

**FOOD FOR EDUCATION PROGRAMME AND PROSPECTS FOR
MULTI-SECTORAL GAINS: EXPERIENCES FROM KAZUNGULA AND
SINAZONGWE DISTRICTS OF SOUTHERN ZAMBIA.**

BY

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requirements for the award of a Masters in Business Administration –
Management Strategy**

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DECLARATION

I, **Lundu Sichala**, student number GSB150604 hereby, declare that this research titled; **‘Food for education prospects for multi-sector gains in rural Zambia: Experiences from Kazungula and Sinazongwe districts of Southern Zambia’** is entirely my own composition and that, all errors of interpretation and weakness of analysis in this work will be entirely mine. Further, I declare that this work has never been submitted for a degree, diploma or other qualification. This paper is hereby solely meant for the MBA in Strategic Management of the University of Zambia.

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APPROVAL

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ABSTRACT

Universal education inclusion has attracted high-profile attention internationally as an ideological project. This study explores Food For Education (FFE) Programmes and prospects for multi-sectoral gains in state and non-state driven projects. Previous studies on Food For Education Programmes have narrowly focused on implications for enrolment and attendance, neglecting the extent to which these programmes create prospects for multi-sectoral gains. The overall objective of this study was to explore FFE programmes and implications for multi-sectoral gains in Southern rural Zambia. Specific objectives considered the nature of FFE programmes in rural Zambia, processes and practices underpinning possibilities of multi-sectoral gains FFE programme and impacts of FFE programmes in host communities of Kazungula and Sinazongwe districts. Data was drawn from multiple sources including preliminary field visits, Key Informant Interviews, Focus Group Discussions and Questionnaires in the study areas.

Results show that FFE programme is narrowly linked to other related sectors, advancing pupil attendance, enrolments and retention. The study shows that the programme enhanced school enrolments and attendance because of food provisioning at school but both cases its nutritional objectives seem to be rarely met and community participation negligible. Community participation in the intervention is primary towards provisioning of free services such as labour and rain fed agriculture produces but this is narrow and unsustainable with insufficient impact across economic benefits to the host communities. Differences in interventions shape project outcomes and related benefits but both state and non-state supported interventions produce narrow linkages with communities and are unsustainable. Overall, the possibilities of school and community empowerment are slender at the moment but centrally lie in the ability to decentralise the delivery of the intervention. As a result, the current intervention somewhat takes power away from schools and local communities to participate in FFE programme which affects the programme's sustainability. This study calls for multi-sectoral approach and the need for FFE programmes to be designed as part of an effective package of interventions that address not only attendance, retention but also nutritional needs as they relate to agriculture opportunities of host communities.

Key words: Food for Education, GRZ, HSFP, Sustainability, Kazangula, Sinazongwe, and Zambia

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I dedicate this thesis to my wife (Chilombo) and my children, Wangu T. Sichala, Lou T. Sichala, Kuzipa H Sichala, Dickson Lungu, Mudenda Hanyenzu last but not the list my mother (Banji). Your love, encouragement and care propelled me to this height. This piece of work is all yours.

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LIST OF ACRONYMS

FAO	Food Agriculture Organisation
GRZ	Government of the Republic of Zambia
FFE	Food for Education
FRA	Food Reserve Agency
HSFP	Homegrown School Feeding Programme
MDG	Millennium Development Goals
MoGE	Ministry of General Education
NGO	Non-governmental Organisation
SDG	Sustainable Development Goals
SFP	School Feeding Programme
SME	Small to Medium Enterprise
WFP	World Food Programme

CHAPTER ONE: INTRODUCTION TO THE STUDY

This introductory chapter provides the study's introduction (section 1.1), background of Food For Education (FFE) programmes in Zambia (section 1.2), statement of the problem (1.3), research aim (section 1.4), objectives of the study (section 1.5), research questions (1.6), justification of the study (section 1.7), scope of the study (section 1.8), definition of key terms (section 1.9) and the organisation of the study (section 1.10).

