desire to stay in school;
- highlight the importance of both education and nutrition to parents;
- create job opportunities for cooks; and
- increase income opportunities for smallholder farmers.

The programme service aims to:

- ensure that children receive a least one square balanced meal a day that provides a minimum of 33% recommended daily intake of key vitamins and nutrients;
- provide necessary deworming treatment to students.

While there are no specific quality standards for the programme (standard market quality is acceptable), the programme mandates a menu based on the national guidelines, but adjusted to accommodate seasonality and local availability. An example of the standard weekly menu, as originally planned and as currently implemented, is shown in Table 1. Data on actual food quantities per child were not available. Programme staff described how at the programme's inception the rations were too large and students were unable to finish the servings provided, but rations size has since been reduced to improve programme cost-efficiency. The fish portions provided to students twice a week are quite small due to cost considerations, though protein content is also provided through beans, and an egg served once a week.

Table 1: Standard weekly menu in OSHGSFHP.

Day	Original	Present
Monday	Rice, stew, fish	Maize, beans, stew, fish
Tuesday	Porridge, vegetables with egusi ⁷ , egg	Porridge (yam or beans), vegetables, fish
Wednesday	Rice, beans, vegetables with egusi, fish + cocoa drink	Rice, beans, vegetables with egusi, fish + cocoa drink
Thursday	Beans, vegetables, fish	Maize, beans, stew, egg
Friday	Rice, vegetables, fish	Rice, beans, vegetables, fish

Food production and small-holder linkages

Smallholder farmers predominate the agricultural production system, generally cultivating less than one hectare of farmland per household using rudimentary production techniques. Thus yields are low. Arable crops being cultivated include maize, yam, cassava, cocoyam, rice and sweet potato. Intercropping of maize and cassava is the most common cropping system. Livestock, including sheep, goats, pigs, rabbits and poultry are also reared for sales

⁷ Egusi seeds are the protein-rich seeds of melons, used to cook traditional foods in South-Western Nigeria.

and consumption. Farmers in the state are generally constrained by poor access to modern agricultural inputs and credit, poor rural infrastructure, inadequate access to markets and inadequate research and extension services. To date though, there are no specific design components linking the demand from the school feeding programme to smallholder production in Osun State. Developing these links remains an important opportunity for the OSHGSFHP.

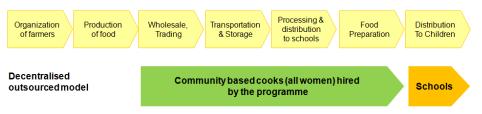


Figure 6: Stylised Osun State HGSF supply chain

Food procurement

By design, the programme delegates significant responsibility to the lowest functioning level – the school kitchen. School cooks purchase all food items (with the exception of the cocoa drink served once a week) and decide on appropriate substitutions based on the menu requirements, ingredient availability and price constraints. The cooks undertake a three-month certification course on food quality, preparation and basic hygiene and before they qualify they must also pass a health check-up to ensure children are not exposed to any communicable diseases. Once the training is completed, cooks are responsible for managing their own budgets and procuring ingredients for the daily meals. Each cook is provided a flat budget of N30 (US\$0.20) per student per meal (N150 per week per child) regardless of the actual price of food. According to programme staff this issue has created a strong incentive for cooks to purchase the cheapest food items that meet the quality standards set by the programme. Respondents reported that in some cases school gardens were an alternative source of fresh vegetables for the cooks, though the school garden activities were not deemed feasible for the production of staple food crops like yam, rice and dry maize throughout the entire school year.

Box 1: Improving financial accountability of food procurement activities

At the programme's inception, programme funds were being disbursed from the OSHGSFHP Secretariat to LGA Secretariats to head teachers to cooks. The OSHGSFHP staff realised that at the end of the disbursement process cooks were not receiving their full budget allocations and that funds were being leaked in the different transactions. There was a need to exclude the middle layer in the transaction and transfer money from the programme account to the cooks in as direct a manner as possible. The middle layer includes the LGA secretariats (who would naturally be the direct recipient of funds from the OSHGSFHP Secretariat) and head teachers (who would be responsible for paying teachers). Financial channels were redesigned to transfer money directly to accounts belonging to individual cooks in private banks as per instructions from the OSHGSFHP Secretariat. As a result of this change in the design of the procurement procedures, money is currently not as easily diverted from its intended purpose and cooks receive full payment for their services. There are still some transaction costs involved; the banks charge the cooks a N100 transfer fee which amounts to approximately 1% of the net payment. Some of the banks also require the cooks to maintain a minimum balance of N500 or N1,000 in their accounts. However, the OSHGSFHP accounting staff maintain that these costs are far lower than the losses due to fund diversion at the LGA and school level. In order to monitor the flow of funds from the public sector, the Auditor General and Office of Governor's auditor regularly monitoring the Programme's account. The OSHGSFHP accountants prepare vouchers for payment which must be approved by the Office of the Governor before any funds are released, and no funds are released without an authorisation. The last full audit was performed for the 2008 accounts.

Current status of the HGSF programme

The OSHGSFHP programme in Osun State currently provides one meal a day for 129,318 children in kindergarten through to primary 2 in all 1,352 public schools in the state. Each child is provided with one cooked meal at school per day, with one cook preparing the meals for every 50 students. Cash is transferred every two weeks into designated bank accounts for each of the cooks, who then purchase food on the local markets. In addition to the meal, a cocoa drink is provided to every primary school pupil in every school one day a week.

Though there is no empirical evidence yet on the impact of the OSHGSFHP, programme monitoring experience from respondents suggests that the school meals have supported access, retention and learning in schools. During the stakeholder workshop in Osogbo, participants also identified an overall improvement in the standard of health of pupils, evidenced in particular through a reduction in diarrheal cases, as well as cleanliness in the school environment. Stakeholders also claimed that the school meals had a positive influence in terms of nutrition practices and diet diversification at home, as pupils now insist on eating the type of meals that are provided during school hours. Stakeholders highlighted that the improved health, nutrition and sanitary practices of the pupils had also impacted positively on the health status of the community, through reduced health maintenance cost and reduced infant mortality rate, for example. Job creation and empowerment of the women cooks were also acknowledged as an important benefit of the programme. In addition, farmers, especially poultry operators, were also reported to have a ready market for their products. Though the feedback from respondents was promising, these benefits will need to be validated by rigorous impact evaluations.

