



Republic of Botswana



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The Botswana School Feeding Programme *A Case Study*

FOREWORD

Botswana's Feeding Programme is one of the world's oldest programmes. It started as an initiative by the first President of Botswana, His Excellency Sir Seretse Khama following the 1965 famine. On realizing that Botswana was a Low Income Country and most of the children walked long distances from home and lands to schools without food, he pleaded with the UN Family to assist with feeding these vulnerable groups in the society. World Food Programme then assisted Botswana government by providing food commodities to both schools and health facilities from April 1966 to December 1997. In 1998, government of Botswana took over the programme and incorporated local foods into the school menu.

The programme covered and still covers vulnerable groups in the society and school going children. It was formed specifically to address the problem of hunger amongst school going children. Our aims have remained the same since the programme's inception in 1966; and are meant to:

1. Increase school enrolment, attendance and retention
2. Reduce hunger and malnutrition
3. Boost domestic food production

The Ministry of Local Government and Rural Development has the oversight responsibility for the Botswana School Feeding Programme (BSFP) and it works in collaboration with partners such as Ministry of Finance and Development Planning, Ministry of Education and Skills Development, Ministry of Health, Ministry of Agriculture, Partnership for Child Development (PCD) / New Partnership for African Development (NEPAD) etc. The BSFP is envisaged to become one of the core pillars of poverty reduction in urban, remote and rural communities of the country. This will enhance food security at the household

level to meet the United Nations (UN) MDG goal of eradicating extreme poverty and hunger.

BSFP is currently providing school-feeding in 755 schools to 331 000 learners country wide. Although a school-feeding program already exists, it only covers primary school children. The Botswana government, through my Ministry, has extended coverage to pre-school children as it was the case during the World Food Programme (WFP) era.

The government also plans to implement other interventions to expand school-feeding and deal with child malnutrition as well as fight poverty. One of these interventions is the Home Grown School Feeding (HGSF) which will encourage farmers to increase food production since the school feeding programme will provide a steady market.

The authors of this case study have widely consulted with many individuals and organisations throughout the country to get a clear picture on the situation of school feeding and have come up with lessons learnt and recommendations on how the programme can be improved.

In conclusion, let me profoundly thank our partners from New Partnership for African Development (NEPAD) and the Partnership for Child Development (PCD) for their countless effort, knowledge and experiences of HGSF and also for having helped shape and support the agenda on home-grown school feeding in Botswana.



Honourable Peter L. Siele
Minister of Local Government and Rural Development.
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Botswana National Primary School Feeding Programme: A Case Study

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List of Abbreviations

ARV	Antiretroviral Drugs
BAMB	Botswana Agricultural Marketing Board
BIDPA	Botswana Institute for Development Policy Analysis
BMC	Botswana Meat Commission
CKGR	Central Kalahari Game Reserve
CSO	Central Statistics Office
DDC	District Development Committee
DLGFPS	Department of Local Government Finance and Procurement Services
DFRS	Division of Food Relief Services
DPS	Deputy Permanent Secretary
FGDs	Focus Group Discussions
GDP	Gross Domestic Product
HGSF	Home Grown School Feeding
IMDC	Inter-Ministerial Development Committee
ISPAAD	Integrated Support Programme for Arable Agricultural Development
MDGs	Millennium Development Goals
MFDP	Ministry of Finance and Development Planning
MLG	Ministry of Local Government
MoA	Ministry of Agriculture
MoESD	Ministry of Education Skills and Development
MoH	Ministry of Health
NEPAD	New Partnership for Africa's Development
NGO	Non Governmental Organization
PPADB	Public Procurement and Asset Disposal Board
PCD	Partnership for Child Development
PTA	Parents Teacher Association
RDC	Rural Development Committee
SMME	Small Medium and Micro Enterprises
UHT	Ultra High Temperatures
UK	United Kingdom
UN	United Nations
USA	United States of America
WFP	World Food Programme
VDC	Village Development Committees

Executive Summary

Introduction

The recent food, fuel and financial crisis has highlighted the importance of introducing fiscal policies that promote coping mechanisms to address problems associated with global economic shocks. School Feeding Programmes (SFPs) are seen to be important both as a safety net for children living in poverty and food insecurity, and as part of national education policies and plans. Today, every country for which information is available, is seeking to provide food in some way and at some point to its school children.

Emerging evidence suggests that countries that have made a successful transition from externally supported to nationally supported programmes have explored linking school feeding to local agriculture, a programme so called '*Home Grown School Feeding (HGSF)*'. Strategic leadership from the New Partnership for Africa's Development (NEPAD) guided Governments in sub-Saharan Africa to include HGSF as a key intervention within the Pillar three of the Comprehensive Africa Agriculture Development Programme (CAADP). Many countries including Cote d'Ivoire, Ghana, Kenya, Mali and Nigeria are already implementing national school feeding programmes sourced with local agriculture production. Many more countries are now requesting for technical assistance in the design and implementation of these programmes. Since 2008, the World Bank Group, World Food Programme and Partnership for Child Development (PCD) have been working together to support countries in the transition and help governments develop and implement cost effective, sustainable national SFPs. One such support is to strengthen the evidence in the cost and benefits of HGSF. This is done through case studies.

In 2011, PCD commissioned a study to be done by the Botswana Institute for Development of Policy Analysis (BIDPA). The aims of the study were: (a) to provide an overview of the Botswana school feeding programme (b) to provide a profile of intervention nuggets across the HGSF supply chain that led to the success of the Botswana SFP.

Methodology

The case study was conducted following the overall HGSF case study approach developed by PCD and Institute of Development Studies (Devereaux, 2010), to enable comparability with other countries. The analytical framework of the study followed the five set of standards namely: design and implementation, policy frameworks, institutional capacity and coordination, financial capacity (funding) and community participation (*'Rethinking School Feeding, Bundy et al, 2009*).

The study methods were a combination of both secondary and primary data collection methods. Secondary data was inclusive of a comprehensive literature review on SFP globally, regionally and locally. Several government reports, policy documents and proposals were reviewed on SFPs, education, agriculture, health, environment and food security and nutrition.

Primary data used qualitative methods which included key informant interviews and Focus Group Discussions (FGDs) methods with a range of stakeholders. A detailed interview guide

was used for the country profile analysis. A total of 18 key informants and 10 FGDs were carried out. Visits were also made to the four primary schools selected, namely; St Gabriel and Makolojane, both urban schools in Serowe (Central District), and Kgaphamadi and D'kar primary schools in Ghanzi District. D'kar PS is in D'kar village, a remote area in Ghanzi district. Site visits were also made to storage facilities. The study participants included teachers, students, parents and key informants in relevant government offices. Initial findings were validated at a workshop including officers from the Ministry of Local Government, Ministry of Agriculture and Ministry of Health. Thereafter, a national workshop was held in Gaborone to validate these results.

Findings

The study findings showed that Botswana has successfully implemented school feeding continuously for more than four decades. The programme was considered to have successfully transitioned from WFP support to Government support from 1998. School Feeding in Botswana is managed by the Ministry of Local Government (MLG) under the Department of Local Government's Finance and Procurement Services (DLGFPS). The objectives of the school feeding programme are to prevent children from feeling hungry during school days, provide children with a balanced diet, keep children in school the whole day, and to improve school attendance.

The Government of Botswana implements a universal school feeding programme where all children attending government owned public primary schools are beneficiaries of the School Feeding Programme. On average, one meal per day is provided to over 330,000 children. Through the Remote area Dweller Programme, a second meal is provided to children in boarding schools. The findings also showed that most children appreciated the programme and reported that it enhances their concentration levels in class. However, concerns were raised about the quality of the menu by some children (who did not like some of the foods) and also participants of the national stakeholder workshop (on nutritional quality). An overwhelming majority of participants visited in Districts as well as pupils reiterated the need to include locally produced foods in the menu.

The MLG primarily uses a centralised procurement model to buy dry and non-perishable food supplies in bulk and delivers them to districts. In districts, the food supplies are managed by the District Administration's District Commissioners who supervise the programme through the district based Division of Food Relief Services (DFRS). At schools, the Head of the Middle age Stream supervises the programme.

Decentralised procurement is a much smaller component and is managed by the District Councils, who purchase fresh food and perishable items. Money is disbursed from the DLGFPS to the Councils to procure such food items as bread and bread spreads from local suppliers but through a tender system. However, some funds are also transferred from the Council to the school heads to purchase fresh agricultural produce from the local villages. Inclusion of fresh produce in SFP was introduced in 2009, when the Government through a Presidential Directive

in 2008 introduced the '*Letlhafula Initiative*' to promote the purchase of fresh food supplies for SFP.

A major concern in both procurement models is the late delivery of commodities. In addition, some of the food commodities do not comply with the set quality standards. The private sector's involvement in the procurement system is limited and does not have adequate capacity to support the school feeding programme. Procurement from local farmers is said to be a challenge because of unreliability of the local production. As a result, government companies (parastatals) are playing an important role in the procurement of major school feeding supplies such as cereals, legumes and beef.

The DLGFPS relies on suppliers to transport commodities from source to receiving depots but provides transport to distribute food commodities from the receiving depots to district depots and to individual schools. Since transport is not always available, the smooth delivery of food to depots is affected. Again, the role of the private sector in transportation is limited as it only applies to the transport of the few commodities they provide. This implies that the private sector is crowded out by the parastatals that transport the centrally procured commodities in bulk.

In terms of storage, concerns were raised about the poor warehouse conditions in some stores, resulting in food spoilage, and in other districts the warehouses were reported to be very old. It was recommended that the government should consider the use of private storage facilities. Currently, the role of the private sector in storage of food supplies is not known.

Regarding food production and smallholder linkages, it was reported that the government of Botswana has committed to enhance production levels to achieve household food security by supporting small scale farmers in rural areas through subsidised services, inputs, skills and the promotion of clustering through service centres. The Department of Agribusiness in the MOA registers agricultural cooperatives and associations and provides them with technical and logistical support but not financial. There is a limited market for small holder farmers through the school feeding programme. However, only individual farmers as opposed to farmer groups participate in the school feeding programme supply chain by selling fresh farm produce to schools.

Botswana does not have a specific policy for SFP. However, the MLG uses the '*Guidelines on Management of Primary School Feeding Programme*.' The need for the country to formulate its own country specific school feeding policy was highlighted at the national stakeholders' workshop. Other policies available in Botswana that are linked to school feeding include: Food relief programme under the National Food Strategy, social development policies (social protection programmes and sustainable livelihood approach strategy), agricultural production policy and Education policy.

Different role players are involved in the design and implementation of SFP in Botswana. These include: MLG as the implementing Ministry; Ministry of Health (MOH) who check for the quality

of processed food through the National Food Testing Laboratory, the Nutrition Welfare Division in MOH who provide advice about the nutritional quality of the menu; Ministry of Education as the supervisor of the programme through the school principals; and the MOA's Plant Protection Testing Laboratory who monitors the quality of grains and pulses. Consultations are also done with the Department of Primary Education in local District Councils who supervise the schools and the District Council's Department of Environmental Affairs who are charged with food safety.

In terms of institutional capacity and coordination, the Department of Local Government Finance and Procurement Services (DLGFPS) in MLG headquarters manages the SFP and has a core staff of five people, while another 550 staff are in regional and district depots and supervised by the District administration. The District Councils employ the hand stampers and cooks in the schools. One of the capacity gaps identified during the study is the lack of technical expertise in food management.

SFP is coordinated as one of several vulnerable group feeding and food security programmes implemented under the National food strategy and supervised by the Ministry of Finance and Development Planning. MLG then implements and coordinates the programme. The status of school feeding is thus reported to such committees as the District Drought Committee, the Botswana Vulnerability Assessment Committee, the IMDC and RDC at the President's office, all of which discuss several matters in addition to SFP. In general, SFP coordination is not as smooth as it should be because of different reporting lines and there is no national level coordination body specifically dealing with school feeding. The MOA contributed to developing *'the Guidelines for Procurement of Agricultural Products'* for SFP. However, there was a concern about the lack of appropriate consultation to ensure that all relevant stakeholders were fully informed about plans to link school feeding with the national Agriculture production.

Effective information management was reported to be an ongoing concern as there was a slow response to information and requests sent to the District Councils on the problems related to kitchen equipment. However, District Councils attributed such slow responses to the industrial strike that was going on during data collection exercise.

The monitoring of SFP mainly applies to checking whether supplies have been received at the depots and subsequently at the schools. For this, there is a systematic and regular monitoring system. There was no evidence of monitoring other aspects of the programme and particularly the outcomes. A major constraint in monitoring the implementation of SFP is the lack of adequate personnel and inadequate collaboration and participation of players involved. In addition, there is inadequate monitoring of the food that actually reaches the school child's plate.

The MLG is responsible for budgeting and the budget is prepared annually. The total budget for school feeding has been increasing over the years and for the 2012-2013 year is 295,141,548.64 Pula (US\$39,401,395.23). This budget includes the cost of food (including the

local purchases since 2008), hand stampers, supervisors, pallets, pest control, transport and fuel. The District Commissioner provides a recurrent budget that covers staff at district level and transportation costs. It was reported during the National stakeholder workshop that while government finances the entire school feeding budget without external support since 1998, this budget only meets about 80% of the requirements. It is not clear how the short fall impacts on the overall SFP or what coping mechanisms are used by implementers of SFP. It was also found that the budget that was used for procurement of local produce in 2011 cropping season was only 1% of the total budget of SF. This budget is too small to provide the small holder farmers with a meaningful market.

In terms of community participation, the case study revealed that community contributions have changed overtime. Currently, parents only pay pots fees to purchase utensils and items such as salt and detergents for cooking. The perceptions of the community regarding SFP are positive and SFP is seen to have contributed to the improvement of both enrolment rates and pass rates. The SFP has made an important contribution to employment at community level (hand stampers and cooks) and has a direct impact on improvement of food security and the reduction of poverty.

Conclusions and Recommendations

Botswana has successfully managed to operate a school feeding programme that provides one meal a day and reaches a total of 330,000 children in all government primary schools in the country. As a result casual observations and reporting from stakeholders indicate that there have been increases in school attendance, enrolment rates and also transition rates. The programme also ensures that children do not feel hungry during school days and most importantly contributes to the children's daily nutritional requirements.¹

Although Botswana experiences unfavourable climatic conditions for farming they have managed to produce some of the commodities for the SFP such as beef and sorghum. In recent years the local procurement of agricultural produce has gone some way in meeting the SFP's demand for food but also created a market, albeit seasonal, for the small holder farmers. The SFP has empowered school communities through the provision of employment. For a universally targeted programme in Africa, the Botswana programme has done well and offers useful lessons for other African countries.

On the whole, the children in schools and the parents visited showed appreciation for the programme. However, there is no school feeding policy to guide implementation. The case study uncovered a number of areas that require further study. One of these is the benefits of the SFP on nutritional status of children. There has been no impact evaluation and therefore some of the outcomes implied in the objectives could not be verified. There was very little quantitative data found on the school feeding outcomes and processes during the case study analysis,

¹ The meal is aimed at providing about a third of the recommended daily nutrient intakes for energy, protein and fat.

emphasising the need for more robust data collection, analysis and reporting as part of the programme monitoring activities.

Going Forward

The government of Botswana has shown interest to improve the primary school feeding programme delivery. The following aspects are highlighted as needing attention;

- The development of a national policy on school feeding to guide SFP implementation
- Improvement in the nutritional quality of the menu and inclusion of more local food.
- Explore different procuring options and modalities to allow the SFP to benefit more small holder farmers and other private sector involvement
- Improve coordination of SFP
- Capacity building of all staff working at the various levels of SFP implementation is essential
- Improve the information management systems at all levels in order to support efficient programme management.
- Integrate school feeding activities within other school health and nutrition interventions for a more cost effective strategy to support positive educational and nutrition outcomes

FACT SHEET: SCHOOL FEEDING IN BOTSWANA²

DESCRIPTION	WFP →GOVERNMENT TRANSITION PERIOD	CURRENT PROGRAMME 2010/2011
Start Date	1993-1997 (Programme started 1966 with WFP assistance)	1998 (Programme initially started in 1966 with WFP support).
Lead Institution	WFP AND Ministry of Local Government	Ministry of Local Government
Objectives	-To ensure that primary school children are best able to take full opportunity of the education offered whilst relieving any possible short term hunger; -To assist authorities to maintain the high net enrolment and average daily attendance rate in primary schooling; -To assist the Government to further institutionalize with its own resources the national primary school feeding programme that is an integral component of its household food security strategy. Bornay et al. (1993)	-To prevent children from feeling hungry during school days -To provide children with a balanced diet -To keep children in the school the whole day -To improve school attendance
Targeting	All Children in primary schools grade 1 -7	Universal targeting of all children aged 5 to 14 years in government owned public primary schools grade 1-7
Coverage	N/A	330,000 children reached through 750 schools
Implementation	Centralised	Centralised for all dry and non-perishable food items. Additional food items such as bread, bread spreads, and more recently fresh produce decentralised to local authorities with different arrangements
Modality	Corn soya milk(CSM), vegetable oil, Sorghum, Samp and beans	One mid-morning meal provided daily to all children. Composed of sorghum porridge* 3 times a week served with beans or canned meat stew (once a week). Bread and milk , and samp(maize) and bean, once a week each. *Sorghum meal supplied in urban areas, while sorghum grain is supplied in rural areas to allow for processing by local community.
Funding Source	WFP and Government (Ministry of Finance through MLG).	Central Government- Ministry of Finance through MLG. The budgets are prepared by the Food Relief Services Division of the Department of Local Government Finance and Procurement Services. The budget line for primary school feeding has been part of the yearly government budget since fiscal year 1995/96.
Annual budget	Gradual and decreased funding from WFP(90% in 1993 to 30% in 1997) while Government funding increases over the period(10% in 1993 to 100% in 1998). Total government budget in 1995/96 was US\$18,778998	The annual budget for primary school feeding in Botswana for 2012-2013 is 295,141,548.64 pula (US\$39,401,395.23). ³

² Data is drawn from the Botswana Transition Report (Isler Annmarie, 2012).

³ The budget for the primary school feeding programme is prepared annually by DLGFPS: Food Relief Services Division. The budget includes the total cost of food (including local food since 2008), hand stampers, supervisors, pallets, pest control, transport and fuel.

1.0 Introduction

1.1 Background

Child development requires a life-cycle approach to intervention, starting *in utero* and continuing throughout childhood. This implies a sequence of programmes to promote maternal and child health, followed by early child development programmes to ensure good health, nutrition, and stimulation in preparation for quality education and health throughout the school-age and beyond. School health and nutrition programmes are a key part of this continuum, providing the foundation for physical, cognitive and educational development that will allow children to reach their full and equal potential.

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. Today, perhaps for the first time in history, every country for which we have information is seeking to provide food, in some way and at some scale, to its schoolchildren. However, where the need is greatest, in terms of hunger, poverty and poor social indicators, the programmes tend to be the smallest. Past experience shows that countries do not seek to exit from providing food to their schoolchildren, but rather to transition from externally supported projects to nationally owned programmes. Since early 2008, the World Bank Group, the World Food Programme (WFP) and the Partnership for Child Development (PCD) have been working together to support countries in this transition and to help governments develop and implement cost effective, sustainable national school feeding programmes.

Emerging evidence also suggests that countries that have made a successful transition have explored linking school feeding to local agricultural development, so called “Home Grown School Feeding”. The central aim of home grown school feeding (HGSF) is to ensure sufficient nutrition for school-going children, and this is achieved by supplementing their diet with a complete meal that is satisfactory in energy, protein, vitamins and minerals (NEPAD, 2003). However, unlike in the traditional school feeding programmes, the initiative takes into account the involvement of local farmers. Here, locally produced food is used in the programme. The target would be on food produced for local markets, especially by low income families, and in that way help develop local food economies and food outlets. It is expected that using local produce for the program will raise the local economy, supply appropriate food for school children and, if correctly managed, will lay the foundation for the transfer of agricultural skills between generations. HGSF is thus an attempt, actively and explicitly, to link agricultural development with school feeding. It aims to deliver simultaneously on local economic growth and social protection or poverty reduction objectives (Dorward et al, 2006; Sabates-Wheeler et al, 2010).

Strategic leadership from the New Partnership for Africa’s Development (NEPAD) guided Governments in sub-Saharan Africa to include HGSF as a key intervention within the food security pillar of the Comprehensive Africa Agriculture Development Programme (CAADP) framework. Many countries, including Cote d’Ivoire, Ghana, Kenya, Mali and Nigeria, are

already implementing national school feeding programmes sourced with local agricultural production, and many more are now requesting technical assistance in the design and management of these programmes.

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.