1.0 Introduction

Universal inclusion in education has attracted high-profile attention internationally as an ideological project. As Dyer (2014, p.9) notes, "*Education policy discourses in Education for All era have articulated an increasing concern over those who remain excluded*" and the role of the public policy in representing inclusion and exclusion. Exclusion is understood as an undesirable state and amenable to correction – by appropriate policy intervention such as through the Food for Education Programmes. The unincluded learners are characterised as 'marginalised,' 'excluded,' 'backward,' or 'deprived,' and their presumed characteristics make for a huge category of people who regardless of their differing values and way of life are described as 'hard to reach' (UNESCO 2010). Education for all was proposed in a holistic, broadly conceived vision as inclusive concept and 'an active commitment' to removing education disparities was demanded.

Persistent hunger in most parts of sub-Saharan Africa has or a long-time ignited debate on how it acts as a barrier to school participation and thus inclusion, raising the need for social safety nets. In many poor households of the Sub-Sahara African countries, hunger has been a barrier to school participation (Bundy et al. 2009). As Yendaw (2015) showed, hunger-stricken children are unable to enroll in school at the right age and cannot regularly attend school even if enrolled. Most importantly, such children are likely to quit school because they have to support with their immediate subsistence needs before they get ready for schooling (Weber 2014). Thus, low school enrollment, low class attendance and high student drop-outs have been identified as recurring problems in child education among poor households especially in areas of high food insecurity across the region of sub-Saharan Africa (Bwonda et al. 2005). Due to these reasons the level of education attainment has also been low in many developing countries although both

private and social returns to education are recognized to be high (Adelman, Gilligan et al. 2008; Bloem 2008).

Governments through various stakeholders and policy actors at different ministerial levels have used several interventions to target and include different groups within a population through social safety nets to address the problem of education, hunger and malnutrition (Gilligan et al. 2008). Among the many interventions that governments and non-governmental organizations (NGO) have utilized in targeting and including areas where a significant part of the population faces under-education, poverty and chronic hunger is Food for Education (FFE) and the social cash transfer schemes (Francisco 2009). Food for education is viewed as a social safety net that provides food to school children or their family or both in exchange for enrollment and continued attendance in school for school-aged children – education inclusion (Espejo 2015). These policies directly relate to the three Sustainable Development Goals (SDGs) that aim at eradicating extreme poverty and hunger, achieve universal primary education, and promote gender equality and empower women (Espejo 2015). One of the motivations for establishing school feeding programmes is to provide targeted families and their children, including girls, an incentive to attend school (Jomaa 2011) – thereby including them in educational opportunities.

However, studies indicate that the idea of using food for education programmes as a vehicle for multi-economic achievements or development has also gained momentum (Gokah 2008). This has led to the rationale of food for education programmes to draw on and use locally produced food thereby providing a regular market opportunity and a reliable source of income for smallholder farmers and entities (Wheeler 2011). Other benefits of sourcing locally produced food for school feeding relate to appropriateness of the food, programme sustainability, costing and avoidance of aid dependence at all times by developing countries on the one hand and host communities on the other (Sumberg 2011).

Despite these on-going social safety net initiatives taken by state and non-state actors in poor countries such as Zambia where students' enrollment in schools is reportedly low, many children excluded are excluded or cut out of schools. Studies revealed that only 59 percent of students enrolled in primary schools in the low-income countries completed primary education (UNESCO 2012). Whilst these interventions espouse multi-sector development driven design, little is known about the actual underpinning processes and outcomes for hosting communities of these

programmes especially that local community participation and ability to benefit across several sectors. This study explores FFE programmes as device or framework for education inclusion and implications for multi-sectoral gains.