Based on budget figures obtained from programme staff, the total programme cost is approximately US\$45 per child per year, equivalent to about 43% of the estimated per student cost of education in Nigeria.⁸

Current monitoring and evaluation stakeholders and processes include:

- State-level: State Monitoring Committee and State Steering Committee responsible for programme oversight; Ministry of Education State Universal Basic Education Board (SUBEB) collects data on a semi-regular basis; Ministry of Health collects statewide data on general child health.
- LGA-level: LGA Education Secretaries are responsible for collecting weekly feeding forms that consist of number of kids fed and a breakdown by gender; the LGA Education authority is also responsible for collecting data collated by SUBEB.
- School-level: Head teachers, food teachers and a nominated food prefect (from an higher class year) are responsible for day to day monitoring of food quality and portion size; the SBMC responsible for programme oversight at the school level and meets regularly to discuss problems and oversee hiring of school cooks. Food quality is monitored by the head teacher, food teacher and a food prefect daily and by LGA checks twice-monthly – when the feeding allowance report is collected from each school. Surprise checks are also conducted semi-regularly.

Box 2: Decentralised approach to procurement, delivery, and programme monitoring Monitoring service delivery five days a week to more than 1,300 schools requires considerable financial and personnel resources. Due to budget constraints, a centralised management approach was not deemed feasible by programme staff. To overcome this limitation the programme was designed to share the M&E responsibilities across different stakeholders and enable regular reporting back to the programme secretariat. At the school level the Head Teacher, a nominated 'Food' teacher and an older pupil acting as school food prefect are responsible for keeping parents aware of any problems through regular meetings

⁸ This figure is a very rough estimate was based on author's calculation using data from (Hinchcliffe, 2002) for 1998 to model expenditures in 2007.

of the school based monitoring committee (SBMC). At the local government level, LGA Education Secretaries are responsible for overseeing the programme's activities in each school, as well as ensuring payment into the cooks' nominated bank accounts. To enable this, each LGA is provided a monthly stipend (N10,000 monthly) to cover transport and delivery of programme supplies, conduct regular visits to check food quality, preparation and delivery to pupils, and respond to issues as they arrive. The key informant discussions highlighted that M&E is most robust at the state programme level, as OSHGSFHP staff are available to LGA officials, school teachers, PTAs and cooks at all times. Mobile numbers of the programme staff are also made available to facilitate communication and programme staff are frequently called by community members as part of grassroots monitoring. The programme secretariat is also monitored and reports regularly to the State Monitoring and Steering Committees, which are composed of state level representatives from agencies integral to the programme. Each level monitors the other, while state programme are overseen by a state monitoring committee. According to programme staff, regular monitoring should ensure that

- all pupils in K-P2 are receiving meals
- food quality is up to standard
- funds are used appropriately and accounted for
- all relevant stakeholders are doing their part

Feedback from key informants indicated that while a number of staff from various Ministries, agencies and LGAs provide monitoring services, current monitoring staff levels and mobility was not sufficient. In addition, there is no provision for M&E in the budget provided by the State, transportation issues limit the ability of staff to travel, and many rural schools are likely not receiving the degree of monitoring and attention required.

Enabling environment: Policy frameworks

At the Federal level, a multi-sectoral national school health policy was launched in 2006 that recognises the pivotal role of school health and nutrition in terms of achieving health and education for all goals (FME, 2006). The objectives of the school feeding programme as framed in the national policy include:

- Reduce hunger among school children;
- Increase school enrolment, attendance, retention and completion rates, particularly among children in poor rural communities and urban neighbourhoods
- Improve the nutritional status of school children
- Enhance the comprehension and learning abilities of pupils/students

The policy identifies cross-sectoral responsibilities in the delivery of the school feeding services. For example, the responsibilities of the Federal Ministry of Agriculture and Rural Development outlined in the national school health policy include:

- Promote agricultural practices in schools
- Facilitate the services of Agriculture Extension Staff to schools
- Encourage the formation and operation of Young Farmers' Clubs in schools
- Supply improved farm inputs for crop and animal farming in schools
- Develop suitable standards and cost effective meal plans for schools in different communities in collaboration with the Federal Ministry of Health

The Federal Ministry of Environment is responsible for the food sanitation standards in schools.

Enabling environment: Institutional capacity and coordination

At state level, Osun State has positioned the HGSF programme separate from other Ministries with the State Programme Officer within the programme secretariat reporting directly to the Governor (see Figure 7 and Annex 3). Significant freedom was given to the programme to best utilise its resources and design its structure to achieve the greatest

impact and efficiency. At State level, a law is currently being drafted by the State Attorney General and is expected to be passed by the State House of Assembly later this year to ensure the permanence of the programme, including State budget provisions.

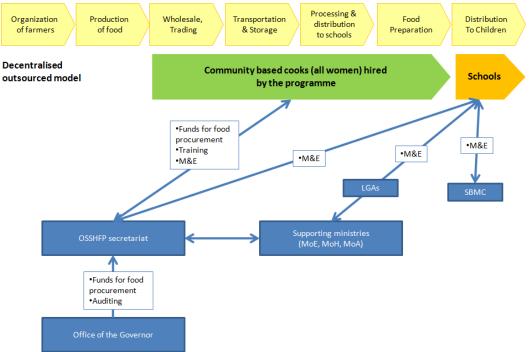


Figure 7: Schematic view of the OSHGSFHP HGSF model and relevant processes.

Supporting institutions comprise the Ministry of Education including the State Universal Basic Education Board (SUBEB), Ministry of Health and Ministry of Agriculture including the Osun State Agricultural Development Extension Project (OSSADEP). There is significant coordination between government ministries and various levels of government. Monitoring and evaluation is conducted by LGAs, Local Education Inspectors (LEIs) through the Ministry of Education, LGA-level inspectors reporting to the LGA Secretary of Education, and OSHGSFHP staff. The Ministry of Education collects data, through SUBEB and LGAs, on enrolment, a key indicator of the programme's success. The steering committee involves the Ministry of Health, NAFDAC, the Ministry of Education, and programme staff. The Ministry of Agriculture is not currently structurally linked to the programme, but has representation on both the State Steering and Monitoring Committees.