Botswana has successfully implemented a school feeding program (SFP) continuously for more than four decades. Though initially included as part of the World Food Programme, the programme was fully taken over by the Botswana government by 1998 and can therefore be considered to have successfully transitioned from WFP support to Government support. The school feeding programme in Botswana is linked to its overall planning objectives of prosperity for all in its Vision 2016 document, the UN's Millennium Development Goals, the National Development Plan principle of social justice, social protection and other long term policy objectives such as poverty eradication. The programme targets all children in schools and is focused on elimination of hunger, achieving a balanced diet for all children and facilitating high and sustainable school attendance and enrolments (Republic of Botswana, 1993). The government has also initiated the local procurement of green crops during the first term of schools, which is also the cropping season. This aspect of the Botswana SFP bears similarity to the objectives of the Home Grown School Feeding (HGSF) initiative.

While the Botswana SFP does not have all the elements of the HGSF model, Botswana is a good example of a country that has transitioned from an externally funded school feeding programme (WFP support) to one that is now targeted at all children in government schools, and relies on government funding and implementation. The purpose of the case study carried out in Botswana was to describe how the national school feeding programme in Botswana is designed and outline the framework of the programme implementation using secondary sources, primary data from two study sites, and a national stakeholder workshop held in Gaborone to validate the data. It is expected that the case study will provide an opportunity for learning and knowledge exchange between countries in Southern Africa and especially those that are looking at implementing nationally owned HGSF programmes.

1.2 Objectives of the Study

The first aim of the study was to provide an overview of the Botswana school feeding programme. Specific objectives of this study were to document Botswana's:

- a) experience with school feeding and with the Home Grown School Feeding (HGSF) programmes;
- b) relevant experiences on multi-sectoral coordination and;
- c) Procurement arrangements for school feeding programmes.

The second aim of the study was to provide a profile of “intervention nuggets” across the HGSF supply chain that has led to the programme’s success in Botswana. Specific research objectives of this part of the case study were to:

- a) explore potential benefits of HGSF on local agriculture and to document evidence.
- b) explore potential benefits of HGSF on local communities and to document evidence.
- c) document any experience on inclusion of local foods in school feeding programmes.

1.3 Structure of the Report

This case study report begins by outlining the aims and objectives of the study followed by the methodological approach guiding the study. In order to put the study in context, the report provides a country profile covering information on the country’s population trends, socio-economic performance, educational as well as health indicators. A brief historical background on school feeding and the transition period (UN-WFP to government support) is given to provide insight on the evolution of the programme in Botswana. Further, an analysis is made based on five quality standards for sustainable school feeding, that include design and implementation, the policy framework guiding the school feeding program, institutional capacity and coordination system, financial capacity and community participation. Following the standards is a profile of intervention nuggets across the supply chain, some strengths and weaknesses of the programme, and finally a set of conclusions and proposed recommendations to strengthen the existing school feeding programme in Botswana.

2.0 Overview on School Feeding

2.1 Background

Education and health are vital aspects of any nation’s human capital investment. Early childhood education, specifically, is recognized as an integral part of basic education. However, there are millions of children who do not attend school in Africa, majority of whom experience malnutrition, stunted growth or experience short-term hunger, which greatly affects their ability to learn. School feeding programmes are one of the initiatives aimed at combating these challenges.

There is increasing evidence to support the educational benefits of school feeding. It helps increase school attendance as children are motivated not to skip school, and in this way are incorporated into the learning environment. This ultimately increases the amount of time a learner spends schooling, and in turn curbs issues such as teenage pregnancy and delinquency.

On the aspect of child development, school feeding helps improve a child’s cognition and educational achievement, as they are in a better position to learn and participate well

academically due to improved nutrition. With an improvement in one's educational stance, other issues like mortality rates are lowered, since it has been shown that for every extra year of schooling a young girl receives, there is a percentage decline in infant mortality (Psacharopoulos and Woodhall, 1985). The program also helps children feel valued and looked after, and as such be motivated, inspired and esteemed. School feeding is also beneficial in that it helps bring the community together. People are given the opportunity to participate in this initiative; through either the provision of agricultural produce for feeding, managing the food, or even preparation and distribution of it to the children. This ensures good relations between parents or the community at large and the school administration.

2.2 Objectives of School Feeding in Botswana

The objectives of school feeding in Botswana are consistent with the overall objectives of school feeding from the inception of the concept in the 1930s when emphasis was to address problems of malnutrition among children. School feeding started under the World Food Programme (WFP) in 1966 when the country attained independence. The main objective was to respond to problems of malnutrition and hunger after prolonged droughts during that decade. Overtime these objectives have been modified and currently, school feeding aims:

- To prevent children from feeling hungry during school days
- To provide children with a balanced diet
- To keep children in the school the whole day
- To improve school attendance

2.3 Historical Development and Transition of the Botswana School Feeding Programme⁴

2.3.1 Background

When Botswana got independence in 1966, it was one of the poorest in Sub-Saharan Africa faced with hunger and malnutrition. The SFP in Botswana commenced in 1966 as one of the coping strategies to address widespread problems of malnutrition among children and child bearing women arising, from a continuous five year drought period (Bornay, et.al, 1993). Botswana was also not self sufficient in food production and like other African countries Botswana started the SFP with the financial and implementation assistance of World Food Programme (WFP), a situation that prevailed until 1993 when the gradual process of WFP's withdrawal of resources and implementation assistance started. By this time, it was evident from the programme evaluation completed in 1991 and ongoing data collection that the number of school feeding beneficiaries had steadily increased and in 1993 there were 300,419 beneficiaries in 672 schools across the country (Bornay, 1993). In addition, in the late 1980's, Botswana had graduated to a middle income country following the discovery and mining of diamonds and other minerals that led to high economic growth, meaning that the government was no longer eligible for WFP support.

⁴ The reader is referred to a more comprehensive study on Botswana's transition to a national school feeding programme (WFP, 2012)

The period between 1993 and 1997 is considered as a transition period during which time, WFP's resources and implementation support was decreasing and government was increasing resources and taking more control over implementation (see Fig1 & 2). This was in line with WFP's 1994 Executive Board decision to phase out activities in all countries with a middle-income status. Plans were thus initiated to close operations in Botswana over the 5 year period and handed over in 1997. To ensure local ownership and accountability, the SFP was made part of the National Food Strategy which is coordinated by the Ministry of Finance and Economic Planning. Ministry of Local Government (MLG) was the main implementing ministry through the then Department of Food Resources. Annex 3 shows the administrative structure of SFP during the transition period. Other ministries involved were Ministry of Health and Ministry of Education.

2.3.2 Design and Implementation Changes

When the government took over the school feeding programme, MLG remained responsible for the operation, accounting and reporting of SFP in the department of Food Resources, with a Director as head. Some restructuring took place immediately following the takeover in 1998. The programme was moved to the District Administration department within MLG, with a Deputy Director as head. At this time there were several staff employed to work in the Food Resources department both at national level and at the districts. A second restructuring saw the department move back to local government administration to the Department of Finance and Procurement Services where it now exists as a department of Food Relief Services. After these changes the district officers were deployed under the District Commissioners; and hand stampers moved to district councils. Therefore, coordination of the programme became weak due to lack of a clear management structure. From a programme implementation perspective, it was revealed during stakeholder consultations that the SFP was never a smooth transition since the take-over by government and encountered several challenges many of which persist even today.

TRANSITION OF SCHOOL FEEDING FROM WORLD FOOD PROGRAMME TO BOTSWANA GOVERNMENT

The transition and main mile stones in Botswana are represented by the two figures below:

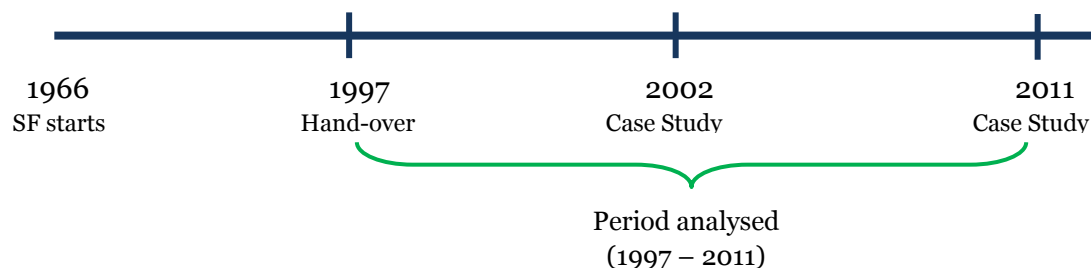


Figure 1: Transition of School Feeding from WFP to Botswana Government

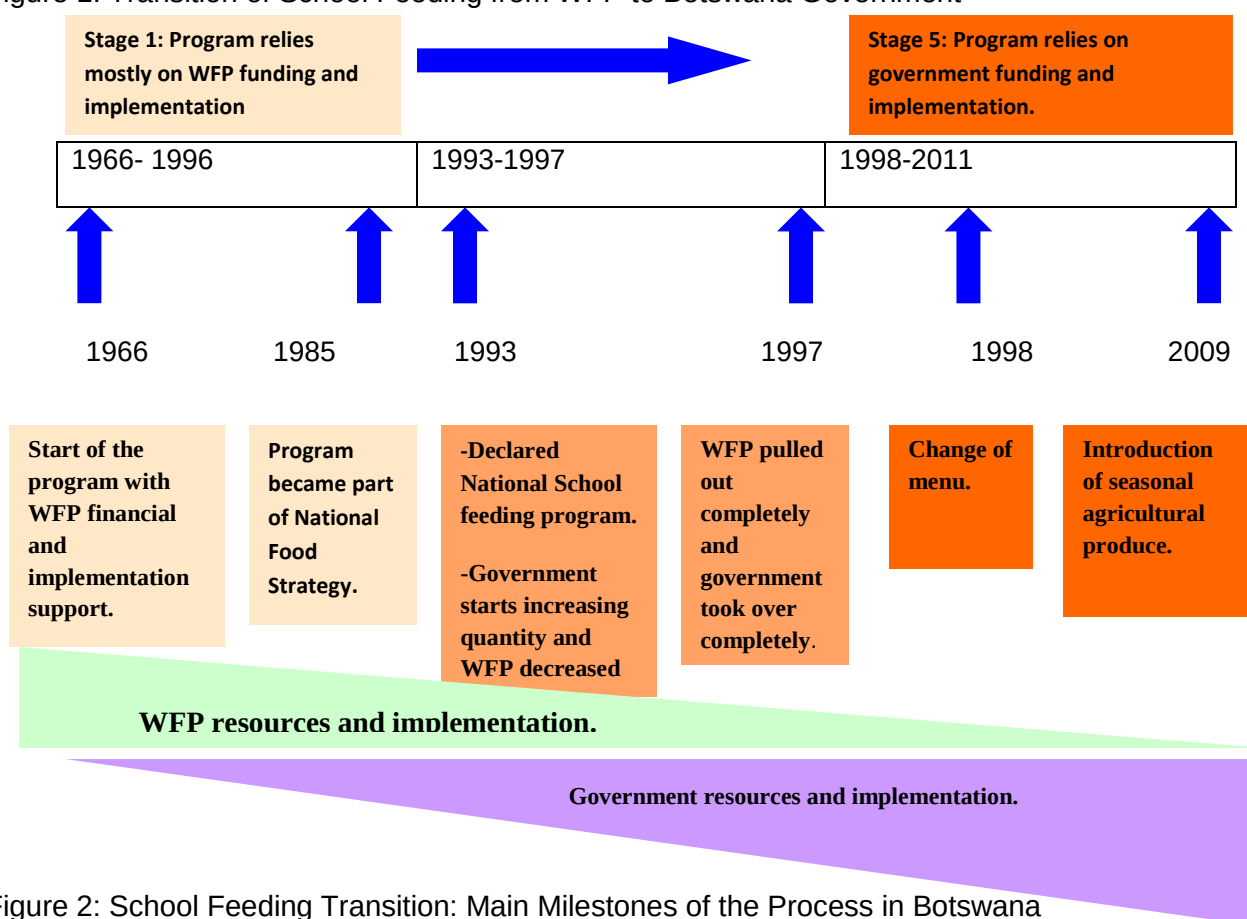


Figure 2: School Feeding Transition: Main Milestones of the Process in Botswana

2.3.3 Menu and Procurement Changes

At the time the school feeding programme started in Botswana with the assistance of WFP, most of the food was imported. The food basket from primary schools included the following foodstuffs: corn, soya milk (C.S.M), vegetable oil, dates, dried skim milk and later sorghum meal. When Government of Botswana took over in 1998, the menu was modified to include

beans and samp (course hominy). Sorghum grain was also introduced and supplied in rural areas to allow for local processing using hand stamping. The SFP was therefore providing food but also employment. Subsequent changes made to the menu were meant to improve on the nutritional content of the meal, improve the nutritional status of children, but also make the meal as close as possible to that provided in the secondary school, which was a full lunch menu (MLG Inter-Ministerial Taskforce, 2001). Thus, in 2003 bread and bread spreads were introduced and thereafter beef stew and UHT milk. These changes led to the current menu illustrated later in the report (Table 3). The current menu is thus much more diversified than that offered before and during the WFP transition and the majority of food commodities are procured locally, in the country, or within the region (i.e. milk). In more recent years (2008) government also introduced the purchase and inclusion of fresh produce in the menu during the cropping season, so that SFP was not just providing food and employment but also benefiting farmers by selling their produce to the primary schools. However, this component of the programme still needs to be developed. It was also noted during stakeholder consultations in the case study that people find the current menu high in carbohydrates and does not include fruits and vegetables.

In terms of procurement, although the government still maintains a predominantly centralized procurement system (for the bulk dry and non-perishable commodities), over the years the government has tried to include procurement at the district level and even at community level for things like bread and also the fresh garden produce such as watermelons and green mealies, thus providing economic opportunities at the local level.

2.3.4 Funding

From 1998, the government took over the full SFP budget. The budget was determined by MLG on establishing the enrolment figures from the department of education. From a budgetary point of view, the SFP can be said to have had a smooth transition in the sense that from 1998 to-date, it has been uninterrupted. However, due to financial and supplier constraints, it has been generally difficult for government to meet the full budget needed to supply all the required amounts of the commodities in SFP. Annex 4 illustrates the difference between amounts requested and amounts supplied between 2006 and 2009 to show that the budget allocated for school feeding may not be adequate.

2.3.5 WFP's Ex-post Evaluation

In 2002 WFP commissioned a study to analyze the phase-out strategy of the program. Some of the main conclusions were that: 1) external technical support should have been maintained after the financial phase-out; 2) having the financial capacity does not necessarily indicate the country's capacity to run the program; 3) long-term sustainability remains the main challenge. While the study helped to shed light on the WFP handover experience, and on the corresponding government takeover, it focused mainly on the operational side and did not include a comprehensive look at the overall policy environment or institutional set up. Further, it did not have a focus on documenting the process itself, but rather studied the results of the handover and tried to identify possible lessons learned or best practices. The case studies that

have now been commissioned in several countries, including Botswana, are much more comprehensive in looking at the operations but also the policy and institutional environment.

3.0 Case Study Methods

3.1 Conceptual Framework

The method and structure of the Botswana School Feeding case study was guided by the analysis jointly undertaken by the World Bank, WFP and PCD (*Rethinking School Feeding*, Bundy et al., 2009). The case study was conducted following the overall HGSF case study approach developed by PCD and the Institute of Development Studies (IDS) (Devereux, 2010) in order to maximize this country's comparability with others and lesson sharing. The analytical framework for the case study follows the set of standards developed in *Rethinking School Feeding* to examine school feeding programmes. These are generally known as 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. This approach builds on the key findings from past and ongoing HGSF experiences in different countries to identify a set of key elements 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 are policy frameworks, institutional capacity and coordination, funding, and community participation, which are all grouped under the "Enabling Environment". This conceptualization provided the overall framework for the case study, as shown schematically in Figure 3. The primary objective 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).

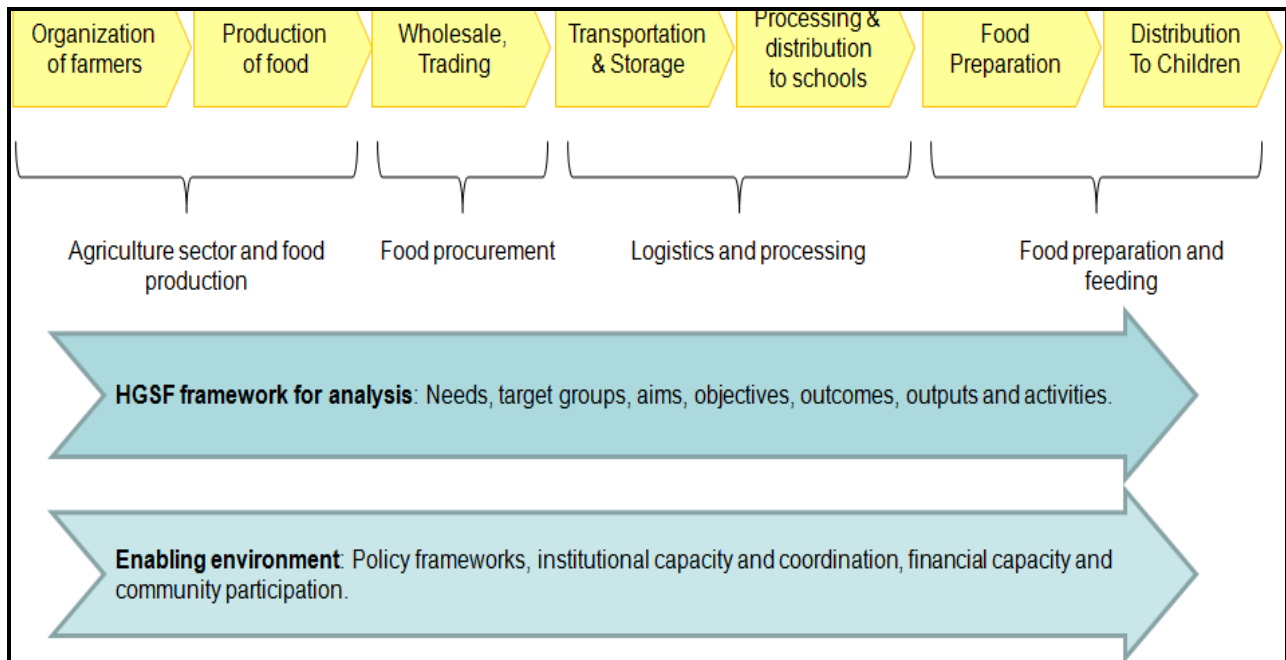


Figure 3: Analytical Framework for the Case Study, and Elements of the HGSP Supply Chain

Although in practice HGSP programmes can exhibit different approaches co-existing in the same country, with context-specific configurations, for instance, as it happens in individual states in Brazil or India, or where other agencies like WFP are complementing the national HGSP programmes such as Ghana and Kenya (PCD, 2010), the aim of this research is not to determine which HGSP model is 'best' but what efficiencies or innovations can be shared with other countries as a best practice.

3.2 Study Methods

The study combined both secondary and primary data collection methods during the period July to August 2011 to document the country's experience with school feeding and Home Grown School Feeding (HGSP) programmes. The secondary data collection included a comprehensive review of literature on school feeding programmes globally, regionally and locally. Several government reports, policy documents and proposals were reviewed on school feeding, education, agriculture, health, environment, food security and nutrition.

Primary data collection was limited to qualitative methodologies which included key informant interviews, and Focus Group Discussions with a wide range of stakeholders. These were utilised to facilitate an in-depth understanding of issues relating to the key concepts addressed by the study. Qualitative methodologies allowed the researchers to document the opinions and experiences of policy makers, programme implementers, practitioners, community members, farmers, suppliers and learners regarding the design and implementation of the program as well as other aspects such as institutional capacity, coordination system, financial capacity, food production and the extent of community participation. Detailed interview guide were developed for the country profile analysis (Annex 5). A total of 18 key informant interviews and ten (10)

Focus Group Discussions (FGDs) were carried out. Apart from in-depth interviews and FGDs, visits were made to four primary schools namely: St Gabriel and Makolojane primary schools in Serowe village (urban) in Serowe (Central) district, Kgaphamadi primary school in Ghanzi township (urban) and D'kar primary school in a rural village (D'kar village), a remote area in Ghanzi District. Site visits were also made to storage facilities. These visits allowed the researchers to observe the physical environment where the food is stored and prepared, and to interact with children during meal times.

3.3 Selection of Study Sites and Participants

The field work was based on the experiences of Serowe in the Central District and Ghanzi in the West (see Figure 4). In choosing the study sites, care was taken to select a semi-urban village and a remote area. Yet another consideration was that in these research sites, government has already introduced supply of some locally grown food as part of school feeding programme.