1.2 Background to Food for Education Programmes in Zambia

Zambia is one of the poorest countries in sub-Saharan Africa with a population of just about 17 million people. The country is identified as one of the highly urbanised on the sub-region, with around 40% of the population living in the main cities (CSO 2015). Despite donor driven Structural Adjustment Programmes in the early 1990s, poverty remains a major problem. According to the recent living conditions monitoring survey of 2015, 73% of the population is considered to be living in poverty (CSO 2015). The country has a significant gender difference, with much higher prevalence rates among females compared to male. Additionally, the impact of HIV and AIDS on families is substantial, with many households affected and a huge orphan/vulnerable children (OVC) population as a result (Semba 2016). Poor economic growth and high disease burden as well as climate change combine to constrain rural production and hinder access to social services, including schools.

The Government of Zambia first initiated the food for education in public primary schools back in 1964 after attaining independence (MoGE 2019 p. 8). However, the programme lapsed in the 1970's and 1980's due to an economic recession and was only reinstated in 2003 (MoGE 2019 p. 7). However, in 2003 the World Food Programme (WFP) re-introduced FFE as a means to attract children to go back to school particularly in drought affected areas (WFP 2008). In 2003, a WFP pilot project of School Feeding Programme was commenced in 30 schools in three most drought-affected districts (Sinazongwe, Siavonga and Gwembe) in Southern Province. The WFP Zambia, in cooperation with the MoE was then providing hot nutritious meals of High Energy and Protein Supplement (HEPS) to over children in 829 schools situated in the most drought prone and food-insecure areas with low educational indicators (Munakayumbwa 2011). The Government of the Republic of Zambia (GRZ) on the other hand also initiated a FFE project upon realizing the debilitating impact of HIV/AIDS and other social issues on school children (MoGE 2019 p. 7). The high prevalence of diseases and low production of food have impacted negatively on the people living in most district of the country. In Zambia, studies reveal that the majority of the

people live in absolute poverty with great consequences on children (Chola 2017). Between 2006 and 2008, Zambia implemented two FFE programmes, one supported by the Ministry of General Education (MoGE) (formally Ministry of Education) while the other one was supported by World Food Programme (WFP) (MoE 2012). This is somewhat of a two-pronged approach.

In 2008, the Ministry of Education (MoE) provided a policy directive to merge the existing two programmes and use a more cost-effective basket (MoGE 2019). The Ministry requested for technical assistance from WFP to develop a nationally owned, locally sourced food-based School Feeding Programme. Accordingly, the Government of Zambia through MoE launched the Home-grown School Feeding Programme (HSFP) (Saber *et al.* 2019). Recent literature reveals that the FFE programme indicated that parents and teachers were mandated to mobilize the community and many other resources to ensure smooth running of the programme (Lumbwe 2017). The 2008 FFE programme targeted to reach at least 1, 250, 000 learners by the year 2016 (MoGE 2019 p. 8). The aim was primarily to increase enrolment, reduce absenteeism, and enhance children's nutritional status and cognitive development. In the year 2012, the MoE revised the target beneficiary to 2,000,000 primary school learners (MoE 2012).

The FFE has been implemented by the Government of Zambia with technical support provided from World Food Programme in key areas such as capacity building of the implementing districts, piloting decentralized procurement of pulses and vegetables from local farming communities, supporting farmers with skills in business management, negotiation, bulking, marketing access and information technology to transform the way farmers market their produce (Mayaki 2013). Although some reports show that there is an increase in students' enrolment in primary schools among Zambia's rural school-aged population, still about twenty five to – thirty percent (25 – 30%) drop out of the schools particularly in the rural areas, opting to help in family or household activities to enhance household food security (Uwezo 2011). Higher dropout rates of children in rural primary schools stem from factors such as increased poverty and hunger, but the implementation of a multi-dimensional developmental intervention should be able to uplift the living standards of the hosting community and implications for multiple pathways for benefitting and ensuring sustainability.

1.3 Statement of the Problem

The overall objective of this study was to explore Food for Education Programmes and implications for multi-sectoral gains in rural Zambia. Food for Education Programmes have emerged as a central feature of intervention in developing countries such as those in sub-Saharan Africa including Zambia to ensure education for all and inclusion. In Zambia, the Food for Education was designed and introduced to serve multi-purposes beyond provisioning of food to learners as a way of improving school enrolments, attendance and retention among school aged children of vulnerable household in rural communities. This social intervention was also expected to drive rural economic growth through community agriculture development and nutritional improvements more widely.