Enabling environment: Funding

The total annual budget for the OSHGSFHP is approximately N873 million (\$5.8 million), excluding staff salaries and other support costs covered by other ministries. Osun State has continued funding beyond the Federal Government's contribution of N88 million made in February 2006, spending N3.2 billion to date. Unlike other school feeding programmes piloted in Nigeria, the OSHGSFHP does not advocate for in kind support from parents or communities. Detailed discussions with programme staff underscored that the cost of the programme is high in relation to the State's overall budget, costing approximately N253 million per term (N759 million) plus an additional N35 million per term (N105 million annually) for the cocoa sachets. On a monthly basis N825,000 (N10 million annually) are budgeted for the M&E activities.

A review of federal and state level data showed that since the school feeding programme's inception there have been significant price increases in agricultural commodities (see Figure 8). As a result, the per-child-per-meal budget allocation was increased from N20 to N30. However, a few of the menu ingredients still stand out as relatively expensive. These are eggs which cost N20 to N25 each (in cases where cooks purchase eggs direct from farms

the cost is increased due to additional transport requirements); the cocoa sachets which cost N9 each (plus the cost of storage, transport, and the need to provide one plastic cup per student); and fish which costs approximately N7-10 per student. It should be noted that the cocoa sachets are provided to kindergarten through P-6. The eggs and cocoa sachets are only provided once a week each and the fish four times a week representing approximately N60 of the weekly N150 cost per child; though this does not transport, storage, and preparation costs. A rough calculation based on budget figures showed that the total cost to the programme for eggs and cocoa sachets alone is approximately equivalent to the cost of providing daily meals to all P-3 students. The programme staff emphasised that the current cost in relations to overall state budget presents a challenge for stabilization, sustainability and expansion of the programme. Presently the programme is coming under increasing pressure as the State's monthly Federal allocation is reduced by Nigeria's dependence on oil revenues which have dropped in recent years due to the global economic downturn and increased restiveness in the Niger Delta region.

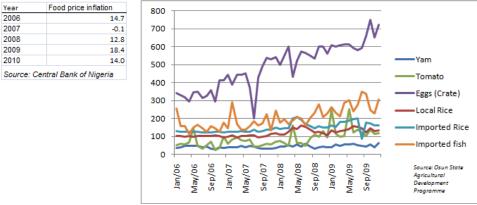


Figure 8: Food price inflation in Nigeria and commodity price trends in Osun State.

Box 3: Linking political support to funding commitment to the programme

Throughout the programme's existence, strong support from the State's Governor and other leading political figures has ensured continued funding for the programme and reduced potential political blockages. As the programme's funding is provided directly from the Governor each school term – three times per year, the direct link between the programme and the Governor's office reduces the amount of bureaucracy and administrative 'drag' that commonly affects government budgeting and service delivery. Through the discussions with the programme staff it was apparent that the high level buy-in in the form of the Governor's personal interest not only prevented political difficulties but also facilitated access to relevant government ministries and agencies relevant to the programme. In addition to funding, strong political support also facilitated other advocacy opportunities including sponsored visits to Abuja, public radio announcements and local media interest.

To ensure continued support and involvement, OSHGSFHP staff are in constant contact with the Governor's office and other relevant ministries, ensuring they are constantly briefed and kept up to date on the situation on the ground. Though there are currently no programme mechanisms to monitor the level of political support, and measurable indicators for this issue would be difficult to establish, according to the programme staff, the benefits of this support are evident in the day to day operations. OSHGSFHP's budget is given top priority at monthly fund allocation meetings; payments are made regularly and on time by the Accountant General; when a matter requires immediate attention by the Government, memos are attended to immediately, and personally brought to the governor by the SSG. Another clear benefit of the high level buy-in is demonstrated by the number of ministries and agencies actually involved in the programme both through staff funding and participation in the state monitoring and steering committees. To date, the high-level political support has been an important asset for the OSHGSFHP. An important test for the future will be to

ensure that the political buy-in translates into actions aimed at programme sustainability, through the passing of appropriate legislation in the State Assembly, for example.

In order to address the funding challenges arising from the proposed scale up, the programme aims to increase resources through partnerships and introduce cost savings through procurement innovations. Presently OSHGSFHP management are designing a strategy to leverage in kind support from private sector partners. The strategy will include individual student, school, ward and local government area (LGA) sponsorship opportunities. One example of private sector engagement involves a LGA sponsorship pilot initiated in May 2010 by the OSHGSFHP with Sahara Group Plc and with local implementation and monitoring support from Food Basket Foundation International, a NGO based in neighbouring Oyo State. The pilot covers 53 primary schools impacting 3,892 students. The pilot will be due for review after two years to determine extended commitment, and is expected to save the OSHGSFHP N27,244,000 per school year.

Enabling environment: Community participation

While communities have not been asked to provide financial resources, community members play an important role in the programme through their participation in the PTA and the School Based Monitoring Committee. The cooks are also employed from within the local community, strengthening the opportunities for income generation and community development. In addition, community members with an interest in the programme can participate in monitoring activities and report problems as they occur; as a respondent outlined "after all, it is the community's children that are being fed by the programme".

Stakeholders have highlighted that the school feeding programme was a welcome intervention in the state, and that the people of Osun State were proud that the programme was still in operation unlike in the other pilot states. However, they also stressed that the sustainability of the programme hinges on funding and monitoring from the grassroots level. Their feedback has suggested that the current level of involvement of communities could be improved by:

- Involving the Parents Teachers Associations (PTA) both to help mobilise funding for the programme and in the monitoring and evaluation
- Mobilising communities to build and maintain school infrastructure
- Involving individuals within the community such as primary school heads, and the community at large who can contact alumni of the schools, political leaders, religious bodies both nationally and in the diaspora to support the programme
- Engaging with Heads of communities to help in retrieving and maintaining land for the use as school gardens

Stakeholder mapping

This section provides a brief overview of the main stakeholders involved in the OSSHSP management and supply chain. Each stakeholder in the programme has value to add and benefit to extract; these are important to understand whilst assessing the current strengths and weaknesses of the programme. The government provides funding while reaching its constituents with a valuable programme, cooks provide meals while earning an income, farmers can potentially supply food while securing a market for their production, and schools can provide necessary monitoring and evaluation while seeing an improvement in school participation and learning.