Serowe is a semi-urban village about 350 km from Gaborone and has both the characteristics of the affluent and the rich Batswana as well as residents who are very poor. It also has on-going home grown school feeding project. Ghanzi is about 750 km from Gaborone and is generally a cattle farming area. There are many people in Ghanzi who are predominantly of San origin and it is the nearest urban area to the Central Kalahari Game Reserve (CKGR). Within Ghanzi, effort was made to select D'Kar, a remote area settlement with a boarding primary school. The case of remote settlements in Botswana is unique in that school feeding in these settlements is also a major source of food for children whose parents do not live in permanent settlements. Ghanzi allowed researchers opportunity to capture the experiences of participants living in remote areas and children who attend boarding schools. These sites were also chosen because in Botswana, incidence of poverty is much higher in rural areas than in urban villages and towns (Central Statistics Office Botswana 2004) and hence food security in these locations is compromised.

The focus group participants were selected purposely among eligible categories of school going age children, parent teacher's associations (PTAs), the community involved in school feeding, the business community, to include farmers and suppliers, and others from the selected research sites. Access to FGD participants was obtained through focal persons appointed by the Food Resource Department as well as the Head teachers of the respective schools. The focus groups were separated by the specific roles they play in the implementation of the school feeding programme. Each group was made up of about 7-15 people. Altogether, one hundred and nineteen (119) individuals participated in the Focus Group Discussions.

Key informants were selected from highly knowledgeable professionals and policy makers in the Ministries of Local Government, Agriculture, Health, Education and Finance and Development. High ranking officials in Serowe and Ghanzi districts also formed part of the sample. Annex 1 provides the list of officials, stakeholders and participants who were interviewed.

4.0 Botswana: Country Overview

4.1 Socio-economic Profile

The Country

Botswana is a landlocked country in southern Africa and shares the borders with South Africa in the south, Zimbabwe in the north east, Zambia in the northern tip and Namibia in the west. Gaborone is the capital city of Botswana and is located in the south east (Figure 4). The country had a total population of about 2 million in 2011 (Statistics Botswana, 2011a). Two thirds of the country is desert and has semi-arid environments, with rainfall ranging from about 500mm in the Chobe region to less than 200 mm annually in the south west region.

Economic Landscape

At independence in 1966, the country's economy was dependent almost entirely on migrant labour to South African mines in addition to subsistence agriculture and livestock production until the late 1970s. Following the discovery of rich diamond deposits in Orapa/Letlhakane and Jwaneng, the country became a major exporter of diamonds. Other mineral exports since independence included copper-nickel and soda ash which have transformed the economic structure of Botswana. Primarily as a result of diamond exports and prudent economic management, the country's GDP growth had averaged 8.5 per cent per year in the past 42 years up to 2007/08 (Ministry of Finance and Development Planning (MFDP), 2009) then slowed considerably due to the global economic downturn. In 2008/09 GDP growth rate was 3.1 per cent and in 2009/10 GDP growth was negative at -3.7 per cent (Figure 5) for the first time in the last 20 years. The decline in GDP was a result of uncertainties in the trade market of diamonds and a deficit in the balance of payments (Matambo, O.K. (2011). Despite these fluctuations in growth, the GDP per capita grew from 10, 601.5 Pula in 2000 to 14, 753.4 Pula in 2011.



Figure 4: Map of Botswana (Images of Botswana:
(www.worldatlas.com/webimage/country/Africa/bw/htm)

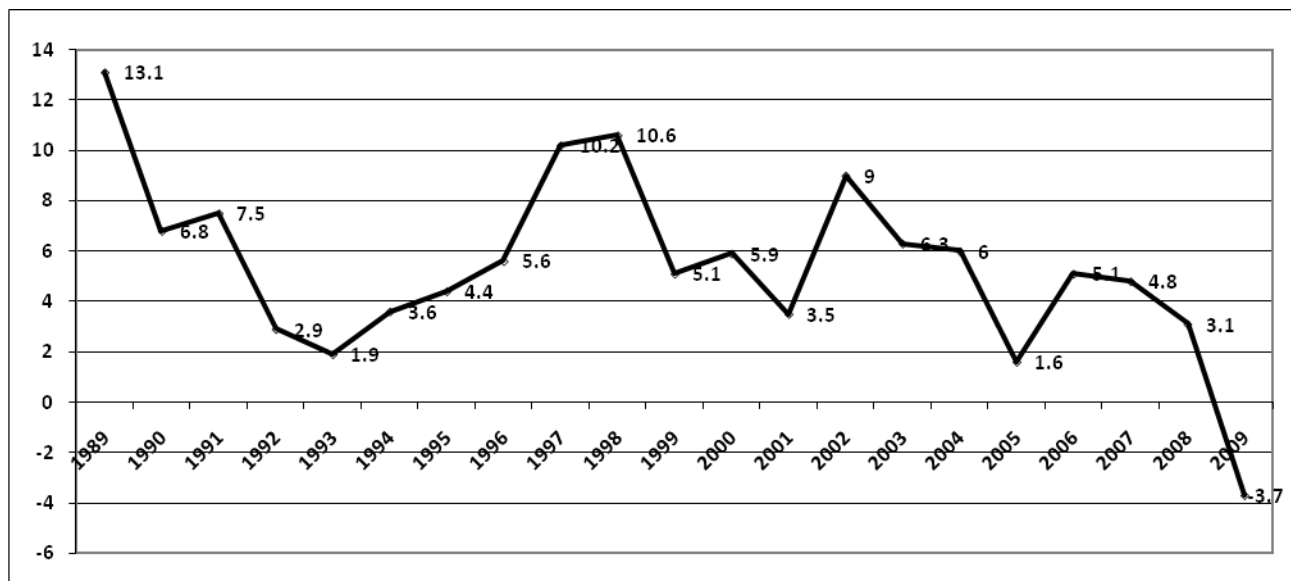


Figure 5: Trends in GDP Growth Rates 1989 - 2009 (Ministry of Finance and Development Planning 2009)

Botswana's impressive economic record has been built on the foundation of a prudent revenue management generated from diamond mining to fuel economic development through prudent fiscal policies and a cautious foreign policy. Government revenue especially from mining has been used to build infrastructure and to provide social services such as health, education and training.

Among the salient features of the Botswana economy, unlike other success stories such as those in Asia and Mauritius in Africa, is that the long period of sustained rapid economic growth in Botswana has not translated into a broad based economy. The country's over-dependence on one mineral (diamond), which is capital intensive and has very limited linkages with the rest of the economy, has meant that very few jobs were created from the impressive growth rates. To date, the socio-economic landscape of the Botswana economy is characterized by high unemployment rates, especially among the youth and school graduates at various levels. Unemployment has been persistently high and the 2005/06 labour force survey indicated a 17 per cent unemployment rate (Central Statistics Office, 2008b) and currently the unemployment rate stands at 17.8 per cent (Statistics Botswana, 2011b).

Poverty Trends

In Botswana, incidence of poverty is higher in rural areas than in urban centres. The incidence of rural poverty using the less than a 1 dollar a day threshold in 2009/10 was 8.3 per cent compared to 6.1 per cent in urban villages and 3.3 per cent in cities and towns (Table 1). Overall the incidence of poverty, based on less than 1 dollar a day poverty criteria, decreased from 23 per cent in 2002/03 to 6.5 per cent in 2009/10. Decreasing poverty rates to single digits in Botswana is a significant achievement towards poverty eradication.

Table 1: Poverty (% Less than \$1 a day)

	1993/94	2002/03	2009/10
Cities/Towns	8.1	5.1	3.3
Urban Villages	17.1	19.3	6.1
Rural Areas	26.4	36.1	8.3
National	19.9	23.4	6.5

Source: Statistics Botswana, 2011b

However, in terms of the cost of basic needs poverty index, 30.6 per cent of Botswana's population was poor in 2002/03 and in 2010/11 this population was 20 per cent (Statistics Botswana, 2011b). Despite the falling poverty rates, structural poverty and vulnerability still remains a challenge.

4.2 Performance of the Agricultural Sector

Botswana is a semi-desert country and most parts of the country are characterized by poor agricultural potential. Only 5% of Botswana's land is arable. Agriculture provides only 2.9% of the formal private sector and parastatal employment, and agricultural contribution to GDP is about 2 per cent. However, agriculture is still considered to play a significant role in rural

livelihoods and in informal employment (MFDP, 2010a). Many people in rural areas participate in it although it may not be adequate to support livelihoods. Such agriculture is characterized by small size farms and the number of agricultural holdings increased from 78,340 in 1979 to 121,595 in 2004 signifying the growing number of people participating in agriculture (CSO Agricultural statistics, 1979- 2004).

Figure 6 shows the agricultural GDP split into three categories: livestock, crops and other. It is evident that the agricultural sector has and continues to be dominated by the livestock subsector which accounted for 74 percent of the agricultural GDP in 1993/94 and 55% in 2007/08.

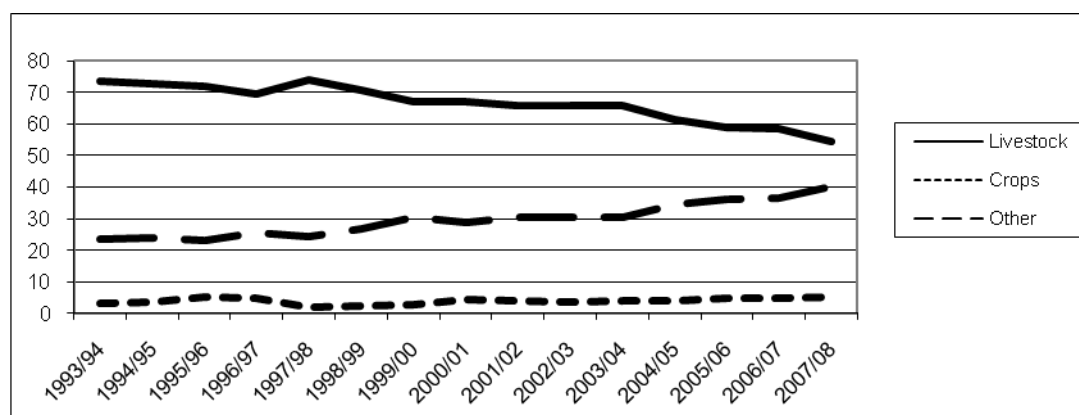


Figure 6: Agricultural GDP Shares (TRANSTEC and BIDPA, 2010)

Cattle production (for beef) in Botswana comprises of two distinct production systems (Traditional/Communal and Commercial). Currently, the traditional system accounts for approximately 80 percent of the national cattle population, while the commercial system accounts for 20 percent (TRANSTEC and BIDPA, 2010). The cattle population has fluctuated between 2.5 and 3 million. Cattle production remains an important factor in the rural economy as a source of income, employment and investment opportunities. It also has strong linkages with the rest of the economy as a supplier of inputs for meat processing, leather and other industries.

Rainfed agriculture dominates the subsistence agricultural sector and the food producing areas are mainly in the eastern districts of the country. The main food crops grown in Botswana are sorghum, maize, millet and legumes (bambara nuts, groundnuts, cowpeas) and fresh produce such as watermelons, butternuts, pumpkin and sweet reeds. Because of the limited agricultural potential, Botswana experiences a continuous failure to produce enough cereals to meet the food needs of its population as shown in Figure 7. Figure 8 also shows that Botswana continues to suffer trade deficits, as evidenced by the trade balance for maize and sorghum observed over the years 2003 to 2010.

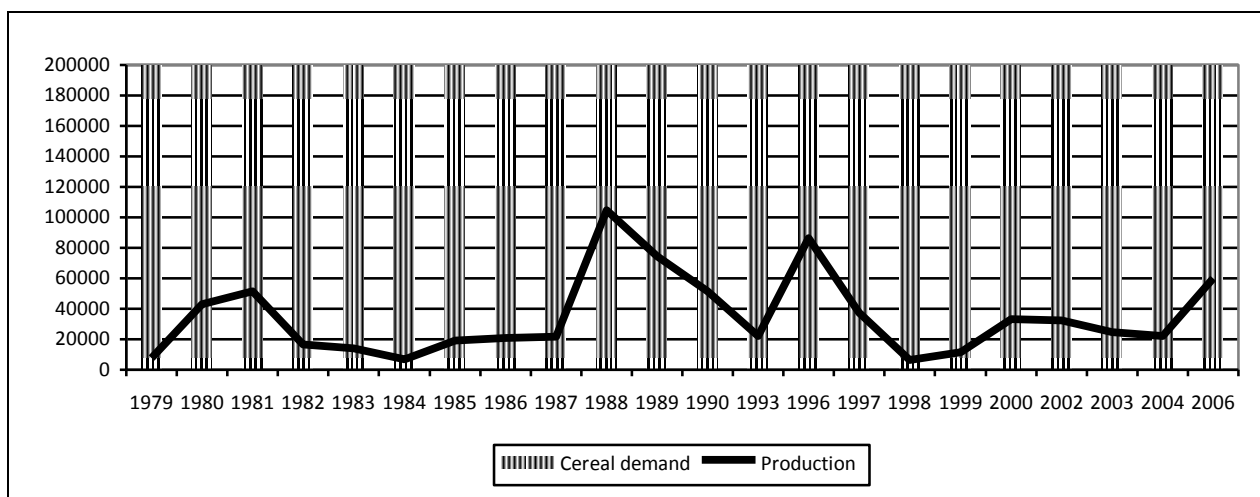


Figure 7: Cereal Crop Output (Metric tonnes): 1979-2006

Source: CSO Agricultural statistics (various)

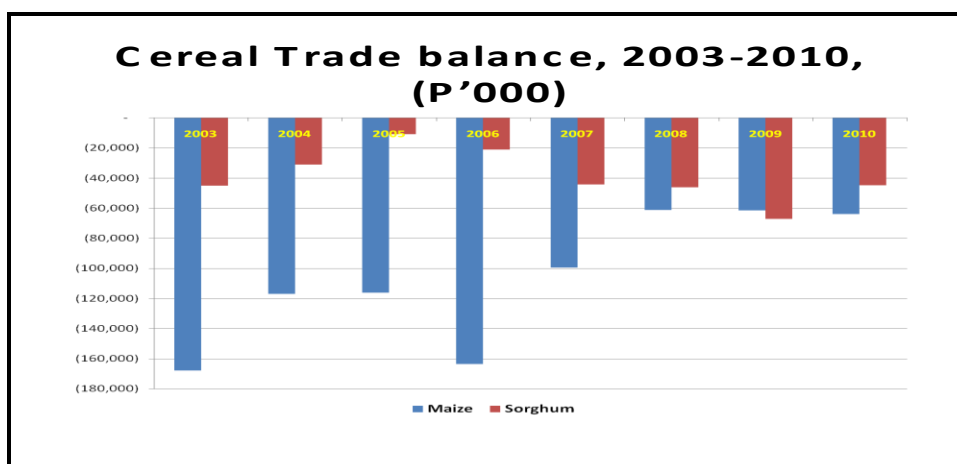


Figure 8: Cereal Trade Balance, 2003 - 2010 (Central Statistics Office, 2011)

According to the MFDP (2010a) the major constraints in the growth of the sector are farm fragmentation that makes provision of infrastructure expensive, inadequate resources, recurring drought, pests and diseases, non-affordability of critical inputs and low adoption of improved technologies.

4.3 Education

The Education System and Its Organization

The MLG shares the responsibility of primary education with the Ministry of Education and Skills Development (MoESD) in Botswana (MFDP, 1997). The MLG is responsible for provision of supplies including school feeding supplies, primary school buildings, teachers' housing, and other related facilities. The MoESD is responsible for provision of teachers, their supervision, deployment and the development of curriculum.

Population Trends of Primary School Going Age Children

Census data shows that the population of primary school going age children between the 6-12 year old category increased from 272,143 in 1997 to 299,497 in 2007 (Figure 8). A slight decrease was evidenced between the years 2002 and 2003, after a sharp increase in 2001 that reached 295,728. Despite the decline in 2002 and 2003, the population of primary school going age children has shown an upward trend over time.

Trends in Primary School Enrolments

Figure 9 shows the trends in primary school enrolment. As depicted in the graph, enrolments increased from 321,271 in 1998 to 330,835 in 2002. A decline in enrolments was evidenced in 2003 to 2004 after which it increased until 2006. Although the trends in primary school enrolments have been increasing, there were some small fluctuations of less than 0.05 per cent over time, possibly because enrolments are affected by age outlier children, those who enrol at the early age of 5 years, or those above the primary education age of 12 years. In some cases, school drop outs could be investigated as a possible problem.

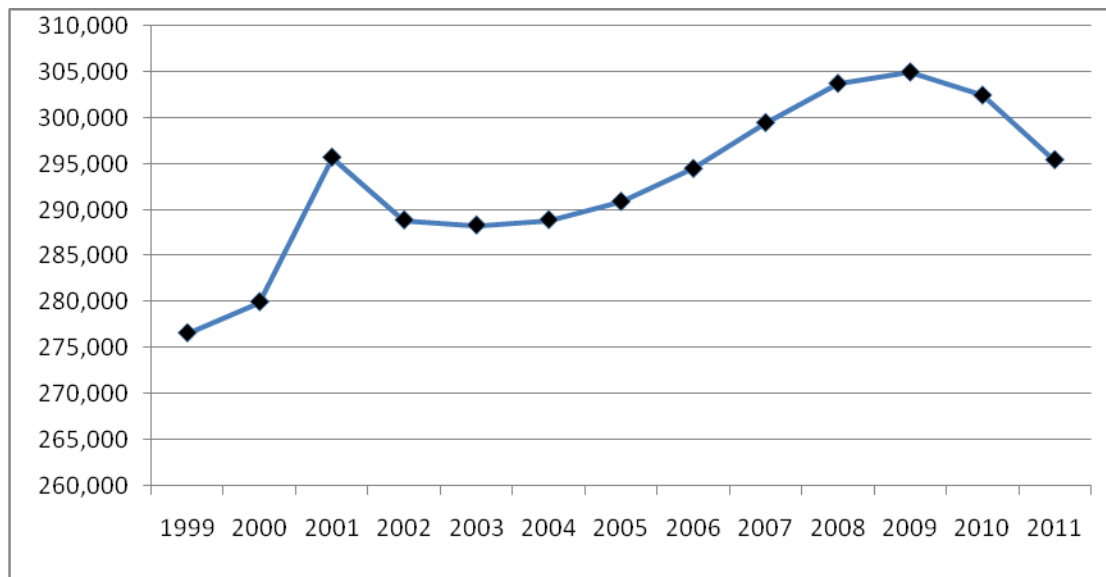


Fig 9: Trends in the Population of Botswana Primary School Going Age Children (6-12 years) (CSO, various)

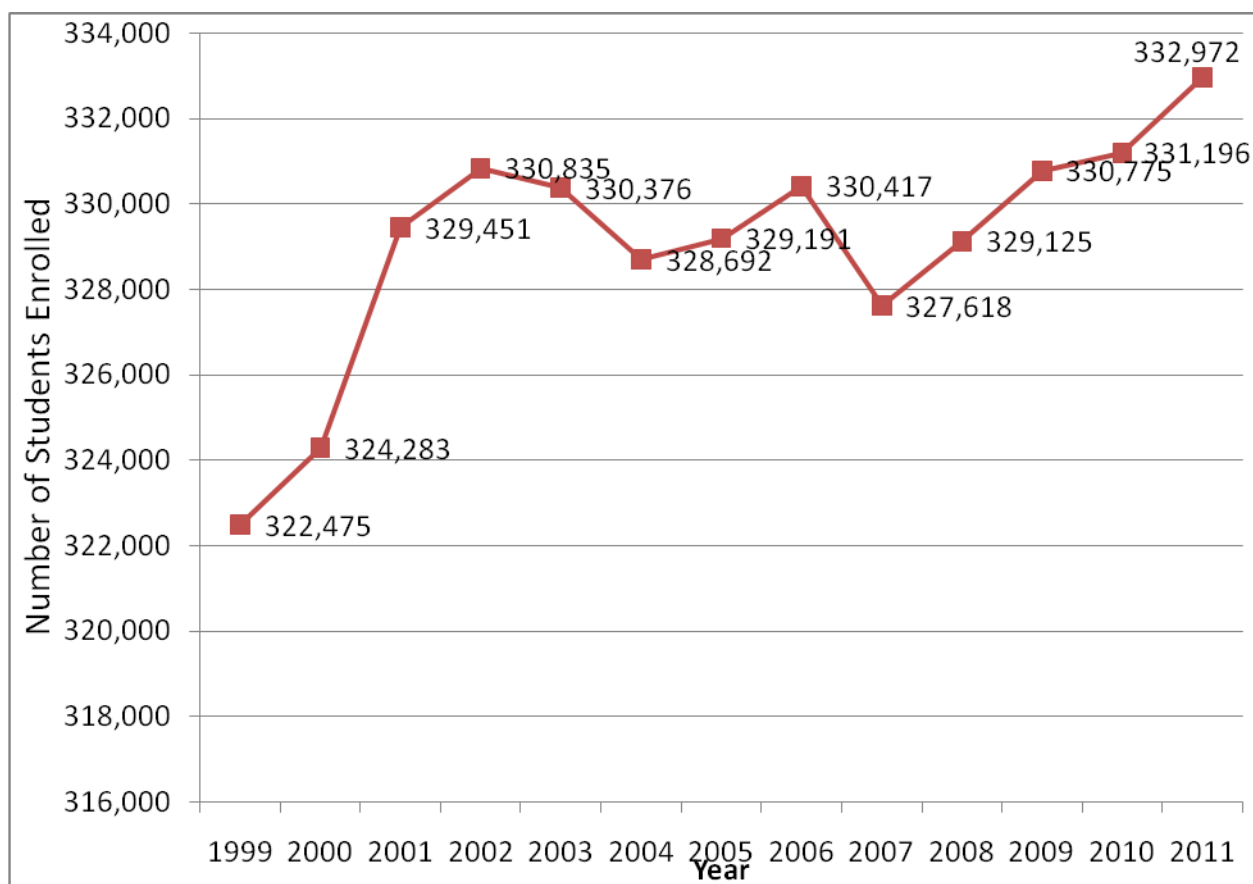


Figure 10: Trends in Primary School Enrolments (CSO 2006 and 2007; Statistics Botswana, 2011).