Thus, the Food For Education Program in Zambia was primarily meant to benefit school children, smallholder farmers involved in food production, and community groups involved in food preparation and other income-generating activities such as transportation and food processing associated with school feeding provisioning (MoGE 2019 p. 3). Efforts towards improving educational performance through FFE programmes have however narrowly tended to focus on enrolment and attendance levels (Alderman et al. 2008). Little is known about the extent to which such programme implementation shapes prospects for multi-sectoral gains in host communities of Zambia. This study addresses this gap by examining two programmes in Sinazongwe and Kazungula districts.

1.4 Research Aim

The overall aim of this study was to explore Food For Education programmes and implication for multi-sectoral gains in rural Zambia.

1.5 Specific Objectives of the Study

The study was underpinned by the following interrelated specific objectives:

- a) To identify the nature of food for education programmes in rural Zambia

- b) To explore and understand processes and practices underpinning multi-sectoral attainment in the food for education programme in Kazungula and Sinazongwe districts of Southern Zambia.
- c) To evidence community impacts of the food for education programmes in host communities of Kazungula and Sinazongwe districts.

1.6 Research Questions

- a) What is the nature of the food for education programme in rural Zambia
- b) What are the processes and practices underpinning Food for Education Programmes and multi-sectoral attainment in Kazungula and Sinazongwe districts of Southern Zambia?
- c) What are the community impacts of the food for education programmes in host communities of Kazungula and Sinazongwe districts?

1.7 Justification of the Study

Existing literature on education inclusion and education for all has focused on impacts on enrollment and attendance. Rather than a narrow focus on education sector which has been the preoccupation of previous researches, the current study broadens the analysis of FFE programmes in its broad sense. The results of this study may provide insight across sub-Saharan Africa into how food for education perceptions might be deployed to advance multi-sectoral gains in host communities not only by impacting on learners but also the community at large. A focus on Zambia provides a typical case that can have wider relevance and application across sub-Saharan Africa. The study provides insights into how FFE programme can be deployed holistically to ensure sustainability by drawing from local experiences in agriculture, health and local commerce sectors.

1.8 Scope of the Study

The study explored the design, implementation and impacts of the food for education programme in the host communities of Kazungula and Sinazongwe districts. The study examined the implementation of the Food for Education programmes in schools that started participating in 2010 when the Food For Education Programme transited to a community owned programme. Further, it was appropriate to obtain information concerning the current status of the programme

to describe what the current situation is with respect to the variables of this study. All the senior members of staff at the district education, agriculture, health, related development partners and program beneficiaries were targeted. These were persons with sufficient knowledge of Food For Education matters. This study engaged teachers, parents, pupils and key community leaders in the host communities to understand the operation and acceptance of the food for education programme in the two districts.

1.9 Definition of key term

This study makes constant reference to the concept Food for Education. Food for Education is a programme using food as a resource to improve educational outcomes (Poulton *et al* 2006). This study adopts the definition of sustainability offered by Cambridge dictionary. The ability to continue at a particular level for a period of time.

1.10 Organization of the study

This study is organized as follows. Chapter one is the introductory chapter. The chapter focused on the introduction to the study, background of food for education in Zambia, statement of problem, research objectives and questions, justification of study and the scope of the study

Chapter two is the Literature Review chapter. The chapter provides an understanding the food for education programme in Africa, key perspectives of food for education, multi-sectoral coordination, importance of design and implementation stages in FFE, possible challenges of implementing food for education programmes, behaviorism theory and the conceptual framework guiding this study.

Chapter three is the Research Design and Methodology which provides the methodology, sample selection, data collection tools and ethical considerations

Chapter four is the Results Chapter. The chapter presents the result analysis and findings such as economic challenges leading to the implementation of the FFE, how FFE operate and how it delivers to learners, community, agriculture support and health factors related to children of school going age. Constant reference is made to Research Objectives.