Equally important, stakeholders must have incentive to add value and the power to extract benefit from the programme. Government will not continue the programme if evidence of success is not concrete. Farmers must be allowed to supply the programme through programmatic design features but will not do so if it means selling for a lower price than other channels. Cooks must be allowed to make informed decisions on the menu in order to save the programme money but will not do so if they themselves are losing money. While the number of stakeholders in the programme is vast, the value added of a subset of stakeholders has been highlighted in the tables below. A successful school feeding programme rests on extracting value from and sharing value with each of these highlighted stakeholders.

	Farmers
Stakeholders	Large commercial farmers and small scale subsistence farmers
Value to add	The school feeding programme has created a greater demand for agricultural produce across the state. In theory, this additional demand could create new markets for local producers. Current capacity to supply to the programme with competitively priced goods year round is limited to eggs and leafy vegetables. There is a prevalence of poultry farms in Osun State. Much of Osun State's egg production is produced by commercial poultry farms and sold out of the state. There may be an opportunity for small farmers to engage in poultry farming to supply the programme.
Incentive to add value	Locally produced rice sells at a premium in the market, thereby creating an incentive for cooks to procure imported rice. The quantity demanded by any one school on any given day is low; farmers tend to sell commodities to traders in the market by the truck load while small, rural primary schools (which are close to farmers and further from markets therefore offering the best opportunity for direct sourcing from farmers) procure commodities in retail volumes (a school with one cook would procure 6 yams, a few bowls full of rice, and at most a basket of tomato per day).
Benefit to extract	In both urban and rural markets across the state where cooks go to procure the food for the daily school meals, the commodities purchased by the programme, in particular yam, rice, fish, tomato and maize, are imported into the state from further north or abroad.
Ability to extract benefit	Farmers are limited in their ability to supply to the programme and therefore ensure a market for their produce for a number of reasons. While maize, yam, rice, and to a lesser extent tomato are grown in Osun State, limited storage capacity limits the ability of local production to meet the needs of the programme over much of the year. Yams can be stored for a few months after harvest, but storage barns are not sufficient to store most of Osun State's production and the ground is too hard to harvest yams during half of the year. The variety of tomato that is preferred in Osun State and therefore used in the school feeding programme is Roma which grows well in the drier climates of northern states but poorly in the wetter climate of Osun State; peppers also grow better in the North. Imported frozen fish is far cheaper than locally farmed fresh fish; the school feeding programme would not support locally farmed fish regardless of price because of the number of small bones. Some farmers are able to store their maize for sale throughout the year (or at least a few months after harvest) but others do not have the means to dry the maize nor the financial security to wait for payment months later. The commodity that Osun State produces the most of is cassava which is not incorporated in the school feeding menu. Since the programme was designed in a very straightforward manner to use public funds to feed school children, farmers have not been provided clear channels through which to benefit from the programme. While in an ideal environment with unlimited resources, the Programme staff believe there would be value in integrating local production, the current priorities are ensuring the sustained funding of the Programme, expanding to Primary 6, and strengthening monitoring and evaluation.

Farmers

	Cooks
Stakeholders	Women under the age of 40
Value to add	The role the cooks play in the programme is irreplaceable. The freshly cooked food uses natural and fresh ingredients and is prepared the day of consumption. Local vendors at or around the schools supply older students with packaged foods, juices (likely water, food colouring, and sugar), and food cooked in unmonitored conditions. The programme would undoubtedly have less value if the cooks were replaced by larger suppliers and the freshly cooked food replaced with pre-packaged meals.

Incentive to add value	The cooks are motivated to provide quality meals both by social pressures and the interest to keep their positions as cooks.
Benefit to extract	At first glance, there is a compelling argument for benefit of the programme to cooks. However, there has not been a formal study to evaluate how much cooks actually make. Prices of basic commodities have more than doubled since inception (this has followed national commodity price trends), but because of budget constraints the payment per student has only increased by 50%. Some cooks claim that their monthly income may be less than N2,000 (\$13). The cooks do not track their expenses; when cooks relay their daily expenses to procure the food they prepare that day, they often account for over 100% of their daily wage through the programme. It is conceivable that because the cooks are not tracking their expenses, they are borrowing and in investing through other income sources more into their school feeding ventures than they are making.
Ability to extract benefit	The cooks do not have significant power. There is greater supply of potential cooks than positions to fill. The cooks must rely on the Programme to protect their interests through regular commodity pricing and meal fee adjustment.

Private sector (not including agricultural production)

Stakeholders	Agricultural marketers, the supplier of cocoa sachets, commercial egg producers, commercial processors, warehousing companies, input providers
Value to add	Currently, traders and marketers are responsible for supplying most of the commodities procured by the Programme cooks. Transitioning the OSHGSFHP to a home grown school feeding programme would involve local transporters, processors, and warehousing to support the larger agriculture sector including and beyond the needs of the OSHGSFHP. Innovative complementary private sector services such as market information built off of already collected data (the Osun State Agricultural Development Programme collects prices twice a month from over 20 markets across Osun State) and supply and demand linkage platforms could also be introduced to fill information gaps that may currently hinder more optimal integration of local production.
Incentive to add value	The private sector is motivated by profit; as long as companies can charge a margin above their costs, they have an incentive to participate.
Benefit to extract	The programme has been designed to build off of existing capacity of the private sector to supply the commodities necessary to prepare fresh meals for the targeted students.
Ability to extract benefit	Few companies have fully integrated themselves into the programme. With a more structured approach to promoting the agricultural link with the Programme, the private sector may be able to add value to the Programme in a profitable way.

Schools and communities

Stakeholders	Parent Teacher Associations (PTAs), the School Board Management Committees (SBMCs), teachers, parents, and students
Value to add	It is up to the schools and communities to effectively monitor and evaluate the programme on a daily basis to ensure a high quality product is being provided to all targeted students, thereby improving their nourishment and concentration. The OSHGSFHP staff have communicated the schools' responsibilities and have identified the staff responsible for these responsibilities; community members have also been engaged. Monitoring the participation of school staff and community members is challenging due to the vast number of schools and limited M&E budget.
Incentive to add value	While there is little personal gain to be had by school staff from monitoring the Programme, it is the Programme staff's opinion that most school staff are active in monitoring. However, as the programme benefits the children in the community, in terms of education, health and nutrition, it is in the interest of stakeholders in the community that

	the service delivery is adequately provided.
Benefit to extract	While there is no empirical evidence there is strong anecdotal evidence that the schools and communities, assumed to be driven to provide quality education to and improve the health of the community's children, have benefited; arguments that the programme is encouraging parents to send their children to and keep them in school, improving child nutrition, and improving learning are compelling.
Ability to extract benefit	As long as the programme continues to be funded and cooks are selected from the community, schools and community members can use social pressure to correct problems in the system.