Figure 10 shows a general growth in enrolments between 1999 and 2011. Overall, enrolment trends in Botswana have stabilized around 330, 000 pupils, making it possible for authorities to plan (project) the school feeding budget. The gross enrolment ratio (GER) for the 6-12 years and 7-13 years age groups was 112.7% and 98.6% in 2011 respectively (Statistics Botswana, 2011), meaning that Botswana is, in principle, able to accommodate all of its school-age population. The higher enrolment in comparison to projected population is due to children in the outlier ages (below 6 years and those above 12 years).

Transition Rates to Secondary School

Botswana has experienced a positive trend in the number of children moving from primary to secondary school (transition rates) over the ten year period from 1998 to 2007 with slight fluctuations between some of the years. This general increasing trend shows that the gap between primary school and Form 1 enrolments has been reducing over the years. The transition rate increased from 92.9% in 1998 to 97.3% in 2007 (Figure 11).

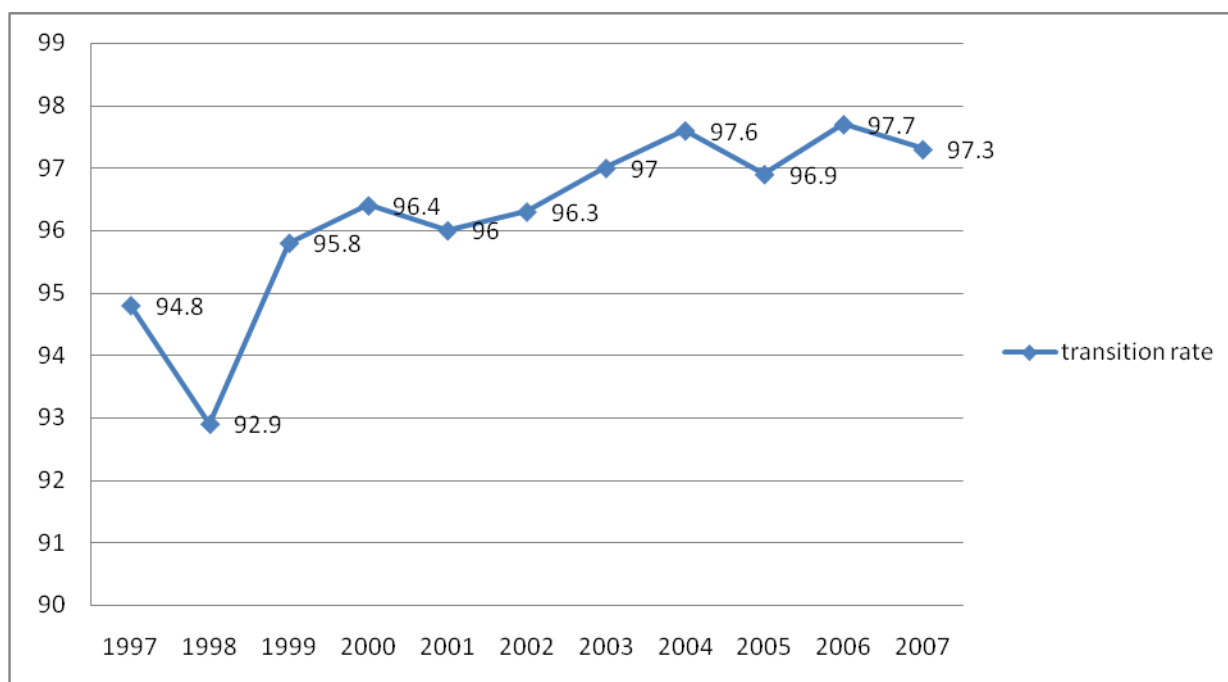


Figure 11: Transition Rates from Standard 7 to Form 1; 1997 to 2007 (CSO 2006 and 2007)

Spending in Education as a Percentage of GDP

Total education expenditure as a percentage of GDP during the period 2001 to 2010 has shown large variations, between 6 and 12 per cent, with a drop to 1% in 2008 as a result of the global financial crisis (Figure 12). Between 2006 and 2009, education expenditure as a percentage of GDP grew from about 6 to 12 per cent, and then dropped to 10 percent in 2010.

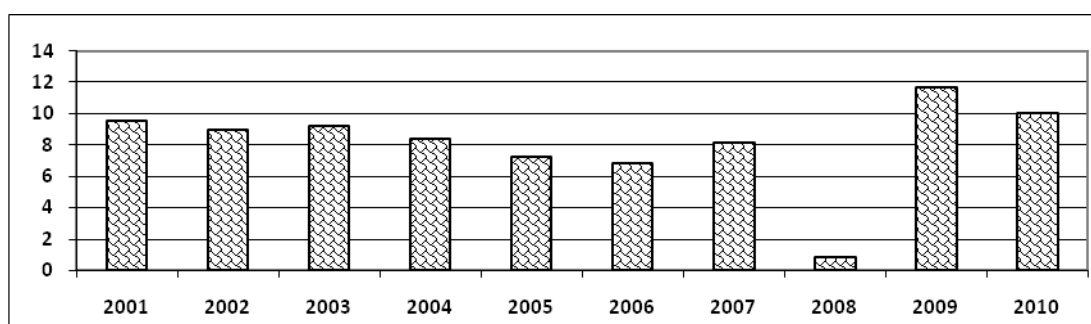


Figure 12: Total Expenditure as Percentage of GDP (MFDP, 2010b)

One of the reasons that could explain a reduction in education expenditure in 2010 was that the global economic recession was beginning to have an impact on the Botswana economy.

4.4 Nutritional Trends in Botswana

Child nutrition and health in Botswana is commonly measured using the underweight prevalence among the under 5 years old as a proxy estimate. The total underweight prevalence among the under 5 years declined from 15 per cent to 3.5 per cent between 1993 and 2009 (Figure 13). If we use only this indicator to measure child nutrition status and health, then Botswana has experienced substantive improvement in child nutrition in the last 15 years.

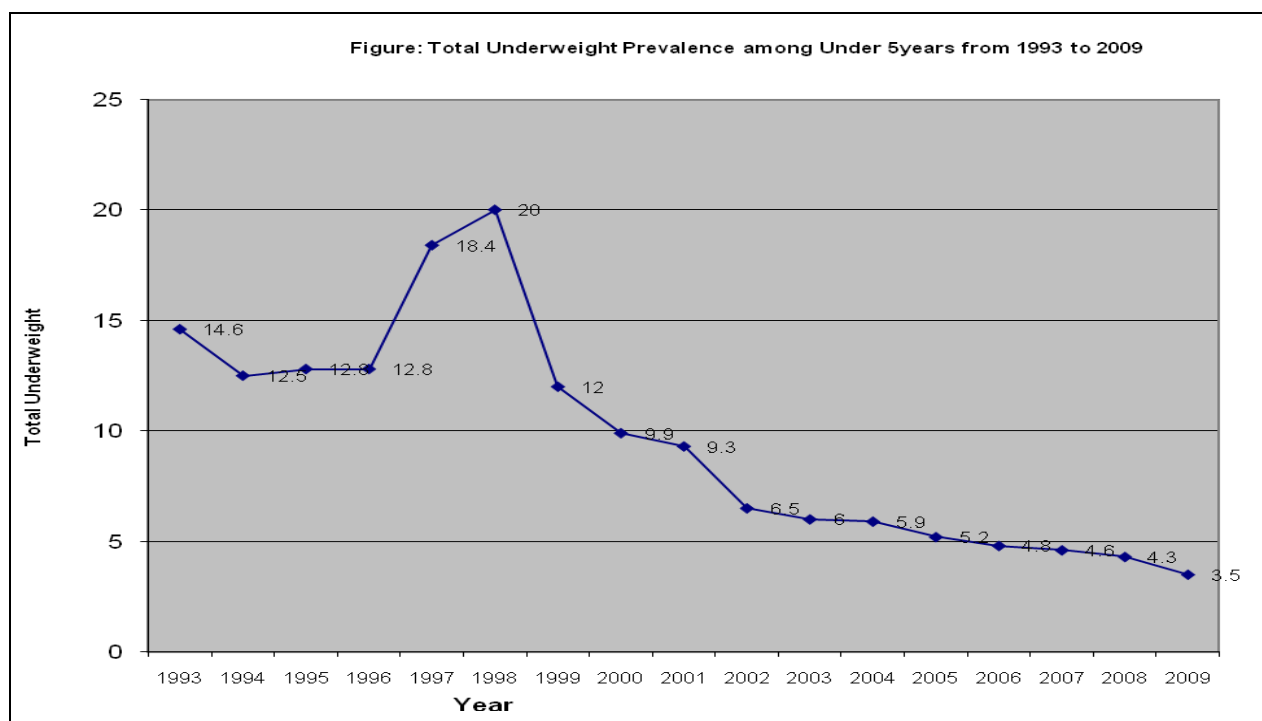


Figure 13: Under Five Years Underweight Prevalence (Ministry of Health, 2011)

5.0 Case Study Findings

5.1 Design and Implementation

This section looks at the overall design of the programme in terms of targeting, the food basket, and implementation in terms of the supply chain, from the production (to include small farmer linkages), all the way to the time the food is distributed to the child at school.

5.1.1 Programme Targeting and coverage

The government of Botswana implements a universal primary school feeding programme. It is targeted at all children attending government owned public primary schools (Bornay, et al. 1993). In general, parents from the middle and upper income bracket send their children to private primary schools where the public school feeding programme is not implemented. Currently, the regular programme provides one meal a day and reaches over 330,000 children on average (see Table 2). In 2011, 750 schools benefited from the programme, a number much

higher than the previous 5 years. The majority of children served by the SFP are in non urban districts.

Table 2: Primary School Beneficiaries by Settlement Status

	2007	2008	2009	2010	2011
Urban District	59 240	59 595	58 347	61 526	56 870
Non-Urban District	268 378	269 530	272 428	269 670	276 102
Total	327 618	329 125	330 775	331 196	332 972

Source: CSO, Various; Bank of Botswana Annual Reports, Various

In Ghanzi District, most children attending primary schools are from marginalized groups such as the Basarwa – Bushmen – who used to live in farms as cattle herders. Since most farms, in the District, have diversified into game farming and no longer need cattle herders, the farm herders who lose their jobs become squatters or homeless people in the Ghanzi Township. Hence children who cannot have a normal meal at home depend on school feeding for their daily nutritional requirement. As this is the case with most households, the regular SFP in these areas provides a normal meal at lunch, and the Remote Area Dweller Programme provides a second meal to children in boarding primary schools.

Similarly, in Serowe District, children in some schools such as Makoljwane were reported to come from underprivileged households (Basarwa). The children that were interviewed in this study said that they arrived in school without breakfast and when they returned home, often found that most parents would have left home to go to the local entertainment areas (beer drinking).

5.1.2 The School Feeding Menu for Half Day Schools

A typical school day in Botswana's primary schools runs from 7.30am to 1.00pm and thus schools are considered half day. Table 3 shows the standard menu for all government primary schools. It gives the guidelines on the composition but also quantities to be supplied per child. Some of the food items listed on the menu are sourced from within Botswana and others are imported (see details under procurement). Children receive one meal a day at school for a total of 185 days a year, except in remote areas such as D'kar in Ghanzi District where extra meals are provided.

The school heads interviewed reported that, in the general school feeding program, children receive their meals at break-time (mid morning) either at 10.30 am or 11.00 am. In the primary schools visited, it was found that meals were always supplied in an efficient and timely manner to ensure the smooth running of the school time table.

Table 3: Standard Menu for Primary School Children

Day	Food Items	Ration
Monday	Porridge/sorghum Stewed beef (canned)	100g/child/day 100g/child/day
Tuesday	Samp Beans Vegetable oil	100g/child/day 100g/child/day 15g/child/day
Wednesday	Porridge Beans Vegetable oil	100g/child/day 100g/child/day 15g/child/day
Thursday	Bread Milk UHT Jam Peanut butter	3 slices at 25g/slice 340ml 45g on three slices of bread 45g
Friday	Porridge Beans Vegetable oil	100g/child/day 100g/child/day 15g/child/day

The food basket is locally acceptable and there is variation. The nutrient composition of the meals prescribed provides at least 30% of daily nutrient requirements for energy (no less than 572 kcals on any day), protein and fat. However, the ration sizes need to be reviewed to determine a more efficient ration that still meets nutrition requirements. In addition, the food basket as currently designed is lacking in fruits and vegetables and therefore is inadequate on the micronutrients⁵. This concern was also expressed in the stakeholder workshops. There was no evidence of micronutrient supplementation in addition to the standard meal.

Perceptions of School Children towards the School Meal

In general, school children interviewed in this study expressed appreciation for the school feeding programme. They reiterated that they could not imagine a school day without a decent meal. Some of the children, from Makolojwane Primary School in Serowe, and D'Kar Primary School in D'Kar, Ghanzi District reported that they often leave their respective homes without anything in their stomachs and that the school meal was their first and last meal of the day. Some participants in the FGDs reported that when there is no food, school attendance drops.

Most children reported that school feeding enhances their concentration level as well as their ability to participate in class. Commenting on this issue, one of the students made this remark:

⁵ Fresh produce (watermelon and other green crops) is supposed to be provided during the cropping season, under the Letlhafula initiative but indications are that the amounts provided are not adequate and only seasonally purchased

“When you have eaten something, you answer questions well; if you are hungry, you easily lose concentration and eventually fall asleep”

Some learners, in St. Gabriel Primary School in Serowe however expressed dislike of certain components of the menu, such as the beans, while some parents, in Kgaphamadi Primary School in Ghanzi also expressed a need for the school feeding menu to consider accommodating the needs of children with disability and those who are on ARV treatment. Children on ARV treatment were reported to require special meals to help boost their immune system. However, such children, whilst not receiving special treatment under the school feeding programme, were expected to also benefit from the terminally ill patients food basket which is administered in the health clinics that are available in all the villages.

The need for inclusion of locally produced food in the menu

An overwhelming majority of participants in the Districts visited recommended that locally grown food (from the district) should be included in the school menu. They cited the following reasons:

- Most traditional foods have a high nutritional value
- This will alleviate poverty as small farmers will have a readymade market
- The willingness is there; farmers could be encouraged to become more productive, and organized to enable ease of procurement from single large local markets.
- Past experience with the inclusion of locally grown food items such as water melons, baked bread, sweet reed and corn was successful.

Many students expressed interest and enthusiasm about the idea of including locally grown foods. They made the following remarks:

“Most of us have never tasted traditional food, we only hear about them. However, we are taught about these in our classes. Sometimes when teachers ask us in class, we are unable to answer the questions because we don’t know. If we have these foods as part of our menu, we will have better knowledge and understanding”

“On Thursdays we eat bread which does not have any spread or milk. We have lots of morula fruit and melon- which can be processed into canned jam”

“In school we are encouraged to grow vegetables; however we don’t get to eat any of these; instead the school sells them. This is not fair as we contribute to producing food that we can eat right here in school. We want a more balanced diet which includes vegetables and fruit”

“Early in the year the school provided mmidi and ntshe. At one point, we even had oranges. We enjoyed these treats; we want the school to consider bringing these back into the menu”

When asked to comment on what type of locally grown food could be incorporated into the menu, participants suggested the food types summarised and illustrated in Table 4.

Table 4: Foods Suggested by Participants for Inclusion in the Menu

FOOD GROUP	CROPS
Cereals	Maize, millet, sorghum,
Legumes	Beans, ground nuts, jugo beans (ditloo)
Fruits	Watermelon, oranges, sweet reed, vangueria infausta (mmilo), wild berries (moretlwa),
Roots and tubers	Sweet potatoes, tylosema esculentum (morama), mogorogorwane,
Meat	Beef, chicken, lamb

Overall, the school menu in Botswana is much more diversified compared to the time when the programme was under WFP. However, some of the stakeholders consulted were concerned that the current menu has a high carbohydrate content and does not include adequate amounts of fruits and vegetables.

5.1.3 Programme Implementation

School feeding in Botswana is managed by the Ministry of Local Government (MLG), under the Department of Local Government Finance and Procurement Services (DLGFPS) and supervised by the Deputy Permanent Secretary (DPS). DLGFPS budgets and supervises procurement at national level. The MLG primarily uses a centralized procurement model. The government, through the DLGFPS purchases in bulk and delivers to districts all the dry or non-perishable food commodities, namely, sorghum grain, UHT milk, beans, samp and vegetable oil, where the food supplies are subsequently managed by Depot Managers who are supervised by the District Commissioners.

From stakeholder consultations, it was indicated that at the district level, the District Commissioners supervise the school feeding programme through the district based Department of Food Relief Services (DFRS) and provides the recurrent budget for the running of that department.



supply the food directly to all the schools in a district.

Figure 14: School Kitchen equipment

At the schools, the Head of Middle Age Stream is generally the supervisor of the feeding programme.

The District Councils manage the decentralized fresh food part of the SFP. MLG disburses money to the District Councils who procure most of these supplies through tenders and send food directly to schools. Some funds are transferred via the Councils directly to schools to purchase the agricultural products at the local level. School heads are directly under the supervision of the council's heads of education departments. It is thus evident (from foregoing discussion) that at the district level, some SFP functions are handled by the District Administration (headed by the District Commissioner), while others are managed by the Local Authorities or District Councils (headed by a District Council Secretary) and Figure 15 illustrates this administrative structure.

As shown in the flow chart (Fig 15), the design and implementation of SFP in Botswana has different role players who are not involved in day-to-day management of SFP but have specific roles. The Ministry of Agriculture (MoA) through the Plant Protection Testing Laboratory and the Ministry of Health (MoH)'s National Food Testing Laboratory, are both involved in food quality control. The MoA tests the grain (sorghum and beans) while MoH tests the processed food. Food quality testing is not regular and the Ministry of Health undertakes tests as and when requested by stakeholders for example, when depots get new food consignments. The MoH (Food Lab) may be invited to inspect food supplies that a supplier intends to supply to the school feeding programme at the supplier's storage facilities. At the same time, if food is suspected to have problems at the school level, the schools will usually bring samples for analysis to the Ministry of Health's laboratory. Food safety testing is also randomly carried out at the district depots by the local District Councils' Department of Environmental Affairs. At this level accountability for food quality thus rests with the District Administration. At the national level, MLG is ultimately accountable for food quality control although it relies on the advice of MoH and MoA.

MoA may also be involved in procurement decisions at the local level. The councils are required to work with the Ministry of Agriculture to help them identify the farmers and provide them local markets for their produce. The Ministry of Education, through the school principals or a delegate, supervise the SFP within the school (receiving of food commodities, food preparation, and serving of meal). The DLGFPS also consults with the Department of Primary Education in local District Councils who supervise the schools, and manage the procurement of bread, bread spreads and local agricultural produce.