Chapter five presents the discussion and explores experiences and dynamics of the FFE programme as they relate to Literature. It relates existing findings to the implications on the wider empirical literature.

Chapter six in the final chapter provides the study's conclusions, recommendations and recommendation for future studies.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This Literature Review chapter provides historical perspectives towards the introduction of the Food for Education Programmes, perceived benefits and cost drawn from the Food for Education Programmes. The chapter examines Food for Education Programmes transformation to Homegrown School Feeding Programmes as a multi-sectoral development approach (section 2.2), Governance and multi-sectoral coordination mechanism (section 2.3), the importance of planning and implementation stages of Food for Education (section 2.4), challenges faced in implementing Food for Education (section 2.5), the behaviorism theory (section 2.6), the conceptual framework guiding this study (Section 2.7), knowledge gaps for the study (section 2.8), and finally provide a summary of chapter (section 2.9). The importance of the chapter is to provide insights on existing theoretical and empirical studies and how the current study has been positioned.

2.1 Understanding School Feeding Programme in Africa

Recent economic challenges such as the financial crisis of 2007/2008 have reignited concerns and the need to strengthen Food for Education programmes across poor countries such as those in sub-Saharan Africa (Bundy *et al.* 2009). A World Bank and World Food Programme (WFP) related joint publication “Rethinking School Feeding” called for the need to clarify the underlying issues and education for all (Bundy *et al.* 2009). Many African children or learners reportedly go without a meal in the morning, walk long distances to school, making them hungry and restless to concentrate on learning. Children face enrollment challenges as they are forced to work, look for food, or help with family chores, relegating schooling opportunities to a lesser priority. Many students go to school feeling sleepy and some would leave early because of hunger (Sari 2008). Children that proceed to enroll are frequently absent; reducing their learning capacity and academic performance (WFP 2011).

Against this background, the post-independence era witnessed by many sub-Saharan governments embarked on food for education programmes but slowly stopped as most economies could not sustain the programmes due to social and economic challenges. Some of

these challenges related to declining mineral prices on the international market and London metal exchange, fluctuating and low annual gross domestic product growth due to internal and external forces impacting negatively on the economy, pressure for improved economic infrastructure and lack of institutional capacity (Gelli 2010). The El Nino effect and famine of 2001/2 farming season in the sub-Sahara region revived the need for Food For Education to incentivize education as hard-hit countries suffered huge drop outs and poor enrolments of learners (Calde et al 2006). This resulted in school meal programme implemented by the various governments with assistance from regional organisations such as New Partnership for Africa's Development (NEPAD), Comprehensive African Agriculture Development Programme (CAADP) and the World Food Programme (WFP) since 2003 (Calde 2006).

The idea behind the partnership with CAADP created a framework that inspired and energised African agricultural research institutions, farmers' associations, African governments and the private sector who believe that agriculture has a pivotal role in development (Alison 2011). This meant bringing together the public and private sectors and civil society to increase investment and improve coordination that was aimed at inclusive economic growth, benefit smallholder farmers, boost food production and end hunger across the continent (Mayaki 2003). Whereas, the World Food Programme (WFP) provided technical assistance in key areas such as: capacity building, piloting decentralized procurement of pulses and vegetables from local farming communities, supporting farmers with skills in business management, negotiation, bulking, marketing access and information technology to transform the way farmers market their produce (Jacoby 2002).

According to the (WFP 2011), the implementation of school feeding programmes mainly has focused on improving four (4) key objectives of which included among them the following:

Table 2.1: WFP objectives and focus areas

WFP Objective	Narrative/Concern
To provide Child protection	This means that the programme is used to help protect children from the risk of child labor and other harmful activities.
To provide a Platform for wider socio-economic benefits:	School feeding has potentially significant economic development outcomes - when integrated with other school health and nutrition, environment and water and sanitation interventions. In addition, complementary activities to bring greater awareness on sexual and reproductive health and HIV and AIDS issues, environment awareness and specific activities like tree plantation, water conservation systems and renewable energy sources use.
To promotes equal access to education and learning	Increased access to education by enhanced enrolment, attendance and completion of disadvantaged learner throughout the country
To improve learning	Increased children's ability to concentrate and learn, thereby enhancing national educational achievement by addressing short-term hunger-common in children who cannot manage to eat before going to school.