Government

Stakeholders	Office of the Governor, State Ministry of Education, State Ministry of Health, State Ministry of Agriculture, Osun State Agricultural Development Programme, Local Government Areas.
Value to add	The state resources drive the programme; without public funds to procure the commodities to feed the students, there would be no programme.
Incentive to add value	While the HGSF programme is confident in the future financial support for the programme, there is an election in 2011 that will bring in a new governor with new priorities. A bill has been drafted to secure the future of the programme, but similar bills in other states (in particular, the Rivers State Sustainable Development Programme) have not protected the programmes from politicisation. The OSHGSFHP is seen as a tremendous success from within the government and, assuming the ruling party is re-elected, the programme is likely to continue.
Benefit to extract	Overall there is clear benefit of the programme to the State Government, though possibly not measurable in all respects, as it works to serve the people of Osun State. Over 2,600 cooks have gained employment and 129,318 students receive a nutritious meal each day. These students also receive deworming tablets once or twice a year which, coupled with the school feeding, has the potential to impact student nutrition. Additional benefit could be extracted, particularly in the area of procurement of local agricultural production and microenterprise / employment opportunities for cooks to graduate out of the programme.
Ability to extract benefit	The Government's ability to extract benefit is limited to its ability to provide funding for the programme. Osun State's federal allocation is relatively small as it is not an oil producing state; it should be noted that the success of this programme is even more laudable given these resource constraints. Budget constraints limit the ability of the programme to extend to primary 6 and create uncertainty over the levels of future budgets and the freedom of the programme to use its funds as deemed most effective.

HGSF Intervention nuggets⁹

In this section we describe two HGSF interventions selected on the basis of emerging or potential evidence of benefits to smallholder farmers and the agriculture sector, and on the local community, including a consideration of the impacts of introducing local foods into the school feeding programme. The two interventions identified by the case study team are:

- Flexible menus
- Decentralised, community based catering

Flexible menus

Though Osun State is a relatively small state by Nigerian standards, it includes a large diversity in people, culture, and local food preferences. While the OSHGSFHP menus include specific nutrition requirements, the programme recognizes that these requirements can be met through a variety of dishes and that preferences and availability of goods vary significantly across the state. As a result, the programme intentionally allows cooks to substitute locally available products for the recommended meal ingredients (for example, in areas where cocoa yams are common, cooks can substitute for yams) and to cook dishes that the children are likely to prefer.

Target groups

This feature of the OSHGSFHP is intended to reduce the cost and labour burden of cooks who can rely on readily available commodities when appropriate. The students also benefit as they are provided with dishes they prefer. Another potential benefit is that a greater amount of the produce procured by the programme may be produced by smallholder farmers.

Intervention description

When a new cook is hired, she is informed of the ability to substitute ingredients in the recommended menu as per availability and preference. When a cook wishes to make such a substitution, she is requested to inform the LGA Secretariat of her decision and ensure that such a substitution is allowed. Because the cooks procure and prepare and the daily meals in groups, new cooks are guided by more experienced cooks. The capacity to substitute foods in the menu is strengthened through the joint procurement of goods and preparation of meals.

Associated benefits and trade-offs

Having the menu based on local cultural habits has been associated with diversification of agricultural production, as well as promotion of appropriate health and nutrition practices. With flexible menus though, ensuring adequate service provision generally and nutritional standards in particular, are two important trade-offs that need to be managed explicitly.

Monitoring and evaluation

Monitoring is done by a wide variety of stakeholders including the school's head master and food teacher, a lead student, the LGA Secretariat's Local Inspectorates of Education, the OSHGSFHP monitors, the Ministry of Education, and NAFDAC. All stakeholders monitor the same basic qualities – appearance of the goods procured, appearance and taste of the prepared food, kitchen cleanliness, and portion size. This ensures that inappropriate substitutions are caught before they jeopardize the nutrition benefit of the programme.

Decentralised community based catering

A state wide distribution system of relatively small amounts of processed meals to every primary school in Osun State would likely be complicated, costly, allow for large contracts to be awarded that put private interests above public interests, and deliver a sub-optimal meals to the targeted children. In order to maximize efficiency of the programme, the OSHGSFHP staff decided to decentralize the procurement of produce and preparation of meals through

⁹ See Annex 1 for examples of HGSF activities across stylised supply chain.

the hiring of local cooks and standard payments based on number of meals served times a state-wide per meal rate.

Target groups

The programme cooks are all women, most under the age of 40 (though the programme has requested women above the age of 40 not be selected as cooks, there are some examples of cooks as old as 50).

Intervention description

The Programme staff recognized that they would not be able to hire the cooks themselves. Instead, they developed a community-based process for hiring cooks. Each school's PTA was requested to nominate candidates from the local community who were interested in participating in the programme. By initiating the process at the PTA level, local community and traditional leaders, interested community members, parents, and teachers were all able to participate in the cook selection. This created a greater level of comfort for community members and ensured that cooks had credibility from within the community. The PTA then submitted the nomination to the LGA which would then review and in most cases approve the nomination. A file was then created for each cook in which comments and notes pertaining to the individual cook from monitoring trips would be kept. In the rare case that cooks need to be replaced, the same process is followed.

Associated benefits and trade-offs

This has led to relatively low cost per beneficiary, generated over 2,600 jobs, and resulted in the delivery of freshly cooked meals to students. This has also reduced speculation by parents about the quality of the food as the cooks are members of the immediate community and thus less likely to feed the community's children a poor quality meal. The women all have bank accounts and have the ability to control their own finances. Because the cooks are serving children from their own community, they often select more expensive (higher quality) produce than would otherwise be used. They also take pride in the meals they serve and prepare food "of the same quality they would serve at home". It's important that service provision is carefully monitored to ensure that the quality and quantity of meals is adequate, and that the per child allocations are well tuned to market price fluctuations.