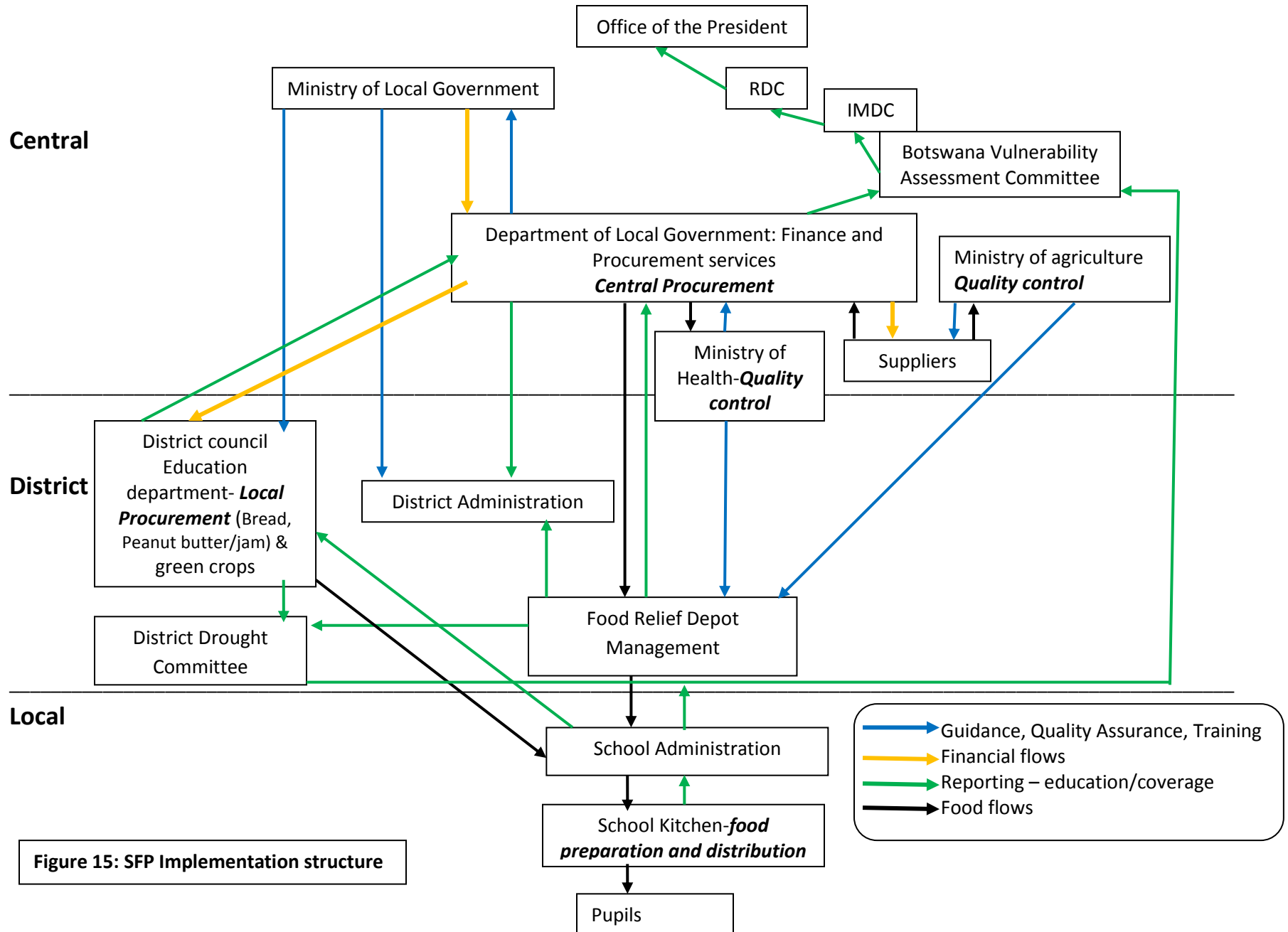


Figure 15: SFP Implementation structure

5.1.4 Food Procurement System

The ministry of Local Government (MLG) through the Department of Local Government Finance and Procurement Services (DLGFPS) operates a predominantly centralized procurement system. The government uses a tender system to procure its supplies through the Public Procurement and Asset Disposal Board (PPADB). The quantities required for each school year are determined based on enrolment figures from the previous year (enrolment data is provided monthly as school rations are provided). Most of the food commodities that are tendered and supplied to schools are dry (non-perishable) and as indicated above, are centrally procured. These include maize, sorghum, milk, cooking oil, beans, and beef stew. On the awarding of a tender, contracts are signed by both parties, the depots are informed accordingly and then begin supply to the depots after which the distribution to the schools starts.

The Department staff reported that they consider a centralized system advantageous because:

- a) Purchasing school feeding requirements in large quantities makes it possible to enjoy low prices due to economies of scale.
- b) A budget for a centralized system is easy to manage and can meet high demand requirements with limited resources.
- c) A decentralized procurement system could disadvantage schools far away from the urban and agricultural centres where the food prices are higher.

Decentralized procurement is a much newer initiative, and started in 2003 with the procurement of fresh bread from local suppliers and is managed by the district authorities. Later, the purchase of watermelon and other green crops such as green maize, sweet reed, courgettes, etc, started in 2009 through the Letlhafula initiative.⁶ The fresh produce purchases are done during the cropping season in the first quarter of the year and these are procured locally by Local Procurement Committees that include school heads, officials of Ministry of Agriculture, Ministry of Health and the parents. On the whole, whether from the centralised or decentralised procurement, a major concern in dealing with the suppliers is the late delivery of commodities. There have also been concerns in some instances, around the quality of food delivered.

Parastatal Organizations

Because of the limited linkages in the economy, the private sector remains small and does not have adequate capacity to support the school feeding programme. As a result, government corporations (parastatals) such as the Botswana Agricultural Marketing Board (BAMB) and the Botswana Meat Commission (BMC) are currently playing an important role in the procurement of the school feeding supplies. Evidence from BAMB suggests that it is a major supplier of cereals to the DLGFPS whilst BMC is the main supplier of beef stew. Stakeholder interviews with BAMB revealed that nearly all the sorghum, and raw sunflower used to process cooking oil supplied to the school programme, are grown in the Pandamatenga Commercial Farms in the Chobe District in northern Botswana.

⁶Bread was incorporated in the menu in 2003, after the exit of WFP, while purchase of watermelons started in 2009

According to the Botswana Agricultural Marketing Board (BAMB) records, Botswana's agricultural produce is sufficient to supply the school feeding programme with sorghum, and sunflower. However, sunflower seeds are purchased locally and sent to South Africa for processing and re-imported as sunflower oil. The BAMB officials interviewed indicated that it was very difficult for them to source supplies from the local subsistence farmers because of inconsistency in quality and quantity of produce. According to Table 5, the DLGFPS purchased 3,480 metric tonnes (mt) of sorghum from BAMB between 2008/09 and 2010/11, but did not purchase any cooking oil in 2009/10 and no purchases of pulses and groundnuts from BAMB in 2010/11. During these years and even prior to 2008, DLGFPS would Purchase the oil and pulses through a public tender system monitored by Public Procurement and Asset Disposal Board (PPADB). Later, in 2008 the Office of the President issued a Directive instructing the MLG to purchase from BAMB in order to provide a market for the local producers. The DLGFPS indicated that when there are shortages of supplies, they sometimes allow for purchases outside the BAMB system by getting the districts to purchase directly.

The menu illustrated on Table 3 includes samp⁷ which is sourced from local private food processors, and currently is sourced from Phofu Millings (Pty) Ltd (previously Foods Botswana). This procurement is done through a tender system at Ministerial Tender Committee on an annual basis. The tendering Ministry is MLG.

Table 5: BAMB Product Supplies Sold to DLGFPS

PRODUCT	QUANTITY Sold (Mt)		
	2008/2009	2009/2010	2010/2011
Sorghum	3480 Mt	3480 Mt	3480 Mt
Sunflower Cooking Oil	161,800 x 9 litres	0	323,600 x 9 litres
Pulses and Groundnuts	5020 Mt	7530 Mt	0
Total	29,442	28,596	32,805

Source: BAMB, 2011

The Botswana Meat Commission (BMC), a cooperative owned by farmers, has a monopoly over the export of both live cattle and beef products. It also sells beef products directly to retailers in the local market. Some of the beef products sold at BMC is the canned beef. Currently 92 percent of the canned beef is supplied to Government's primary school feeding programme and the rest is produced for export (Source: <http://www.bmc.bw/livestock.php?thetitle=Operations>).

Role of the Private Sector

According to officials in the DLGFPS, the bread, bread spreads, and milk are sourced from the private sector. Purchasing of bread and bread spreads is decentralized and administered by

⁷ Also referred to as hominy/grits. Dried corn that has been dehulled and stamped until chopped to a coarse grain. Prepared by boiling.

local authorities. In all districts, bread is purchased from local bakeries, women's cooperatives and other small businesses to supply the primary schools. This is the case at Makolojwane and St Gabriel Primary schools in Serowe. In Ghanzi, it was reported by the key informant interviews that the council supplies bread, jam, peanut butter and mealie-meal for Ghanzi Primary schools and uses an open tender system. The bread is sourced from local cooperatives or bakeries. The council also procures agricultural produce from local farmers during the cropping season. These include sweet reeds, maize-cobs and water-melons.

Stakeholders in Ghanzi reported that outside Ghanzi town, such as in New Xade village and Grootlagte village there was no capacity to produce bread at reasonable prices for the school feeding budget. For example at Grootlagte, a loaf of bread cost P20.00 whereas the maximum price of bread in the shops/supermarkets was P12.00. Where it was possible to produce bread locally, hygiene quality could not be guaranteed, hence the council sourced the bread from the cheaper, high quality, and well established suppliers in Ghanzi. So it is evident that procurement from within the local community is not always possible.

Milk procurement is centralized at the DLGFPS and is sourced from a nationally based milk processing firm, Delta Dairies (Pty) Ltd, which operates in Gaborone. The Gaborone Firm produces Ultra High Temperatures (UHT) processed milk, which is ideal for most parts of the country as it has a very long shelf life and does not require refrigeration. The milk processing firm imports most of its raw milk⁸.

Communication between different implementing departments within the Ministry of Local Government was not always effective. For instance, the Council Education Department that procures food supplies locally (decentralized component) and the DLGFPS have not developed a complementary planning and budgeting programme for the school feeding programme. As a result, the newly introduced procurement of seasonal harvest (Letlhafula), which is undertaken by District Councils do not substitute some menu items already provided in the normal food supplies budget in schools, but add to procured supplies by the DFRS. In some instances, it leads to duplication of efforts and waste. Most study participants who were involved with the implementation of the school feeding considered the food procured from local seasonal crop produce as snacks for students.

5.1.5 Transportation and Storage

5.1.5.1 Transportation

The Role of Government

The DLGFPS is responsible for ensuring the adequate handling and transportation of food commodities to storage centres and from the stores to different distribution points or schools (Bornay et.al., 1993). In recent years, the Department has relied on the suppliers to transport

⁸ Botswana livestock sector does not include dairy farming.

food commodities from source to the receiving depots. The DLGFPS provides government transport to distribute food commodities from the District Food Depots to the individual schools. However, transport is not always available and it was raised as an issue affecting the smooth delivery of food to the depots.

Centrally procured food is delivered to district depots on a monthly basis and distribution to schools is twice in a term of about 13 weeks. The first distribution is a week before school reopens and second distribution is the beginning of the 7th week of the term. In cases where a school experiences a shortage of any commodity, they report to the district depot and the commodity is supplied immediately following the reported shortage.

The Role of Parastatal Organizations

The role of parastatals in the transportation of school feeding supplies is not indicated in the guidelines of the programme. However, stakeholder consultations during the study revealed that parastatal organizations that supply food commodities for the school feeding programme to DLGFPS transport them from the source to the DLGFPS receiving depots at the District Level. This bulk transportation of food to the different feeding regions is found to be more cost effective because of economies of scale. However, in the process, the small and growing private sectors in the transport business are crowded out.

The Role of the Private Sector

The role of the private sector in the transport of school feeding supplies is very limited. It generally applies to the transport of bread, and bread spreads. The government of Botswana's system of transportation of school feeding supplies to feeding points is not responsive to improved road networks and availability of private vehicles, which could be used for outsourcing food transport and promoting the private sector growth. There is a need to reconsider outsourcing of school feeding transport from the district centres to the schools, in an effort to promote private sector development.

5.1.5.2 Storage

The Role of Government

The government maintains Regional and District food depots for storage of school feeding supplies. Thereafter, the food is transported and stored in school storerooms that are owned and maintained by local authorities. There are 24 depots (four of them also serving as regional depots) placed in the main districts across the country⁹.

The Ministry of Agriculture's Plant Protection Testing Laboratory has the responsibility of testing the food, primarily cereals, in storage for food quality before it is consumed by the school

⁹ Four of the depots act as regional depots and are based at Lobatse, Gaborone, Palapye and Francistown.

children and acts when there are doubts of food quality. One of the concerns raised by the MLG interviewees was the problem of food spoilage encountered due to unfavourable conditions at the warehouses. It was also indicated that the storage facilities in some districts are very old.

The Role of the Private Sector

The government documents available do not mention the role of the private sector in the storage of school feeding commodities. However, some stakeholders in the villages visited during the case study proposed that government should consider the use of private storage facilities. Locally based and accessible storage facilities allow frequent turn over and reduces problems of food contamination (moisture) and spoilage that can occur due to long storage.

However, for many parts of Botswana, there remains concern about the use of local procurement (suppliers, transport and storage systems) and their ability to provide uninterrupted supplies to the DFRS throughout the school year. It is thought that in good rainy years, food costs are likely to fall when local procurement is initiated because transport costs are likely to fall as well. In addition, there are idle buildings that were previously used as commercial food stores in many villages where businesses have since closed due to competition from large scale chain stores accessible to many people in Botswana. These idle buildings can be used for food storage by the school feeding programme. Hence, the feeding programme would contribute to economic diversification and employment generation in the private sector.

5.1.6 Food Production and Small Holder Linkages

Agriculture still plays a significant role in rural livelihoods and in informal employment. However, this sector has been declining in terms of output overtime. For instance, cereal yield per hectare in the traditional sub-sector declined from 310kg/ha in 2003 to 168kg/ha in 2004 (CSO, 2008a). Botswana government has committed to enhance production levels to achieve household food security by supporting small scale farmers in rural areas. The strategy focuses on the provision of subsidised services, inputs, skills and the promotion of clustering through service centres to be distributed strategically across the country. Some of the support to small scale farming would include the development of SMME agricultural enterprises and cooperatives in both rural and urban areas (MFDP, 2010). However, the small scale farmers still experience problems of access to markets.

On realization of the potential market that exists for farmers within the school feeding programme, a Presidential Directive was issued in 2008 that required that local agricultural produce (initially watermelon), be procured from farmers during the cropping season as part of the SFP, a programme referred to as Letlhafula. In 2009, the government introduced the guidelines for procurement of agricultural products for school feeding and this programme was anticipated to benefit farmers and motivate them to produce more crops (MoA, MLG and MoESD, 2009). The main products that are produced locally in Botswana and were to be sold directly to the school feeding programme are water melons, green mealies (maize cobs), makgomane (cougettes), sweet reeds, and beans.

Organisation of Farmers

Most farmers' associations in Botswana are organized under the Agricultural Management Associations and Agricultural Cooperatives and are registered by the Department of Agri-Business in the Ministry of Agriculture. These associations and cooperatives are supported by Ministry of Agriculture through technical advice and some logistical support, and do not receive any financial support. The agricultural associations are expected to participate in the school feeding programme as part of procurement committees or as producers. However in practice, only individual farmers (as opposed to farmer groups) participate in school feeding through selling fresh farm produce to the schools. Small holder farmers are however unable to participate meaningfully in the programme and this is partly because the school budget for purchasing from local farmers is very small.

5.2 Policy Frameworks

There is no specific policy for school feeding in Botswana. Currently the Ministry of Local Government uses the 'Guidelines on the Management of Primary School Feeding Programme (Bornay et al., 1993), and these are now almost 20 years old. However, school feeding in public schools in Botswana is an integral part of the revised National Food Strategy (pg 12, (2000), and is also included as part of the Revised National Policy for Rural development (pg16, 2002).

Following a history of malnutrition due to droughts over the years since the 1960s, children in school are provided for under the vulnerable groups supplementary feeding programme. Thus school feeding contributes to a social protection mandate by providing supplementary feeding to children who are at risk of food insecurity, thereby minimising the problem of malnutrition. This government position is repeated in the different national development plans that were implemented in the last 45 years (Ministry of Finance and Development Planning (MFDP, 1997, 2003). It is part of programmes aimed at achieving household food security by minimising the impact of household income shocks and income fluctuation (MFDP, 2010a). School feeding is thus an important contributor to child nutrition and prevention of hunger. As part of the overall poverty eradication objectives, the government of Botswana aims to eliminate all forms of malnutrition and any opportunistic diseases that might result from problems of malnutrition.

Although the Botswana SFP is fully functional, participants at the national stakeholder workshop stressed the need for the country to formulate its country specific school feeding policy.

5.2.1 Social development policies

Social development policy in Botswana is guided by the national policy framework and principles stated in Vision 2016. Botswana's National Vision 2016's pillar of a Compassionate, Just and Caring Nation is consistent with the UN's MDGs that aim to half malnutrition by 2015. There is consistently a high problem of unemployment, at about 17 per cent, which is a major source of poverty in the country (CSO, 2008b; Statistics Botswana, 2011b). The early warning system in Botswana for instance, is one of the instruments that monitors social development programmes such as education, health, food security and others to provide timely information for response.

Social protection objectives in Botswana have produced a wide range of schemes and programmes that include social allowance, social assistance and social insurance schemes. Examples of these provisions in Botswana are; care and support for orphans, the elderly, vulnerable children, destitute persons, remote area dwellers and those who are sick, injured or chronically ill. School feeding is one of the programmes institutionalised as part of the government feeding programmes.

Botswana government is in the process of formulating a social policy framework that encompasses school feeding as a recognized social protection scheme (Ministry of Finance and Development Planning, 2002). To this effect government commissioned a study in 2009 to undertake a situational analysis of all social safety nets including school feeding program. The report has been submitted to government for consideration of a comprehensive social policy framework. School feeding is unlikely to be down scaled, given the high public demand and support that the programme receives.

5.2.2 Food and Nutrition Policy and School Feeding

Despite lack of a policy on school feeding, the guidelines on primary school feeding have a very strong focus on nutrition and the programme design was premised on the need to address problems of malnutrition, and aimed to provide a nutritious meal. For instance, following the prolonged drought of 1982 to 1986, the Ministry of Finance and Development Planning (Republic of Botswana, 1991) argued that school feeding in Botswana was one of the major instruments through which government would provide children with the necessary conditions for promotion of optimal health, growth and development. According to Bornay et al (1993), the reasons for providing a nutritious meal were and are still to:

- a) Prevent children feeling hungry at school
- b) Provide children with a balanced meal each day
- c) Assist families who do not have enough food to adequately feed everyone
- d) Help poor families and families where parents are very busy or absent
- e) Discourage children from buying food from vendors, which might be unhygienic, expensive and not very nutritious
- f) Teach children to learn how to prepare food in a nutritious and hygienic way
- g) Create employment for hand stampers and cooks.

Botswana has a food relief programme that has been in place for more than three decades as part of a coping strategy to address problems of nutrition among vulnerable groups (MFDP, 2003). Primary school children in the country are considered as vulnerable to problems of poor nutrition and school feeding is meant to provide supplementary feeding to improve their nutritional status. The Inter-ministerial Taskforce constituted to review the primary school menu in 2001 also prioritised nutrition objectives and in addition to some of the objectives above, aimed to combat malnutrition among children in primary schools and to promote nutrition education in schools (Ministry of Local Government, 2001). The Ministry of Health provides

advice about the food type, nutritional value and amounts that each child is entitled to per meal that is served in school mid-break meals to achieve the nutritional objectives of the programme.

5.2.3 Agricultural Production Policy and School Feeding

The School feeding programme in Botswana is not directly linked to agricultural production under the 1991 Agricultural Policy (Ministry of Agriculture, 2001). The present agriculture strategy aims to enhance production levels and sustain livelihoods for small scale farmers in rural areas and contribute to household food security and poverty alleviation (MFDP 2010a). In 2009, the government introduced the guidelines for procurement of agricultural produce for the school feeding programme to absorb excess production of water melons, green maize (mealies), and other crops from subsistence farmers (MoA, et al., 2009). The guidelines required the formation of local procurement committees that include different stakeholders and the school head to procure fresh agricultural produce that does not require long shelf life, is readily available for consumption from the farm, and enables the school feeding programme to act as a market for local farmers.

Thus, current agricultural policy objectives address food security, diversification of the production base, increased output and productivity, employment opportunities, provision of a secure and productive environment and conservation of scarce agricultural and land resources. There is a strong case for linking school feeding to agricultural production as a means to provide incentive for farmers to diversify, increase production, conserve the environment and maximize the use of the limited land resource available.