Sourced: Drake et al 2016

Food For Education contributes to having healthy and well-educated children but its impact also depends on whether quality education is available (Guo et al. 2002). Food for Education supports families in securing education for their children, especially girls who are often differentially excluded from education. This promotes human capital development in the long run and helps break intergenerational cycles of poverty and hunger (Morgan 2008). Therefore, Sub-Sahara Africa food for programmes has experienced continued expansion and refinement, especially during the past decade (Drake et al. 2016). School feeding is an important safety net programme and is considered to have a large coverage of all social protection interventions employed by developing countries. The food for education programme provides direct support to the poor by transferring incomes to families (Drake et al. 2016).

Since the introduction of free compulsory primary education in most sub-Saharan countries around 2003, the NEPAD, CAADP and WFP-assisted feeding programmes have developed alongside educational policies trying to support increased student health, attendance and programme outcome performance (Buttenheim 2011). After recording a number of cases relating to absenteeism, non-enrolment of school aged children in most low-income communities Governments of the Sub-Sahara realised that education system will lose out on a number of

children's learning time (Walder 1995). Available statistics of the sub-Saharan poor communities indicated that from 2000 – 05 only about 42 percent of qualified applicants of school going age were enrolled in basic schools (Calder 2006). To address historical primary school absenteeism and non-enrollment among African most impoverished and traditional communities (Learners), free meals are a tool used as an incentive to attract school-aged children to class (Gilligan 2008).

Within rural communities in which food is scarce, this daily meal provision relieves much of the burden of childrearing. The beneficiaries of the programme are usually from extremely poor families that are largely unable to provide the minimum recommended daily allowances of calories, protein, and essential micronutrients to their children. These poor conditions may irreversibly stunt the mental and physical development of young children, resulting in wasted potentials and lifelong difficulties (Galal 2000).

Nearly every country in the world today whether high- or low-income status, seeks to feed at least some of its school children through government sponsored programmes (Donald 2013). Moreover, when the financial crisis emerged in 2008, the World Bank crisis response mechanisms experienced unprecedented demand to strengthen support for food for education programmes (Bundy 2012). Government spending has an impact on the economy. The increased government spending may create a multiplier effect. If the government spending causes the unemployed to gain jobs then they will have more income to spend leading to a further increase in aggregate demand (Williamson 2011).

Foods for education programmes have been thought of as social safety net interventions to achieve educational and nutritional goals only, but more recently these programmes and others that involve food aid have been thought of as a possible tool for local agricultural development (Wheeler et al. 2011). In the past, procurement of food for education programmes usually came from foreign food aid, because smallholder farmers in Africa produce poor quality food stuff except for fresh flower farmers and are still among the poorest in the world (Blössner 2003). It is difficult for them to maximize their potential without modern agricultural technologies, sufficient investment and a distribution structure that remains ill-suited for accessing markets (Blössner 2003). Some analysts have argued that when food aid is distributed, there are distortions to the local markets, which often results in lower prices and provide disincentives to local producers, equally destroyed and suffocated the market for expensive locally produced food (Barrett 2006).

Studies indicate that food acceptability was another challenge among local people who were being introduced to new food staffs (Kremer 2004). Leading to the development of programmes such as the WFP's Purchase for Progress (P4P) initiative to reverse this trend and helped lead others to look to Home Grown School Feeding as a tool for agricultural development (WFP 2011). In an effort to transition away from WFP/NEPAD assistance and create a more sustainable and locally integrated programmes Sub-Saharan governments began implementing a homegrown School Feeding Programme (HSFP) in July of 2009 (Espejo 2009).