Monitoring and evaluation

The state-wide per meal price is currently set at N30, raised from an initial allocation of N20 after food price increases. The Programme staff recognise that many of the prices for basic ingredients in the menu have doubled, tripled, or even in some cases more than quadrupled since the inception of the programme. However, due to budget constraints the cost per meal allocation was not linked to the rapid price increases. The programme, due to budget constraints and a priority to scale up, has not been able to evaluate the income impact on participating cooks. There is some concern in this regards as most of the cooks do not keep records of their expenses and when asked to break down their daily costs account for more costs than they are paid for their services. It is worth noting that if cooks were paid based on an index of commodity prices, information on this could be provided by the Osun State Agricultural Development Programme, which collects commodity prices from 21 markets across the state. This information could help the Programme appropriately price meals and ensure cooks' payments are sufficient to cover their procurements, transport, and labour.

Discussion and limitations

This case study, though mainly descriptive in nature, highlights several important findings with regards to HGSF implementation in Osun State. Firstly, the design of the food procurement model in the Osun State HGSF programme involves caterers hired by the programme who are provided a fixed budget for food procurement, preparation and distribution to the school children. This approach is very similar to that seen in the Ghana Home Grown School Feeding Programme, for example. Moreover, as with the HGSF programme in Ghana, in Osun State there are to date no HGSF programme design components that link explicitly schools to farmers. In the Osun case, though, we have seen that there is some evidence suggesting that the link to smallholder farmers through the market exists for a few of the commodities in the food basket (e.g. for eggs and fresh vegetables).

Trade-offs in decentralised procurement and preparation

The decentralised procurement model where cooks procure the food every two weeks, for approximately 50 children per cook, also raises important trade-offs in terms of smallholder participation. Though a detailed analysis of these trade-offs is beyond the scope of this work, it is important to highlight some of the main considerations involved.¹⁰ The decentralised procurement procedure in Osun has clearly allowed for improved governance of the financial flows to the lowest level, however critically for agriculture it has also limited the size of the size and frequency of the food purchases on the market. In addition, smallholder farmers facing post-harvest management constraints, including a lack of adequate storage for example, are likely only able to respond to the demand at harvest time, thus reducing the potential benefits resulting from the stable demand throughout the year.

This particular issue has been tackled in other countries implementing HGSF by, on the one hand, strengthening the transparency and accountability of the financial flows, and on the other developing adequate procurement systems that are geared to generate sizeable aggregate demand and support smallholder participation. Developing explicitly these two elements of the HGSF system has vielded encouraging results, and experiences in Brazil and Chile on this issue can provide some very useful lessons for the OSHGSFHP. In Chile, for example, more formal involvement of the private sector through competitive and transparent bidding processes has led to considerable savings in terms of efficiency without compromising the quality of service (Catalan et al., 2009). As the tenders issued by the Government for the school feeding service provision also allow catering companies to submit bids to cover from one to twelve districts, this has had benefits in terms of economies of scale and demand aggregation. In addition, by developing the systems necessary to outsource the service provision, the Government of Chile could then focus on strengthening its role in setting implementation standards and in monitoring the service delivery (Martinez, 2010). Similarly in Brazil, food is also procured at the equivalent of the district level (the Municipality). In addition, by law 30 percent of the food has to be sourced from smallholders¹¹ within the district itself (Peixinho, 2010). In both countries, a formal registration of suppliers, including smallholder producers, was a key step in strengthening both the procurement process and transparency of the system. Clearly though, the legal frameworks, checks and balances and other features necessary for these innovations to work were developed over at least a decade as the result of an explicit strategy aimed at making the school feeding programme an intervention that could benefit different target groups across the HGSF supply chain. The current tension between the accountability dimension of the benefits and that of the potential benefits to smallholder agriculture in Osun State will require more detailed analysis in the future.

¹⁰ See (Sumberg and Sabates-Wheeler, 2010) for an analysis of some of the trade-offs associated with smallholder farming and HGSF procurement models.

¹¹ The municipality maintains a list of registered smallholders that can participate in the public procurement process.

Benefits from strong community level engagement

Several important differences between the Osun State procurement model and the Ghana model are also apparent and merit further discussion. In Osun State, the cooks are selected by a participative community driven process that has likely strengthened the community ownership and accountability of the programme as a whole. In turn, there are indications that this has reduced the risk of cooks compromising on the quality of the food provided to the children to increase their profits from the catering activity, a key challenge currently faced by the HGSF programme in Ghana (USDA, 2009). In addition, the OSHGSFHP, though it targets only the early primary school grades, is universal in terms of school coverage. Therefore, as a programme it is not subject to the common problem of politicisation in terms of school selection. The demand for food from the OSHGSFHP is also potentially relevant throughout the State: as long as a primary school exists, there will be an opportunity, however small or large, to link the school feeding programme with smallholder production from within the community. This provides an opportunity for more systematic planning, and research, on the viability of establishing or strengthening this link throughout Osun State. The size of this additional demand on the market from the school feeding activity however is still not clear and this issue requires further analysis.

The findings presented in the case study highlight another issue that is particularly relevant in the decentralised procurement model, the issue of ensuring that the food purchased by the cooks is of adequate quality and quantity. As nutritional standards and guidelines for the OSHGSFHP have to date been limited to general menu and ration quantity specification, there is at present a clear opportunity for capacity building activities aimed at improving service provision, quality control and diet diversification.

Key lessons in programme management

Governance is clearly one of the OSHGSFHP's strengths. The State Programme Officer is heavily involved in every component of the programme. Inventories of office equipment are posted on every wall in the Secretariat ensuring that equipment does not go missing. The finances are cross-checked and audited at multiple levels. The programme staff appear to be very motivated and actively participate in the management activities, often speaking freely and animatedly about the programme's structure and success. As outlined on the preceding sections, M&E activities are undertaken by different stakeholder groups across State government institutions and civil society, ensuring that the programme does not deviate from its original purpose. Structures have been established at the school level, LGA level, and State level to oversee the success of the programme and intervene when necessary. The Steering Committee and the Monitoring Committee provide the highest level of oversight and involve participants from a variety of government offices, relevant agencies and selected communities. The general impression is that this system of checks and balances has not only improved the transparency and accountability of the programme as a whole, but also improved cost efficiency by responding to the specific challenge of corruption and leakage.