5.2.4 Education Policy and School Feeding

The Revised Policy on Education of 1994 does not mention primary school feeding (Government of Botswana, 1994). Despite lack of a policy for school feeding, the available primary school feeding programme guidelines show that among the main objectives of school feeding, the programme is designed to ensure that primary school children are best able to take full opportunity of the education offered and assist the authorities to maintain high levels of net enrolment and average daily attendance (Bornay, et al., 1993).



Figure 16: RADs Children in D'Kar, Ghanzi

Key informant interviews and focus group discussions in schools visited in Ghanzi District and Makolojwane Primary School in Serowe stated that the school feeding program is associated with active school participation, particularly for children from remote areas (RADs) and settlements (Fig.16).

5.3 Institutional Capacity and Coordination

5.3.1 Multi-sectoral Coordination

The Ministry of Finance and Development Planning was designated by government to execute the school feeding programme. It is responsible for overall policy coordination and delivery of the national food strategy and is in a position to ensure that line Ministries perform the set tasks within school feeding. The MLG is charged with implementation of the SFP and communicates with the various departments and ministries to ensure the smooth running of the programme.

There is no specific committee or task team tasked with coordination of SFP. School feeding is discussed as one of the key items by district and national level committees that are tasked with overseeing food relief under the National Food Strategy. Such committees are the District Drought Committee and the Botswana Vulnerability Assessment Committee (BVAC) (which functions as an Early Warning Committee) that receive information/reports on SFP among other types of information (structure illustrated in figure 15) The District Drought Committee chaired by the District Commissioner and/or the District Council Secretary receives reports (among other district reports) on SFP from the FRS at the district level. This information goes directly to the Permanent Secretary's office at MLG. The DLGFPS at MLG receives monthly reports from the district FRS offices (reporting on SFP per district and per school), and compiles monthly reports which go to the BVAC. BVAC meets monthly and subsequently reports to the Inter-Ministerial Development Committee comprising of directors and permanent secretaries of all government ministries implementing the National Food Strategy. Information then flows to the Rural Development Committee under the Office of the President. The main emphasis in these committees is to ensure that food is available and has been delivered to schools and to districts.

However, it was evident from the discussions that coordination is a challenge. Various stakeholders involved in the selected districts indicated during data collection that a major constraint in managing the implementation of the SFP was the lack of adequate personnel or inadequate collaboration with other players in the feeding programme. In some cases, there was limited or no participation of the Agriculture Extension Officers in the Local Procurement Committees. In Ghanzi, for instance, the Ministry of Agriculture was concerned of a possible lack of appropriate consultation to ensure that all relevant stakeholders had detailed information about plans to link school feeding with the national agriculture production. As it turned out from this study, the different government implementing agencies appeared to have limited knowledge about the objectives of local procurement and the purchase of locally produced agriculture products. In general, what prevailed in the Districts were unplanned meetings to consider how to

implement a Presidential Directive that required that schools purchase local produce while still green (Letlhafula¹⁰).

There are several factors that contribute to problems of multi-sectoral coordination of the school feeding programme. At the national level, this could include the fact that there is no school feeding policy. The coordination structure given above is not adequate to deal with all issues pertaining to delivery of SFP. The Ministry of Agriculture contributed to the development of the Guidelines for Procurement of Agricultural Products for School feeding but to date is thought to play a minimal role due to inadequate coordination. The concept of local procurement of fresh green vegetables from the small farmers and the modalities of procurement seem to not be well understood. Other SFP coordination problems cited are a result of the implementation structure. The primary school feeding programme is placed under the Ministry of Local Government but the teachers who supervise the feeding in schools are employed by the Ministry of Education and Skills Development. During the study consultations, some of the teachers complained that the duties they do under the feeding programme are not part of their job descriptions. Within the Ministry of Local Government, coordination of local procurement is very minimal as the different departments are not obliged to consult one another.

All the stakeholders who participated in this study have indicated their keenness to work together and improve coordination of their activities through among others, frequent reporting to the District Development Committees (DDC's)¹¹, which is the main multidisciplinary institutional structure monitoring district based projects.

5.3.2 Staff Complement of the School Feeding Programme

The Division of Food Relief Services has a core staff of five people at the headquarters in Gaborone and up to 550 staff in regional and district food storage depots. The District councils employ school feeding cooks and hand stampers (Fig.17) for labour intensive processing of sorghum in primary schools and relies on the school heads to receive and manage the food supplies. Some district councils were however concerned that in some cases, the DFRS staff had no capacity to manage food in district warehouses as most of them had no technical expertise in food management. In most schools, direct responsibility for the school feeding program is undertaken by a school's Head of Department (Middle



Figure 17: Hand Stampers at Work: Serowe

¹⁰ Green crops produced in farms and eaten whilst fresh

¹¹ Members of this Committee are all heads of departments at the District Level and it is chaired by a District Commissioner. District Development Committee (DDC) is a separate committee from District Drought Committee. DDC deals with general issues of development, for instance, infrastructure.

Stream). Cooks are hired by the Department of Education in the District Councils. Cooks and food stampers (approximately 7 per school) are given in-house training on food handling by the Division of Food Relief Services who engage service providers from within and outside the system.

5.3.3 Information Management

Information management for the school feeding is the responsibility of the DLGFPS at the Ministry of Local Government and the Education Department of local District Councils. For instance, in District Councils, the schools should communicate with the Education Secretary's office if there is a problem.

However, effective information management is an ongoing concern. Most kitchen equipment in the districts visited in June 2011 during this study were not operational but had been reported. Some in the District Councils attributed such slow department response to lack of information as a result of the technicians' involvement in the industrial strike that was ongoing during the data collection exercise. In the schools, information management about the programme is not well understood. There appear to be lack of clarity regarding how the different stakeholders are expected to execute their roles in the school feeding programme. For example, some teachers expect the DFRS to use its staff in school for food supervision, preparation and distribution.

5.3.4 Monitoring and Evaluation

During the case study, it was reported that there is a monitoring and evaluation plan for SFP which is systematic and shows the regular intervals for monitoring at local, district and national level. The main objective of the current monitoring or internal evaluation of programme is to check whether food supplies are available at feeding points or not, and whether they are suitable for human consumption. The DLGFPS uses several documented procedures to help monitor the supplies. For instance, on awarding a tender, the tender documents stipulate the commodity to supply, how much, to which districts and for how long. The districts have to submit a delivery note and invoice from supplier to DLGFPS for payment. An issue and receipt voucher system monitors how much has been delivered to the district, how much is outstanding and how much is yet to be delivered. There are weekly stock level forms submitted three times a week to DLGFPS, and enable them to check/evaluate the supply (or lack thereof) to the various districts. The FR1 form is also a supply and feedback mechanism. It is used to deliver food to the schools and has a section to show which truck delivered food, how much, the accountable officer who received it, and number of pupils in the school. There are monthly reports compiled by all districts and regions and provide information about individual schools.

In addition, Food Relief Services depot managers undertake monthly visits to schools to monitor food handling and food usage. The Managers provide monthly updates to DLGFPS and also report to the District Drought Committee on a quarterly basis as part of a district level early warning and food security monitoring system. However, this monitoring does not go to the extent of determining what, how much and whether the beneficiaries eat the food or not.

In District Councils, the Education Department reports to District Development Committees about supplies availability and deficit in schools. In addition there is an Education Committee, a District Extension Team and Education, Health and Social Services Committee that involves councillors which receive reports on the status of food supplies in schools. The Education Committee also reports to the Ministry of Local Government's Director of Finance and Procurement who supervises the Department. Monitoring of the purchase of local crop produce in schools is supervised by local Procuring Committees that involve Ministry of Agriculture, Parents Teacher Association (PTA), School Head, and Village Development Committee (VDC). The monitoring of food quality is done by the Ministry of Health and Ministry of Agriculture as indicated earlier in this report and they check for the quality (safety) of food and adherence to set specifications.

Lack of capacity to monitor and evaluate the decentralised component of school feeding in Botswana's District Councils, has led to implementation problems. For instance, in some schools visited during the case study, some key informants reported problems of monitoring supply of bread to primary schools. This has led to instances where the suppliers of bread have no delivery schedule and at times either oversupply or undersupply because there is no direct accountability for the feeding program in schools. The main problems likely to arise in monitoring food are;

- When there are emergencies or when there is poor communication between district administration and schools that could lead to oversupply.
- Negligence that can cause food-handling problems such as expired food due to poor storage management.
- When teachers do not adhere to the recommended amounts a child should eat per meal.

There is generally no problem in monitoring enrolment and attendance. However, in Ghanzi children normally abscond and are followed up by the parents and teachers' committee to bring them back to school.

5.4 Financial Capacity

5.4.1 Budgeting for the School Feeding Programme

The Ministry of Local Government is responsible for the operation, accounting and reporting about the primary school programme (Bornay, et. al, 1993). Thus, this Ministry is responsible for budgeting and procuring the centralized primary school feeding commodities. The Ministry's Department of Local Government Finance and Procurement (DLGFPS) manages the school feeding programme through its Division of Food Relief Services (DFRS) in consultation with the Department of Pre and Primary Education in the Ministry of Education. The DFRS uses data on primary school enrolment to budget and procure school feeding supplies. At the district level, the District Commissioner provides the recurrent budget for the running of the DFRS. This budget covers such things as the staff at district level, and the food transportation costs.

During the National stakeholder workshop in Gaborone in November 2011, it was pointed out that while government finances the entire school feeding budget without external support since 1997, this budget only meets about 80% of requirements. This finding is supported by the data in annex 4 which shows the food quantities requested and the actual amounts delivered to schools between 2006 and 2010. The deliveries only covered between 66% (in 2007) and 84% (2009) of requirements. One external factor that compounds the budgetary shortfall and reported by stakeholders is the escalation of food prices in the market. It is not clear how this shortfall impacts on the overall programme, or what coping mechanisms are used by the implementers of SFP at district and school level. MLG staff explained that they request for the total yearly budget for both vulnerable group feeding and school feeding and then they split the different components based on what is finally allocated.

5.4.2 The Cost of School Feeding per Child

Table 6: The Annual Cost of School Feeding and the Cost Per Child

Year	Cost in Pula ¹²	No of Students	Annual Cost per Child
2006/7	120,270,600	271,750	443
2007/8	122,848,078	260,507	472
2008/9	128,416,693	271,924	472
2009/10	219,348,310	308,225	712
2010/11	242,176,885	310,757	779
2011/12	289,905,995	331,000	876

Source: DLGFPS, 2011, 2012

Table 6 shows the total annual cost of school feeding and also cost per child. The DLGFPS indicated that the total cost of the school feeding programme in Botswana was close to P290 million in the year 2011/12 for a total enrolment of 331 000 pupils. If we use a simple average, for the 3 year period, 2009/10 to 2011/12 the average cost of school feeding per child in Botswana is about P789 (US\$ 106.62) a year, which comprises about 185 school days. If calculated on a daily basis, the cost of school feeding per child is P4.26 (Four Pula twenty six thebe) or about US\$0.58¹³.

¹² The data from 2006/7 to 2008/9 does not include all costs.

¹³ One US\$ was exchanged at P7.4 in 2011.

5.4.3 Budgeting for the Decentralized Procurement Section

The budgeting for the decentralized school feeding component covers supplies of bread, bread spreads (jam, peanut butter), the procurement of agricultural products (Letlhafula Project) and the wages for hand stampers. The money for these purchases is released through the DLGFPS to the councils. The total reported budget expenditure was specifically used for procurement from local farmers in 2011 cropping season was 1 per cent of the total budget of the school feeding programme for the year. As a result, very few farmers sold their produce to schools. The case study results reveal that in some cases, the provided school budgets were very small and could not support local farmers with a meaningful market. For instance, key informant interviews have revealed that in Makolojwane Primary School, in Serowe, the budget for the year 2010/11 was less than two thousand Pula (P2000.00).

5.5 Community Participation

5.5.1 Community Roles and Contribution

The community in Botswana's school feeding programme includes the Parents Teachers Association (PTA) and the community of that particular school or village/place (Bornay et. al., 1993). Parents have a role to play in the actual feeding of their children at a particular school and the PTA suggests the modalities and discusses them with the entire community for approval and implementation. For instance, the PTA can participate in educating school children on the values and objectives of the school feeding programme so that they adopt appropriate eating habits which they can pass on to future generations. Teachers, can also implant an attitude of love and well being in children by taking active part in educating primary school children on the importance of the school feeding programme. The commitment and dedication of the entire community to the school feeding programme could be used as an indicator for that community's spirit of self-help and unity required for development of the community (Bornay et al., 1993).

From the Focus Group Discussions and key informant interviews with community members, it was revealed that community contributions have changed overtime from PTAs as employers of cooks to local authorities being the main employers of cooks. The community is no longer required to supply wood fuel because the local authorities use LP Gas and electricity as the main energy sources for cooking. However, parents pay pots fees in schools to purchase utensils and items such as salt and detergents for cleaning. The community contributions complement government resources to meet the total costs of implementing a successful school feeding programme. The perceptions of the community about the school feeding program have improved and most communities consider the meals provided through the programme conducive for learning and contribute to improvement of both enrolment rates and pass rate in schools.

5.5.2 Income Generation and Food Preparation Process at the School

One of the objectives of the SFP as stated in the guidelines (Bornay et al., 1993) was to create employment for hand stampers and cooks. In the schools visited, the stakeholder interviews revealed that the community members, usually women, participate as paid hand stampers (but

using own equipment) in the processing of sorghum, and earn P300 monthly which contributes to income generation for community members. The community also provides labour to schools as cooks and both skills are generally performed by women. During the focus group discussions, the women involved in food preparation and hand stamping of sorghum remarked;

“Being involved in stamping has helped most of us. We appreciate the wage rate of P300 we get. We are able to feed our children and meet other household needs. We do not want to stop working”

“I am able to pay school fees for my children. I am no longer a destitute. I also assist my siblings. I have managed to get funeral insurance for myself and my family with the little I get from stamping”.

It is evident from above statements that food processing in the school feeding programme has an important contribution to employment, and a direct impact on food insecurity and the incidence of poverty.

5.5.3 Community Involvement, Hygiene and Cleanliness

Community involvement in the school feeding programme is also meant to promote safe handling of food and nutrition. One of the strategies meant to achieve this objective includes the establishment of local School Health Committees (Ministry of Health, 1999). These should be composed of a school head as Chair, a Nurse In-Charge of the local clinic as secretary, a Social Worker, a Health Education Assistant, Available member of NGO, representative of the School Health Club, School Health Focal person, Chairperson of the Parent Teacher Association (PTA), Chief Representative/Headman and an Assistant Agricultural Technician.

According to Ministry of Health (1999), the Local School Health Committees are expected to execute among others the following terms of reference:

- a) Interpret and implement policies and district level plans
- b) Prepare a school health schedule and assigns duties to relevant members
- c) Mobilize communities for participation in the implementation of the school health program

In the four schools visited in this study, local School Health Committees were not functioning. Parents, PTA and VDC members who participated in the Focus Group Discussions (FGDs) reported that they were not aware of any committee which specifically dealt with school feeding and related health matters in their village. They however, acknowledged the need for such a committee. In one school, PTA members indicated that they periodically visited the school to monitor food preparation. However, this was done on an ad-hoc basis.

6.0 HGSF Intervention Nuggets

In this section the HGSF intervention nuggets that demonstrate the supply chain potentials and especially in providing employment, food security, and promoting small holder farmers in Botswana are discussed. The nuggets are 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 evidence provided in these nuggets is derived from the case study findings. The key intervention nuggets are;

Improved Agricultural Production/Capacity to Produce

As far as production is concerned, the government is committed to empowering small scale farmers. Through the Ministry of Agriculture's extension service there is effort to encourage food production among small holder farmers by teaching better farming methods such as row planting, use of fertilizers and minimum tillage. To improve productivity, incentives are provided to farmers through ISPAAD which provides fertilizers, seeds, and 5ha draught power for free. The 1991 Agriculture policy through which above programmes are couched, was not set up with the school feeding programme in mind but aimed to enhance production levels and sustain small holder farmer livelihoods in rural areas and alleviate poverty. However, in recent years this effort has been beneficial to the SFP, in that a good number of the commodities in the programme are sourced from Botswana.

Local Procurement (letlhafula)

The Letlhafula initiative started as a Presidential Directive given in 2008, to supply water melon to schools when in season. In 2009, the government introduced guidelines for procurement of agricultural produce for the school feeding programme in response to this initiative. The Letlhafula initiative then expanded to cover local procurement of seasonal crops/green harvest in general and the main products sold to the school feeding programme in addition to water melons are, green maize cobs, green beans, and sweet reeds. Access to knowledge and to appropriate technologies is supported by information dissemination through kgotla meetings, radio, television, agricultural association meetings and others. This programme has therefore provided a ready market for small holder farmers, albeit only at certain times of the year, and complements the food production strategies highlighted above. The Letlhafula initiative and the programme to encourage small holder farmer production can be expanded and exploited to its full potential, including institutionalising the linkage between the two (currently the food purchases from through SFP are still small). The purchasing from local farmers (whether individual or farmer associations) could be extended to include purchase of dry harvest, thus creating a more stable demand. There have been challenges of procurement (mainly adequacy of supply) and limited or poor monitoring and management of procurement at this level but this linkage is potentially a win win situation for both the farmers who have a readily available market, and the school children, who (through SFP) have access to freshly produced food which improves on the standard menu.

Food Processing, and Preparation of School Meals by Community Members

Sorghum is a culturally accepted local food which is included in the school menu. Even though sorghum grain is purchased in bulk through the central procurement system, it is locally sourced (in Botswana) and delivered to schools and then processed at that level through hand stamping by women. The process of hand stamping is labour intensive but it provides employment for the women at community level. In some districts, bread is baked by women in local villages, while in other districts bread is sourced from local bread suppliers. Other commodities in the current

food basket of the SFP that are locally available are sunflower (for the vegetable oil), beef, as well as most of the legumes.

7.0 Discussion and Conclusions

The Botswana government has successfully implemented a school feeding programme for over forty years. The programme started in 1966 with donor support through the UN World Food Programme, with the aims (among others) to prevent child hunger and provide a balanced diet. The programme continued with WFP support until 1993 when a process of slowly handing over to government (the transition phase) was instituted and ended in 1997 when it was fully taken over by Botswana Government. The SFP offers one meal and reaches all children in government primary schools in the country (about 330,000 in 752 schools in 2011).

The Botswana case study highlights a number of successes but also challenges in the implementation of school feeding in primary schools. It is worth noting that even though the programme was not designed with the home grown school feeding (HGSF) concept in mind, it has naturally progressed, albeit slowly to a model that encompasses elements of HGSF. Firstly, notable changes/additions have been made to the menu over the years to not only improve the nutritional content but also to incorporate foods sourced from Botswana, a change from the early days when food was imported.

The SFP in its design was also sensitive to the needs of the community and has provided employment by recruiting cooks and hand stampers to process the sorghum grain from the local community. The community members, through the PTA (monitoring food preparation) and Village Development Committees are involved in various decision making processes regarding the school meals, and more recently regarding the procurement of local produce.

Another key observation is the fact that the predominant mode of delivering school feeding in Botswana at inception and after the WFP transition was the centralized approach. Most procurement is conducted through two main state institutions, namely BAMB and BMC and there have been concerns that the two crowd out private sector participation in the programme. However, over time, and with the addition of perishable food items to the menu, it became necessary to use a decentralized method of procurement in order to source the food items such as bread and the seasonal crop produce locally. The findings in this study indicate that some districts are able to purchase from the immediate local communities, while others approach the bigger and more reliable (and cost effective) suppliers from within or outside the district. Bread is a good example where some districts such as Serowe get bread from the local women bakers, thus providing a livelihood while in certain parts of Ghanzi, it has not been possible to source bread from the local small businesses/women bakers.

The decentralized purchase of fresh/seasonal agricultural produce was initiated through a government directive, later referred to as the 'letlhafula project'. This project has created a link to the small holder farmers, a positive aspect of the programme that should be capitalized upon

because of its HGSP component. However, this initiative has remained small, has not been implemented well enough or not well coordinated, and the budgetary allocation to the initiative remains very small to be of any real impact as a market for the small holder farmers.

On the positive side, the changes made to the menu have made the meal more diversified. Although it is offered as a mid morning meal/snack, there is evidence to show that it meets the objective of 'preventing children from feeling hungry'. In the more disadvantaged areas, it may even be covering for lunch, and elsewhere in the report it has been indicated that the portion sizes are bigger to address this need. There is still room for improvement in the menu and this has been brought up by the stakeholders.