Political support vs. politicThe high level of political support and public attention given to the programme has helped to insulate the OSHGSFHP from mismanagement,¹² and also provided a good platform for advocacy at community level and LGA level, across state ministries and agencies, and Federally. To ensure strong political support across all tiers of Osun State government it was critical to have paramount support from the Governor, this ensured that the Deputy Governor and the State Secretary for Government (SSG) lent their support to the programme, both personally and politically. Support from the Commissioner of

¹² It is important to note here that political buy-in into the programme and politicisation of the programme are two separate issues. The first issue, as we have seen in the case of Osun can be used to leverage financial, technical and other resources, as well as for improved advocacy at all levels of society. The second issue, though obviously linked to the first has very different consequences, and has been associated with a lengthy catalogue of problems throughout the history of school feeding. A detailed analysis of the political economy of why school feeding works and why it doesn't work is beyond the scope of this paper and is another important area of future research.

Education and the Chairman of the State Universal Basic Education Board (SUBEB) further strengthened government State government ownership.

The OSHGSFHP structure has enabled effective cross-sectoral coordination, as shown by the complementary deworming programme, for example: tablets are provided by the Ministry of Health and the Ministry of Education participates in monitoring and evaluation. The Ministry of Agriculture, through OSSADEP, while not yet formally involved, is reorienting itself in order to provide improved services to smallholder farmers including possible market linkages through the school feeding activities.

Challenges in implementation remain

The capacity of the State to fund the programme is limited; the current budget is a strain on the finances of a State that receives a relatively small portion of the Federal allocations. It is clear that funds to scale-up the programme to cover all primary students do not currently exist. Even at the current level of commitment, funding for monitoring and evaluation is not adequate and as a result the monitoring of the programme is not as rigorous as it could be to ensure quality service provision and identify structural weaknesses. Monitoring is primarily qualitative to ensure the cooks are providing a quality product, but key indicators are not currently collected to demonstrate the programme's success in achieving its educational objectives. No baseline assessment was undertaken at the programme's inception.

Limitations

This qualitative study involved limited exposure to programme sites in the field and the results of this analysis are therefore mainly descriptive in nature. The field visits mostly covered urban markets and schools so this case study is limited in its ability to make strong conclusions on the programme's operations in more rural schools. In addition, the case study team was not able to access as much data as it would have liked. This is for two reasons: first, data collection has not been a focus of the programme and therefore much of the data that would be useful in analysing the programme's impact was not collected at baseline and in follow-up monitoring; and second the data that did exist, particularly from the Ministry of Education, was requested but not received, possibly because the data is collected and maintained at a sub-state level and not routinely aggregated. The one exception was the commodity pricing data from the Osun State Agricultural Development Programme which has been collected and aggregated for a number of years.

Conclusions

In 2004, the Federal Government of Nigeria initiated pilot HGSF programmes in thirteen states. To date, the OSHGSFHP is the only one to continue and represents a model of best practice amongst other school feeding initiatives in Nigeria. Its endurance is in itself a credit to a programme that has continued to provide beneficial services to over a hundred and thirty thousand school children in Osun State.

This case study has begun to identify some of the benefits of the OSHGSFHP as well as a number of critical issues that require careful analysis and further study. It is important to stress that there is little or no empirical evidence on the impact of the OSHGSFHP in the published literature. This is not surprising as to date no impact evaluations have been undertaken on the programme. However, emerging, more programmatic type evidence on the benefits of the OSHGSFHP as documented in this analysis includes improved school participation and learning for school children receiving the school meals. The OSHGSFHP has provided employment to over two thousand community based women cooks. There are also indications that some small scale farmers in Osun State may have benefitted from the demand from the school feeding programme, particularly for the provision of eggs and fresh vegetables.

An innovative system of checks and balances developed over the years has ensured that the governance of the OSHGSFHP has become a model of good practice within the country and the region. The OSHGSFHP has not only benefitted from the inspiring leadership of the programme; the engagement in the programme monitoring from different stakeholders at many levels has provided a strong platform for improved transparency and accountability. However, this analysis found very little quantitative data on the school feeding outcomes and processes, underscoring the need for more robust data collection, analysis and reporting as part of the programme monitoring activities. The lack of strong empirical evidence on the impact of the OSHGSFHP highlights the pressing requirement for more systematic and rigorous evaluations to be undertaken. This is particularly important as the OSHGSFHP is planning to scale-up its coverage to reach all primary school children in the state.

Direct linkage between farmers and cooks can in principle provide multiple benefits from the agriculture and food security perspective. In practice though there are a number of constraints and trade-offs that will require careful analysis before they can be effectively addressed by the OSHGSFHP. One of the very explicit trade-offs in the OSHGSFHP programme design hinges on the decentralised food procurement model. On the one hand, the current decentralised procurement allows for improved transparency and accountability; on the other it affects the quality, quantity and frequency of the food procurement which in turn limits the opportunities for smallholder farmers' engagement in the sourcing process. This trade-off has been tackled in other countries with different degrees of success, and it is important that in the future the OSHGSFHP can incorporate the lessons from these experiences.

Way forward

This case study is the first step in the systematic planning of a set of support activities in support to the OSHGSFHP. The findings from this analysis are being used to inform the development of an Osun State technical assistance plan aimed at strengthening the OSHGSFHP programme design, management and implementation. Technical assistance activities identified by this multi-sectoral, participative process include:

- Developing programme framework and operator's manual of the programme for key stakeholders at various levels.
- Strengthening the nutrition dimension of the programme could involve both the development of more detailed guidance in terms of nutritional content of the different

foods in the school feeding ration and also developing sensitisation material aimed at improving nutrition practices with the community.

- Capacity building for programme stakeholders and retraining for programme operators with a focus on school and community-level ownership.
- Increased mobility of programme staff (e.g. vehicles) to enhance monitoring and evaluation activities.
- Integrating the school feeding activities within a comprehensive package of school health and nutrition interventions, including deworming for example, can be a cost-effective strategy to address educational inequalities and support positive educational outcomes.
- Design and implementation of an impact evaluation of the OSHGSFHP.
- Learning visits to countries where HGSF good practices have been identified.
- Dissemination of good practices from the OSHGSFHP to other states in Nigeria and other countries interested in HGSF.

In order to maintain the momentum on the ground whilst the longer term plan is being developed, some short-term support actions, including learning visits and other knowledge exchange activities, have already been underway.

References

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.

Catalan, J., R. Epstein, M. Guajardo, D. Yung, L. Henriquez, C. Martinez, and G. Weintraub. 2009. "No such thing as free lunch?" ORMS.

Devereux, S. 2010. "Home-Grown School Feeding Case Study Methodology." IDS.

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

Federal Ministry of Education, Nigeria. 2006. National School Health Policy.

Federal Ministry of Education, Nigeria. 2007. National Guidelines for School Meal Planning and Implementation.

Hinchcliffe, K. 2002. "Public Expenditures on Education in Nigeria: Issues, Estimates and Some Implications." Washington, DC: World Bank.

Martinez, C. 2010. "The Chilean School Feeding Targeting Model." Presentation delivered at the Global Child Nutrition Forum, Accra, June 2010.

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

Peixinho, A. 2010. "The Brazilian School Feeding Programme." Presentation delivered at the Global Child Nutrition Forum, Accra, June 2010.

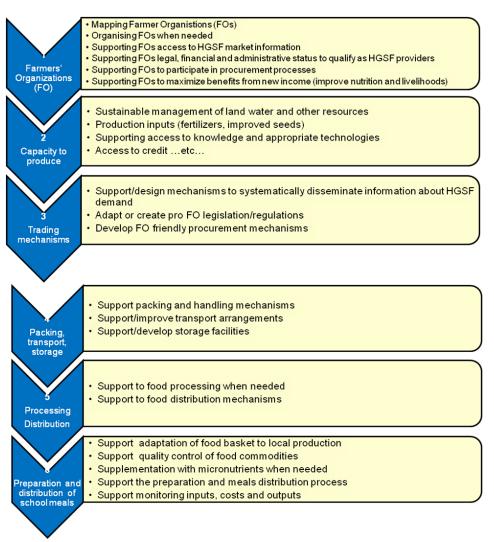
Shaad, B., and N. Jaisinghani. 2009. "An Assessment of Home Grown School Feeding in Nigeria."

Smith, J. 2010. "Mapping School Health and Food Security Indicators in Nigeria: Review and collation of existing data to inform school-based health programmes. London: PCD.

Sumberg, J., and R. Sabates-Wheeler. 2010. "Linking Agricultural Development to School Feeding." IDS.

USDA. 2009. "Assessment of Local Production for School Feeding in Ghana."

Annex 1: Key activities within stylised HGSF supply chain



Annex 2: Review of data sources for Nigeria¹³

Important sources of demographic data in Nigeria include the **Nigeria Population Census 2006**, and the **Gridded Population of the World** (GPW) project which extrapolates data from the Nigeria Population Census 1991. The **2008 Nigerian Demographic and Health Survey** (2008 NDHS) is also an important resource for information on demographics and health in Nigeria.

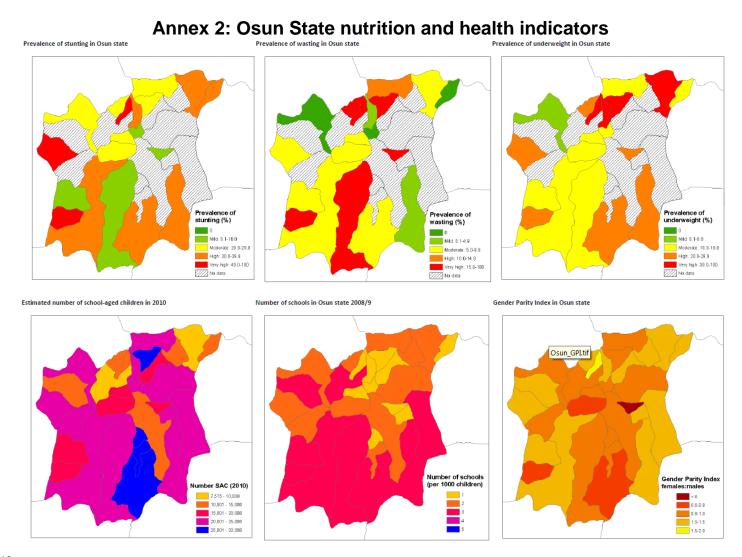
The FMOE recently conducted the **2009** *Annual School Census* (*ASC*), but data is not yet available for inclusion. The most recent school census for which state-level data is available is the **2004-5** *ASC*, published in 2006. These data include enrolment statistics, geographical distribution of schools, and gender and pupil teacher ratios summarised by state. Summary statistics at the LGA level should be available through the Nigerian National Bureau of Statistics (NBS) or from state Departments of Planning, Research and Statistics, but may require official letters of introduction/intent or a commitment to working in the given state.

The **2001-3 Nigerian Food Consumption and Nutrition Survey** (NFCNS) conducted by IITA collected data on food intake, nutritional status, and food security in Nigeria, while the

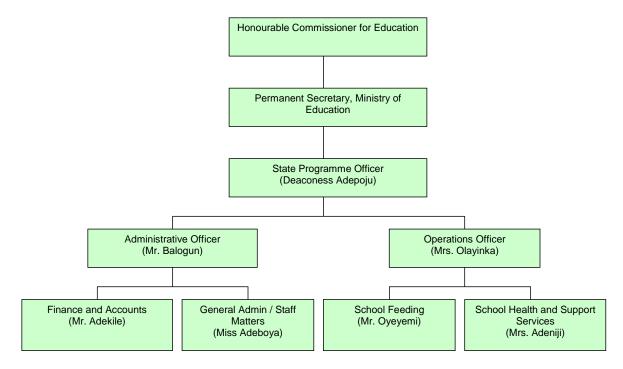
¹³ From Smith, 2010.

2008 NDHS collected anthropometric data for children under 5 years of age and reported intake of vitamin A and deworming treatment. Sources of nutritional data yet to be obtained include: the **Multiple Indicator Cluster Survey** (MICS), which is a household survey programme developed by UNICEF, and LGA or point level estimates of anthropometric data and additional biochemical indicators from the NFCNS (*request in process*). MICS data should be available from the NBS and UNICEF.

The main source of agricultural statistics in Nigeria is the **NBS**, which conducts regular surveys of area planted, production, and consumption of different crops. Most published data is only available at the state level, but research organisations can request more detailed data from the NBS. Research organisations, including **IITA** and **IFPRI**, use data from NBS and supplement it with independent studies including the **2001-3 NFCNS**. IFPRI is supporting the FMOA on a USAID funded project to set up a statistical analysis and knowledge support system, to pull together data. **Famine Early Warnings** (FEWS) also collates and reports current information on market trends and livelihoods. Other independent surveys include the **Core Welfare Indicators Questionnaire** (CWIQ), a qualitative survey that has relevance to food security, and **MICS**.



Source: Smith, 2010.



Annex 3: OSHGSFHP governance structure

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