However, in terms of the procurement and related logistics of delivering food to the schools (overall supply chain), as well as the enabling environment factors (institutional capacity and coordination, and financial capacity), the programme has had its share of challenges. As pointed out during stakeholder consultations, the programme has never been a smooth exercise ever since it was taken over by the government from WFP. The case study highlighted concerns related to the poor or limited communication and coordination across sectors and the various stakeholders involved in SFP. In addition, the budgetary allocation to school feeding has not been adequate and there is a discrepancy between what is requested and what is allocated. This affects the amount of food actually distributed. The following are some of the other concerns that have been cited in the report as affecting the smooth running of the SFP;

- Shortage of transport
- Late deliveries by suppliers/irregular supply of some food commodities
- Some of the food commodities do not comply with the set quality standards
- Spoilage of food commodities due to unfavourable conditions at the warehouses
- Old storage facilities
- Suppliers sometimes not paid on time.
- Inadequate warranted funds to run the programme
- Weak monitoring systems

During individual stakeholder consultations (key informant interviews) and at the national stakeholder workshop, it became apparent that there are differences in opinion about using a centralized procurement approach versus a decentralized approach (the current SFP is predominantly centralized). Those for a centralized approach argue that it is easier to monitor the quality of purchase, bulk buying allows for better prices and it is possible to supply food to areas/regions that have a limited production capacity. With decentralization, there are risks of not getting the right quantity and quality of food commodities desired, and at the right time (when needed). In addition, the prices may be higher (as in the case of Ghanzi where bread from local bakers was reported to be more expensive). The modalities of monitoring a decentralized procurement approach especially from small holder farmers needs to be addressed. For instance, there were concerns raised about the poor monitoring and management of the lethlafa initiative. But even the centralized procurement system has had challenges such as those cited above.

Nonetheless, it is important to think of ways, whether centralized or decentralized, through which the small holder farmer participation can be strengthened. The participants at the Botswana national stakeholder workshop called for a more decentralized procurement. What this means going forward is that developing adequate procurement systems that are geared to support smallholder participation is vital and the experiences of Brazil and Chile can offer useful lessons. In Brazil for example, procurement is at the equivalent of district level, and by law, 30 percent of the food has to be sourced from the small holder farmers within the district. At the same time it should be realized that the idea is not to determine which model is best but rather to see what works in the different situations.

Evidence of Impact

The country has witnessed growth in enrolments and school attendance rates that are highly associated with the availability of food at school. There is also observation that the consistent implementation of the school feeding programme is associated with the increasing transition rates from standard 7 to Form 1 observed between 1998 and 2007 (earlier illustrated in Figure 11). Anecdotal evidence from key informant interviews and focus group discussions held in schools in remote areas such as those visited during the study (Ghanzi District and Serowe) shows that the school feeding program contributes to active school participation for children from remote areas (RADs) and settlements. Most stakeholders interviewed during the study were of the opinion that the school feeding programme had a significant impact on nutrition and education of children.

From the above observations, it is evident that a number of areas require further study. One of these is the benefits of the SFP on nutritional status of children, but also the impact of school feeding on educational attainment, and enrolment. There has been no impact evaluation and therefore some of the outcomes implied in the objectives need to be verified with empirical data.

8.0 Recommendations

The following are some suggested interventions that could be included in the country's primary school feeding improvement plan based on the case study findings and from the national stakeholder workshop;

1. Policy development: Although the SFP in Botswana enjoys Government support and financing, there is need for a dedicated policy on school feeding in general as well as a policy on Home Grown School Feeding in particular. It is expected that the policy would make mention of the various beneficiaries including small holder farmers, and the need to link them to school feeding as market for their produce.
2. Strengthen and develop Agriculture development (both arable and livestock farming): The school feeding programme is a strong stimulus for this development as it provides a ready market for the farmers.
3. Development of farmer organisations: Agriculture extension staff need to promote the growth and development of farmer organisations in order for farmers to benefit from

available market. The food supply chain requires certainty in supply but also volume of sales which can only be sustained by several farmers coming together.

4. Explore different procuring options and modalities to allow the SFP to benefit more small holder farmers and other private sector involvement. The decentralized procurement component of SFP needs to be re examined with a view to making local procurement easier and accessible to the small holder farmers, in the case of fresh produce, or to the locally based small and medium businesses for such food items as bread. This will require a more detailed set of guidelines and conditions to be set as part of the policy. Equally important is the need to offer farmers competitive prices to enable them sustain their business.
5. The storage facilities need to be improved and monitored more efficiently to avoid the food spoilage that is currently a problem.
6. The school feeding menu should be reviewed to improve its nutritional content, and ration sizes. At the same time the food selection could be flexible enough to reflect regional differences in terms of food production but also cultural preferences. This way SFP can change focus to become a market for the food commodities that are grown in the various regions in Botswana.
7. Coordination of SFP is weak at the moment. There is need to investigate the adequacy of the existing coordinating mechanism of the district level and national inter-ministerial committees. A system that facilitates more consultation between the various ministries such as MLG, MoESD, the Ministry of Health and Ministry of Agriculture who are all major stakeholders in the school feeding programme should be put in place. For instance at the local level, there has been limited communication with the agriculture sector on the requirements of the SFP so that the farmers can respond to the demand.
8. Capacity building is essential across the supply chain, from the producers, the suppliers, to depot managers and down to the managers at school level. For instance, to enhance food preparation, the cooks require training on food preparation, and both cooks and hand stampers need to be trained on the correct food handling methods.
9. Food processing at the lowest level such as hand stamping is beneficial to the community. Further opportunities for processing of the school feeding supplies should be explored and encouraged as they are likely to contribute to economic diversification and a widening of job opportunities at community level. This can include baking of bread among other activities, where this is not currently implemented.
10. Improve the information management systems at all levels in order to support efficient programme management.
11. Integrate school feeding activities within other school health and nutrition interventions for a more cost effective strategy to support positive educational and nutrition outcomes

REFERENCES

BAMB, (2011). Cereal Procurement Reports. Gaborone, BAMB. Unpublished.

BARR, N., (2004). *Economics of the Welfare State*. Oxford University Press, Oxford.

BORNAY, O. ET AL., (1993). Guidelines on the Management of Primary School Feeding Programme in Botswana.

BANK OF BOTSWANA, (2010). 2010 Annual Report: Bank of Botswana.

BANK OF BOTSWANA, (VARIOUS). Annual Reports: Bank of Botswana.

BUNDY ET AL., (2009) Rethinking School Feeding: Social Safety Nets, Child Development, and the Education Sector. Directions in Development Series. Washington, DC: World Bank.

CSO (2012). Stats brief. National Accounts Statistics-Gross Domestic Product-Fourth Quarter and Annual 2011.

CSO (Various). Agricultural Statistics Reports

CENTRAL STATISTICS OFFICE BOTSWANA, (2011) Trade Statistics. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2010) Education Stats Brief. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2008a). 2004 Revised Agricultural Census. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2008b). 2005/06 Labour Force Survey Results. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2007). 2007 Education Statistics Botswana. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2006). 2004 Education Statistics Botswana: Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (2004). 2002/03 Household Income and Expenditure Survey. Gaborone, Central Statistics Office.

CENTRAL STATISTICS OFFICE BOTSWANA, (VARIOUS). Agricultural census Reports. Gaborone, Central Statistics Office.

DEVEREUX, S. (2010). Home Grown School Feeding and Social Protection. Brighton: Institute of Development Studies.

DORWARD ET AL., (2006). Promoting Agriculture for Social Protection or Social Protection for Agriculture: Policy and Research Issues. Brighton: Future Agricultures Consortium, Institute of Development Studies.

ESPEJO ET AL., (2009). Linking Agricultural Development to School Feeding. Rome: World Food Programme.

GOVERNMENT OF BOTSWANA (1994). Government Paper No 2 of 1994. The 1994 Revised Policy on Education. Gaborone, Botswana: Government Printer.

GREENHALGH ET AL., (2007). Realist Review to Understand the Efficiency of School Feeding Programme. BMJ 2007

ISLER, A, (2012). Botswana: the transition to a national school feeding programme. Study commissioned by the World Food Programme and the Government of Botswana.

MATAMBO, O.K. (2011). Budget Speech of 2011. Gaborone, Ministry of Finance and Development Planning.

MINISTRY OF AGRICULTURE (2011). Reports of the Department of Agri-business. Gaborone, Ministry of Agriculture (Unpublished)

MINISTRY OF AGRICULTURE ET AL., (2009). Guidelines for Procurement of Agricultural Products for School Feeding. Gaborone: Government printers.

MINISTRY OF AGRICULTURE (2001). 1999/2000 Crop production Division Annual Report. Department of crop production and forestry. Gaborone, Ministry of Agriculture.

Ministry of Finance and Development Planning (2002) Revised National Policy for Rural Development. Gaborone, Government Printer

Ministry of Finance and Development Planning (2000) The Revised National Food Strategy. Gaborone, Government Printer

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (2010a). Financial Statements, Tables and Estimates of the Consolidated Funds Revenues 2010/2011. Gaborone Government Printer.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (2010b). National development Plan 10, Gaborone, Botswana: Government Printers.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (2009). Financial Statements, Tables and Estimates of the Consolidated Funds Revenues 2010/2011. Gaborone Government Printer.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (2003a). National Development Plan 9, Gaborone, Botswana: Government Printers.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING (2003b). National Strategy for Poverty Reduction of 2003, Gaborone, Botswana: Government Printers.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (2002). Revised National Policy for Rural Development. Gaborone, Ministry of Finance and Development Planning.

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING (2000). The Revised National Food Strategy, Government Printer, Gaborone

MINISTRY OF FINANCE AND DEVELOPMENT PLANNING, (1997). National Development Plan 8, Gaborone, Botswana: government Printers.

MINISTRY OF HEALTH (2011), Nutrition Status of Under 5s. Gaborone, Ministry of Health.

MINISTRY OF HEALTH, (1999). Botswana National School Health Policy and Procedures Manual. Gaborone: Government Printers.

MINISTRY OF LOCAL GOVERNMENT (MLG), 2001. Inter-Ministerial Taskforce. Report on the review of Primary School Menu. Unpublished Report.

MOEPENG P. (2010). *Rural Poverty in Botswana – A Case Study*. Saarbrucken, Germany. Lambert Academic Publishing.

MOEPENG P. AND C. TISDELL (2008). *Botswana's Development, Its Economic Structure and Rural Poverty* in Indian Development Review Vol 6. No.1

NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT (NEPAD). 2003. "The NEPAD Home-Grown School Feeding Programme: A Concept Note."

PARTNERSHIP FOR CHILD DEVELOPMENT (PCD). (2010). Home Grown School Feeding: linking small holder agriculture to school food provision. PCD working paper no. 212.

PSACHAROPOULOS AND WOODHALL, (1985). Education for Development: An analysis of Investment Choices. New York: Oxford University Press

REPUBLIC OF BOTSWANA (2009), The National School Health Policy. Gaborone.

REPUBLIC OF BOTSWANA (1993). School Feeding Guidelines. Gaborone: Government Printer.

REPUBLIC OF BOTSWANA (1991). Government Response to the Report on the Evaluation of the Drought Relief and Recovery Programme 1982-1990. Gaborone, Government Printer.

SABATES-WHEELER ET AL., (2010) Linking agricultural development to school feeding in sub-Saharan Africa: Theoretical perspectives, Institute of Development Studies (IDS), University of Sussex, Brighton BN1 9RE, UK.

Statistics Botswana (2011). Stats brief. Education Statistics

STATISTICS BOTSWANA (2011a). Stats Brief, 2011 Population and Housing Census Preliminary Results. Gaborone, Statistics Botswana.

STATISTICS BOTSWANA (2011b). 2009/10 Botswana Core Welfare Indicator Survey, Preliminary Results. Gaborone, Botswana.

TOMLINSON (2007) School feeding in east and southern Africa: Improving food sovereignty or photo opportunity?" Health Systems Research Unit, Medical Research Council, 2007.

TRANSTEC AND BIDPA, (2010). Agricultural Sector Review. Unpublished Consultancy Report. Gaborone, Botswana Institute for Development Policy Analysis (BIDPA).

WORLD BANK (2011). Working for a World Free of Poverty,
<http://data.worldbank.org/country/botswana>

WFP, 2012. Botswana: the transition to a national school feeding programme. Authored by Anne Marie Isler. Gaborone, Botswana, April 2012

Annex 1: List of Focus Groups and Key Informant Interviewees

Table 1: Focus Group Discussions Conducted

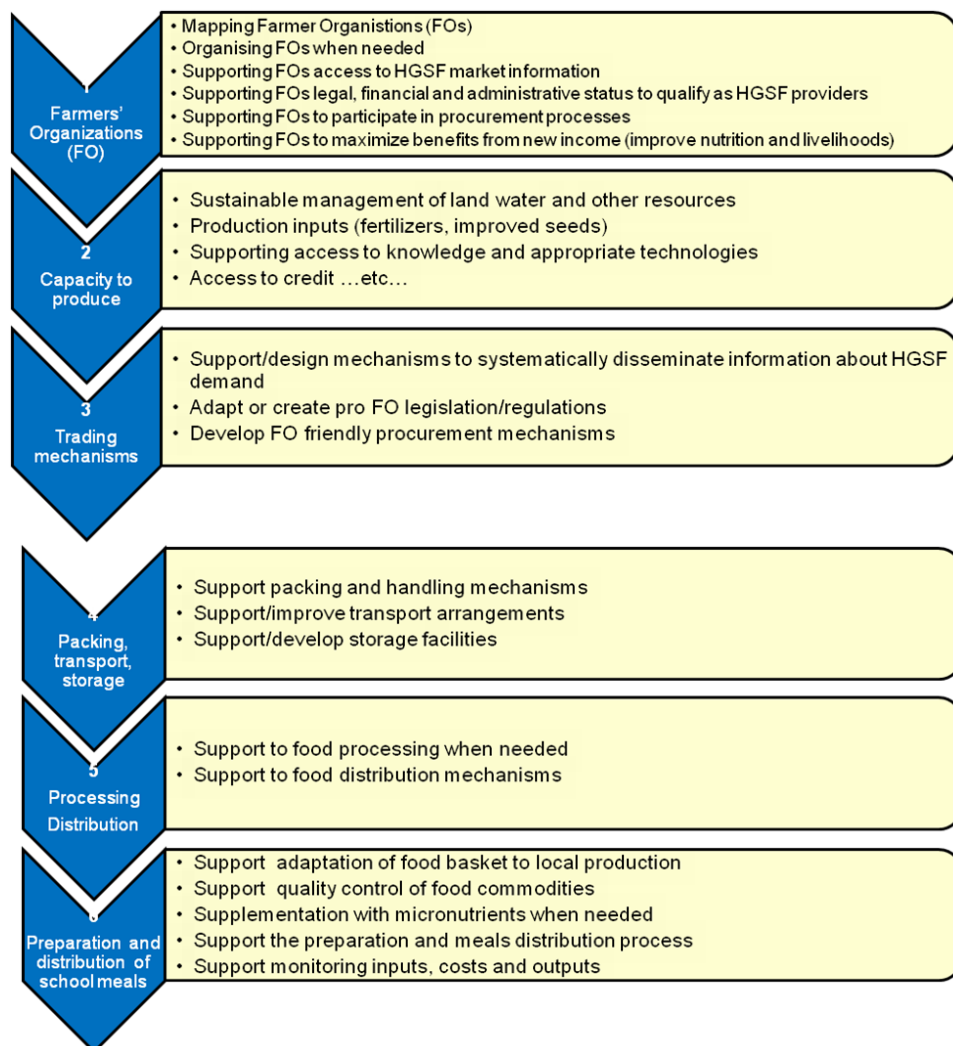
Focus Group	Research Site	Female	Male	Total
PTA and Parents	Serowe, St Gabriel School	12	3	15
VDC and Suppliers	Serowe, St Gabriel School	6	1	7
Primary School Learners	Serowe, St Gabriel School	6	6	12
PTA	Serowe, Makolojwane School	9	4	13
Primary School Learners	Serowe, Makolojwane School	6	7	13
VDC/PTA	Ghanzi, Kgaphamadi School	4	3	7
Primary School Learners	Ghanzi, Kgaphamadi School	7	6	13
Parents and Cooks	Ghanzi, Kgaphamadi School	11	2	13
Parents and PTA	Ghanzi, D'kar	9	5	13
Primary School Learners	Ghanzi, D'kar	7	6	13
TOTAL		77	42	119

Key Informant List

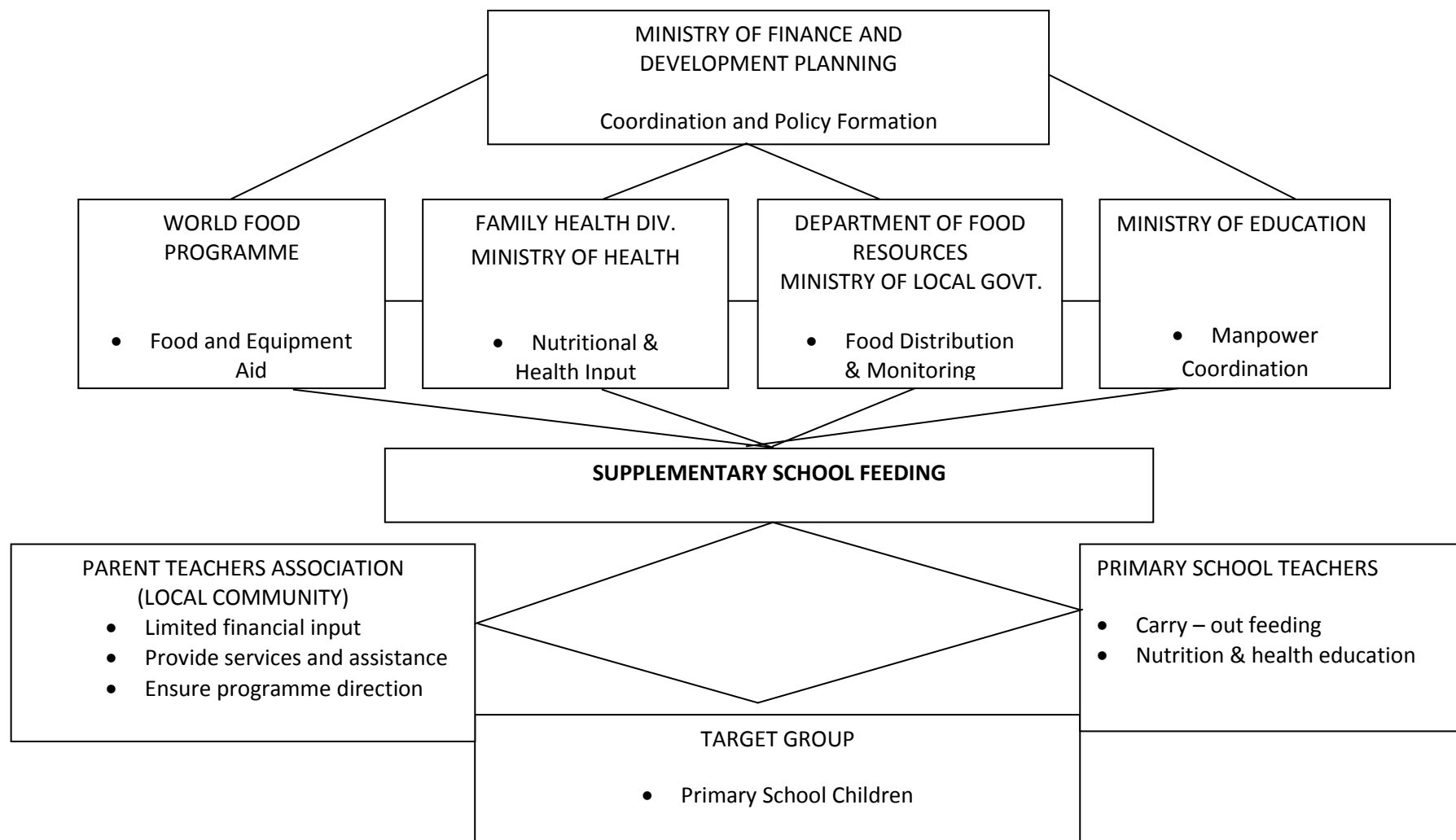
Mrs Mollo Assistant Council Secretary, Serowe Sub-District
 Ms Changane Crop Production Officer, Serowe Sub-District
 Ms Kgethe School Head, St Gabriel Primary School, Serowe
 Ms. Moremedi Deputy School Head, St Gabriel Primary School, Serowe
 Ms. Fetisang Head of Department, St Gabriel Primary School, Serowe
 Ms Rantshabo Deputy School Head, Makolojwane Primary School, Serowe
 Mr. Setumo District Commissioner, Central District
 Mr. Molepolole Council Secretary, Ghanzi District
 Mr. Bopadile Chief Education Secretary, Ghanzi District
 Mr. Hengari School Head, D'Kar Boarding Primary School, D'Kar, Ghanzi
 Mrs Seikabelo Matron, D'Kar Boarding Primary School, D'Kar, Ghanzi

Mr. Mmeleri	Head of Department, D'Kar Boarding Primary School, D'Kar, Ghanzi
Mrs Tsheboeng	Deputy Director, Department of Agribusiness, Ministry of Agriculture
Mr. Ntshese	Department of Agribusiness, Ministry of Agriculture
Ms. Marakalala	Director, DLGFPS
Mr. Singabapha	Head, Food Relief Services, DLGFPS.
Ms. Mafule	Food Relief Services, DLGFPS.
Ms. Masie	Food Relief Services, DLGFPS.
Mr. Otukile	Food Relief Services, DLGFPS.
Mr. Manamela	Clerk of Cabinet, (Former Coordinator of Rural Development)
Ms. Matsapa	Head, Nutrition Unit, Ministry of Health
Mr. Basheke	Nutrition Unit, Ministry of Health

Annex 2: Key Activities within a Stylised HGSP Supply Chain



Annex 3: School Feeding Administration Structure (During the transition 1993-1997)



Source: Bornay et. al., 1993

Annex 4: Food Supplies and Deliveries to Primary Schools 2006-2010

Year	Commodity	Primary schools		Actual number of beneficiaries fed Primary schools
		Quantity Required MT	Quantity Supplied MT	
2006	Sorghum grain 50kg	2721.5	2478.8	271,750
	Beans 50 kg	3075.2	2344.5.0	271,750
	Samp 25 kg	1022.6	866.3	271,750
	Stewed steak 3.1 kg	3456.4	1795.0	271,750
	Vegetable oil 750 ml	572.4	109.3	271,750
	UHT milk 340 ml	2166.3	1112.2	271,750
	TOTAL	13014.4	8706.1 (67%)	
2007	Sorghum grain 50kg	2844.15	2825.75	236,365
	Sorghum meal 25 kg	99.28	76.37	12,417
	Beans 50 kg	3242.77	1343.99	260,507
	Samp 25 kg	2178.52	698.44	260,507
	Stewed steak 3.1 kg	1068.53	1011.59	260,507
	Vegetable oil 750 ml	543.49	152.4	260,507
	UHT milk 340 ml	3720.90	2865.25	260,507
	TOTAL	13,697.64	8,973.79 (66%)	
2008	Sorghum grain 50kg	2729.74	2534.38	251,075
	Sorghum meal 25kg	60.12	53.7	20,849
	Beans 50 kg	2878.78	2206.36	271,924
	Samp 25 kg	2211.37	1392.33	271,924
	Stewed steak 3.1 kg	1066.17	827.81	271,924
	Vegetable oil 750 ml	534.99	259.11	271,924
	UHT milk 340 ml	3578.11	1873.66	271,924
	TOTAL	12010.30	8358.53 (70%)	
2009	Sorghum grain 50kg	2606.01	2138.98	250,636
	Sorghum meal	96.08	87.08	10,877
	Beans 50 kg	3239.95	2726.58	261,513
	Samp 25 kg	2187.22	1813.74	261,513
	Stewed steak 3.1 kg	1032.12	974.60	261,513
	Vegetable oil 750 ml	485.04	176.25	261,513
	UHT milk 340 ml	3510.38	3088.46	261,513
	TOTAL	13156.80	11005.69 (84%)	
2010	Sorghum grain 50kg	2793	2416.3	265974
	Sorghum meal	337.28	323.27	44970
	Beans 50 kg	3576	2439.7	310944
	Samp 25 kg	2394.27	1512.46	310944
	Stewed steak 3.1 kg	1150.49	1150.49	310944
	Vegetable oil 750 ml	536.38	436.3	310944
	UHT milk 340 ml	2855.68	1616.85	310944
	TOTAL	13643.10	9895.37 (73%)	

Source: DLGFPS Various reports

Annex 5: Interview Guides

HOME GROWN SCHOOL FEEDING PROGRAM KEY INFORMANT INTERVIEW GUIDE

Location_____

Position held by the informant_____

Name of Department_____

Policy framework

1. Is there a specific national school feeding policy?
2. Does the policy specify the design of the programme, targeted beneficiaries, scope, implementation requirements, and responsibilities and funding arrangements?

Institutional capacity and coordination

3. Where the programme sits in the national government: Is there a specific ministry or institution with the mandate of managing and implementing school feeding?
4. If it is not the Ministry of Education, does that institution have appropriate contact and communication with the Ministry of Education?

Multi-sectoral coordination

5. Is school feeding discussed in any national-level coordination body (technical working group, task force, or the like) that deals with school, health, agriculture, and nutrition issues, or quality issues, or special cross-cutting issues?
6. Is there a national-level coordination body specifically for school feeding, led by the institution in charge of school feeding, that is operational and brings all stakeholders together regularly?
7. Is this coordination mechanism effective in making decisions for the programme?
8. Comment on the size of staff complement.
 - a) Formal positions vs those filled.

- b) Does the responsible unit in charge of implementing school feeding have a sufficient amount of staff?
- c) Are they working full time or part time on school feeding?

Information management

- 9. How is information about the programme stored, analysed, and managed?
- 10. Is there a proper information management system in place for school feeding at the central, district level?

Monitoring and evaluation

- 11. Is there a monitoring and evaluation plan for the school feeding programme?
- 12. Does the plan include data collection, analysis, reporting, feedback, indicators, guidelines, and tools? Who is involved in monitoring the programme?
- 13. Frequency of monitoring visits per school per year (target vs actual). Does the government at national and local levels have the capacity to monitor or does it rely on external support?
- 14. Is there a budget for the monitoring and evaluation plan?
- 15. Are there any problems monitoring outputs (food, non-food items, and so forth)?
- 16. Are there any problems monitoring outcomes (enrolment, attendance, and other measures)? Is there a baseline for the programme?
- 17. Is there a baseline for the programme?
- 18. Has there been mid-term or end of term evaluation done?
- 19. How has the information from the evaluation disseminated and translated into action or decisions?
- 20. Is the information reported at any national or local level coordination mechanism?

Implementation Issues

21. How good is communication between the central and the local level for the implementation of the programme?
22. Do staff have sufficient skills and knowledge about the implementation of a school feeding programme?
23. At the district or sub national level, who is involved in the implementation of the school feeding programme?
24. Are there clear implementation arrangements at the school level? Do these rely mostly on the teachers or do they also include parents and the community?
25. Are the people responsible for implementation trained on the management of the programme (management and storage of food, entitlements, and reporting requirements)?

Budget and Financial capacity

26. What is the budget for the program?
27. What is the cost per child per day
28. How do yearly priorities and resources within the government get decided and budgeted for?
29. Overall, how embedded is school feeding in national- and local-level planning and budgeting processes?
30. If the government allocates resources from national budget, how much are they as a percentage of the total programme requirement?
31. What are these funds for (food, monitoring and evaluation, management, and so forth)?
32. Do districts have the capacity to plan and budget their needs and request resources from the central level?
33. Do districts have a budget for school feeding?

34. Is the government allocating a significant amount of resources to the programme, or is it mostly funded by partners?
35. Has the government progressively increased the amount of resources allocated to school feeding or has it been static in its contributions?
36. Is school feeding part of a sector-wide approach or a basket fund of the education, social protection, or agriculture sectors?
37. Are there any donors financing the programme through one of these mechanisms (for example, the World Bank)?
38. If so, how much of the programme is covered under these funding arrangements? Has the government received funds from the Education for All-Fast Track Initiative for school feeding?
39. How is the government planning to finance the programme in the future?

School feeding standard: Design and implementation

40. Has the program made any impact on the well-being of children? (probe: nutrition, health, education, other).
41. Who does the program target? (geographic, grades)
42. What is the number of children targeted vs actual number of that age group
43. What is included in the menu? Including quantities per child per day (if no quantities, state this)
44. What are the feeding times?
45. How many times are children fed per days per year
46. Are there other programme areas included in school feeding programme (e.g. nutrition education, gardens, deworming)

Food production and small holder linkages

47. Brief overview of the structure of agriculture in the country. What are the main food crops and seasons, and where are the food producing areas, including historic levels of production, and areas of regular food deficit?
48. Small scale agriculture: Number of “small scale”/ smallholder farmers, and what is understood by the definition. Current small scale agricultural promotion/ development programmes and their success in the past/ now / challenges
49. Local food production/procurement: Are the commodities in the food basket locally or internationally purchased?
50. What are foods currently produced in the country (and normally used by the population) that would be appropriate for school feeding?
51. Are there locally processed foods or local businesses that might be able to supply food for the programme?
52. Could the food basket be modified to include more local food without sacrificing the nutritional content?
53. How can local processing and fortification be included in the food supply chain? Is there capacity in the country?
54. What type of community structures, businesses, or efforts could be tapped into for processing or sourcing the food for the programme?
55. Has there been an attempt at procuring more food locally? If so, what were the advantages, challenges, and constraints in procuring locally?
56. Have there been discussions with the government on possible procurement modalities for school feeding that can be more locally appropriate, including the possibility of linking procurement with agriculture-related activities?
57. If the school feeding programme could be sourced locally, how would the quality of the food and the costs of the programme be affected?

58. Role of Ministry of Agriculture: Has the Ministry of Agriculture been involved or contacted to make the connection between school feeding and national agricultural production?

59. How can the agriculture sector be more involved in procurement for school feeding?

60. At the local level, are the requirements for the school feeding programme communicated to the agriculture sector so that more crops are grown for the programme?

Role of private sector

61. Has the private sector been involved or could it be involved in making the connection between the farmers and market mechanisms (warehouses, associations, co-ops, and so forth)?

Food procurement, transportation, storage and handling

62. Procurement model/s: Which model is used, where and why was it selected?

- a) bulk supply models
- b) school-based procurement (school chooses service providers)
- c) cooperatives
- d) catering companies

63. Who selects the procurement model? (i.e. centralised / decentralised)

- a) Transportation and storage
- b) Delivery frequency to school

School feeding standard V: Community participation

64. Who manages the programme at school?

65. Is the food prepared on premises?

66. If yes, who does this?

67. Are they paid (how much?) / voluntary

68. If food is not prepared on premises, how does it work?

Community involvement

- 69. Is there any community involvement in food preparation, if any?
- 70. Are there any community-level structures that are used to establish communication (village councils, traditional authority structures, village elders, and the like)?
- 71. Has the community been involved in deciding which products are provided in the food basket?
- 72. If the community was more involved, would there be the possibility of mapping local-level businesses, processing capacity, and food production capacity to analyse the food basket of the programme and the possibility of sourcing it locally?
- 73. Overall, how significant is the community's contribution?
- 74. Is there a canteen or food management committee comprising representatives of parents, teachers, and students?
- 75. Does this committee act as an interface between the community and the school, manage and monitor the school feeding programme, and ensure good utilisation of the food in the school?
- 76. Do implementation arrangements avoid putting too much pressure and burden on teachers and not take up teaching or class time during school hours?
- 77. What are the programmes **strengths, weaknesses and challenges (SWOT Analysis)** To be asked in all interviews

HOME GROWN SCHOOL FEEDING PROGRAM KEY INFORMANT INTERVIEW GUIDE: DC and CS

Location_____

Position held by the informant_____

Name of Department_____

School feeding standard

78. Has the program made any impact on the well-being of children? (probe: nutrition, health, education, other).
79. What is included in the menu? Including quantities per child per day (if no quantities, state this)
80. Could the food basket be modified to include more local food without sacrificing the nutritional content?
81. How can local processing and fortification be included in the food supply chain? Is there capacity in the country?
82. If the school feeding programme could be sourced locally, how would the quality of the food and the costs of the programme be affected?

IMPLEMENTATION ISSUES

83. How good is communication between central and the local level for the implementation of the programme?
84. Do staff have sufficient skills and knowledge about the implementation of a school feeding programme?
85. At the district level, who is involved in the implementation of the school feeding programme?
86. Are there clear implementation arrangements at the school level? Do these rely mostly on the teachers or do they include parents and the community as well?

87. Are there people responsible for the implementation or the management of the programme (management and storage of food, entitlements and reporting requirements)?
88. Do districts have the capacity to plan and budget their needs and request resources from the central level?
89. Do districts have a budget for the school feeding?
90. Is the government allocating a significant amount of resources to the program, or is it mostly funded by partners?
91. Are there other programme areas included in the school feeding programme? (Nutrition, education, gardens, deworming)?
92. Has the private sector been involved or could it be involved in making connection between farmers and market mechanisms (co-ops, warehouses etc)?

Monitoring and evaluation

93. Is there a monitoring and evaluation plan for the school feeding programme?
94. Does the plan include data collection, analysis, reporting, feedback, indicators, guidelines, and tools? Who is involved in monitoring the programme?
95. Frequency of monitoring visits per school per year (target vs actual). Does the government at national and local levels have the capacity to monitor or does it rely on external support?
96. Is there a budget for the monitoring and evaluation plan?
97. Are there any problems monitoring outputs (food, non-food items, and so forth)?
98. Are there any problems monitoring outcomes (enrolment, attendance, and other measures)? Is there a baseline for the programme?
99. Is there a baseline for the programme?
100. Has there been mid-term or end of term evaluation done?

101. How has the information from the evaluation disseminated and translated into action or decisions?
102. Is the information reported at any national or local level coordination mechanism?
103. What are the programmes **strengths, weaknesses and challenges (SWOT Analysis)**

HOME GROWN SCHOOL FEEDING PROGRAM KEY INFORMANT INTERVIEW GUIDE: HEAD OF FINANCE AND PROCUREMENT

Location_____

Position held by the informant_____

Name of Department_____

Multi-sectoral coordination

104. Is school feeding discussed in any national-level coordination body (technical working group, task force, or the like) that deals with school, health, agriculture, and nutrition issues, or quality issues, or special cross-cutting issues?

105. Is there a national-level coordination body specifically for school feeding, led by the institution in charge of school feeding, that is operational and brings all stakeholders together regularly?

106. Is this coordination mechanism effective in making decisions for the programme?

107. Comment on the size of staff complement.

d) Formal positions vs those filled.

e) Does the responsible unit in charge of implementing school feeding have a sufficient amount of staff?

f) Are they working full time or part time on school feeding?

Information management

108. How is information about the programme stored, analysed, and managed?

109. Is there a proper information management system in place for school feeding at the central, district level?

Monitoring and evaluation

- 110. Is there a monitoring and evaluation plan for the school feeding programme?
- 111. Does the plan include data collection, analysis, reporting, feedback, indicators, guidelines, and tools? Who is involved in monitoring the programme?
- 112. Frequency of monitoring visits per school per year (target vs actual). Does the government at national and local levels have the capacity to monitor or does it rely on external support?
- 113. Is there a budget for the monitoring and evaluation plan?
- 114. Are there any problems monitoring outputs (food, non-food items, and so forth)?
- 115. Are there any problems monitoring outcomes (enrolment, attendance, and other measures)? Is there a baseline for the programme?
- 116. Is there a baseline for the programme?
- 117. Has there been mid-term or end of term evaluation done?
- 118. How has the information from the evaluation disseminated and translated into action or decisions?
- 119. Is the information reported at any national or local level coordination mechanism?

Budget and Financial capacity

- 120. Who does the programme target?
- 121. What is the number of children targeted vs the actual number of that age group?
- 122. What is the budget for the program?
- 123. What is the cost per child per day
- 124. How do yearly priorities and resources within the government get decided and budgeted for?

125. Overall, how embedded is school feeding in national- and local-level planning and budgeting processes?
126. If the government allocates resources from national budget, how much are they as a percentage of the total programme requirement?
127. What are these funds for (food, monitoring and evaluation, management, and so forth)?

Food production and small holder linkages

128. Local food production/procurement: Are the commodities in the food basket locally or internationally purchased?

Food procurement, transportation, storage and handling

129. Procurement model/s: Which model is used, where and why was it selected?
- e) bulk supply models
 - f) school-based procurement (school chooses service providers)
 - g) cooperatives
 - h) catering companies
130. Who selects the procurement model? (i.e. centralised / decentralised)
- c) Transportation and storage
 - d) Delivery frequency to school
131. What are the programmes **strengths, weaknesses and challenges (SWOT Analysis)**

HOME GROWN SCHOOL FEEDING PROGRAM KEY INFORMANT INTERVIEW GUIDE: NUTRITION DEPT

Location_____

Position held by the informant_____

Name of Department_____

School feeding standard: Design and implementation

132. Has the program made any impact on the well-being of children? (probe: nutrition, health, education, other).
133. What is included in the menu? Including quantities per child per day (if no quantities, state this)
134. Could the food basket be modified to include more local food without sacrificing the nutritional content?
135. How can local processing and fortification be included in the food supply chain? Is there capacity in the country?
136. If the school feeding programme could be sourced locally, how would the quality of the food and the costs of the programme be affected?
137. What are the programmes **strengths, weaknesses and challenges (SWOT Analysis)**

HOME GROWN SCHOOL FEEDING PROGRAM KEY INFORMANT INTERVIEW GUIDE: SINGABAPHA

Location_____

Position held by the informant_____

Name of Department_____

Multi-sectoral coordination

138. Is school feeding discussed in any national-level coordination body (technical working group, task force, or the like) that deals with school, health, agriculture, and nutrition issues, or quality issues, or special cross-cutting issues?
139. Is there a national-level coordination body specifically for school feeding, led by the institution in charge of school feeding, that is operational and brings all stakeholders together regularly?
140. Is this coordination mechanism effective in making decisions for the programme?
141. Comment on the size of staff complement.
- g) Formal positions vs those filled.
 - h) Does the responsible unit in charge of implementing school feeding have a sufficient amount of staff?
 - i) Are they working full time or part time on school feeding?

Information management

142. How is information about the programme stored, analysed, and managed?
143. Is there a proper information management system in place for school feeding at the central, district level?

Monitoring and evaluation

144. Is there a monitoring and evaluation plan for the school feeding programme?

145. Does the plan include data collection, analysis, reporting, feedback, indicators, guidelines, and tools? Who is involved in monitoring the programme?
146. Frequency of monitoring visits per school per year (target vs actual). Does the government at national and local levels have the capacity to monitor or does it rely on external support?
147. Is there a budget for the monitoring and evaluation plan?
148. Are there any problems monitoring outputs (food, non-food items, and so forth)?
149. Are there any problems monitoring outcomes (enrolment, attendance, and other measures)? Is there a baseline for the programme?
150. Is there a baseline for the programme?
151. Has there been mid-term or end of term evaluation done?
152. How has the information from the evaluation disseminated and translated into action or decisions?
153. Is the information reported at any national or local level coordination mechanism?

Food production and small holder linkages

154. Brief overview of the structure of agriculture in the country. What are the main food crops and seasons, and where are the food producing areas, including historic levels of production, and areas of regular food deficit?
155. Small scale agriculture: Number of “small scale”/ smallholder farmers, and what is understood by the definition. Current small scale agricultural promotion/ development programmes and their success in the past/ now / challenges
156. Local food production/procurement: Are the commodities in the food basket locally or internationally purchased?
157. What are foods currently produced in the country (and normally used by the population) that would be appropriate for school feeding?
158. Are there locally processed foods or local businesses that might be able to supply food for the programme?
159. Could the food basket be modified to include more local food without sacrificing the nutritional content?
160. How can local processing and fortification be included in the food supply chain? Is there capacity in the country?
161. What type of community structures, businesses, or efforts could be tapped into for processing or sourcing the food for the programme?
162. Has there been an attempt at procuring more food locally? If so, what were the advantages, challenges, and constraints in procuring locally?
163. Have there been discussions with the government on possible procurement modalities for school feeding that can be more locally appropriate, including the possibility of linking procurement with agriculture-related activities?
164. If the school feeding programme could be sourced locally, how would the quality of the food and the costs of the programme be affected?

165. Role of Ministry of Agriculture: Has the Ministry of Agriculture been involved or contacted to make the connection between school feeding and national agricultural production?
166. How can the agriculture sector be more involved in procurement for school feeding?
167. At the local level, are the requirements for the school feeding programme communicated to the agriculture sector so that more crops are grown for the programme?

Food procurement, transportation, storage and handling

168. Procurement model/s: Which model is used, where and why was it selected?
- i) bulk supply models
 - j) school-based procurement (school chooses service providers)
 - k) cooperatives
 - l) catering companies
169. Who selects the procurement model? (i.e. centralised / decentralised)
- e) Transportation and storage
 - f) Delivery frequency to school
170. What are the programmes **strengths, weaknesses and challenges (SWOT Analysis)** To be asked in all interviews