The manner in which the WFP school meals goals link together can be seen in the proposed food for education programmes, which are designed to supply food for education programmes, from procurement of locally produced food while enhancing the domestic production and demand for food locally (Ahmed 2014). Successful national food for education programs in middle-income and high-income countries rely on local procurement of commodities, while programs in low-income countries where discovered that they were dependent on external sources of food aid (Butterheim et al. 2011). This suggest that there was an opportunity for low-income countries to kick-start their transition in establishing sustainable sources for some of their commodities but also contributing to local economic development (Vermeersch 2004). Food for education are not strictly limited to the purchase of local products for schools from smallholders but is usually designed to achieve nutrition-sensitive objectives and includes complementary interventions for farmers and local economic activities within communities (Borja *et al.* 2012).

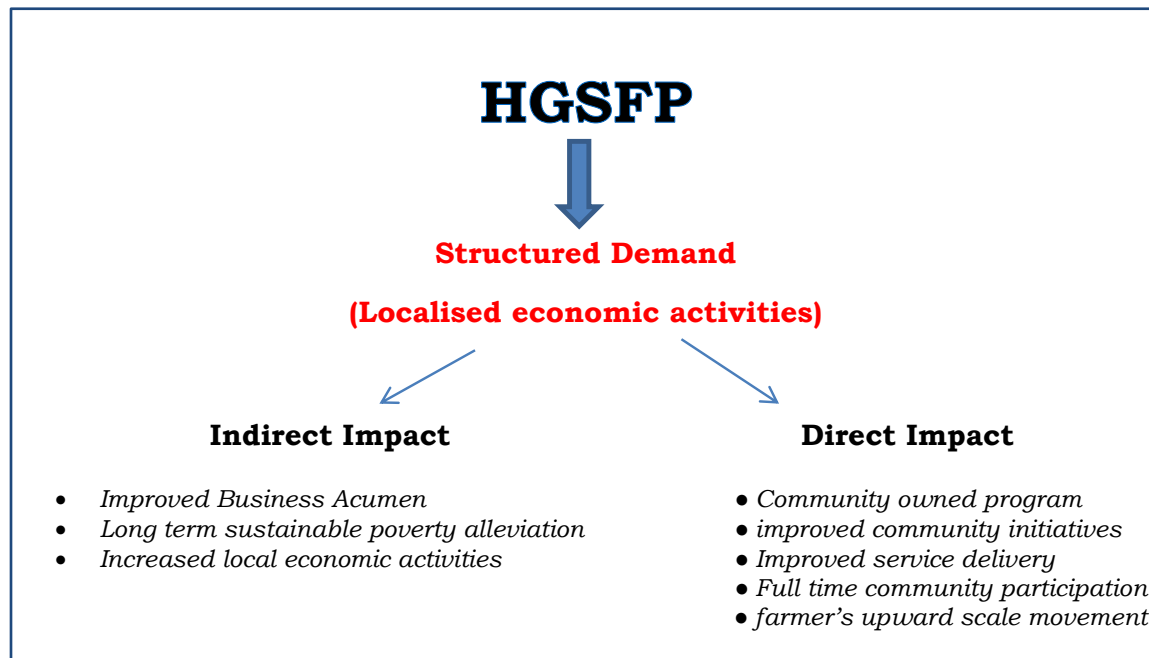
Overall, even if only a percentage of food is purchased locally from smallholder farmers, a school feeding program can be considered as 'home-grown,' (Camp 2001). This is so provided that the local purchases are designed to support and boost the local economic activities (increased productivity and net earnings hence improved living standards) and provide food markets and such objectives are taken into regard along the policy design and implementation of the food for education program (Jomaa 2011).

Linking Food For Education Program to local production is not necessarily a new phenomenon. Many countries have developed different ways of creating this link, depending on the context, the capacity of farmers to supply schools, and different degrees of community participation (Alderman 2012). For instance the 2004 'school milk program' was introduced in Kenya to create a stable market for Kenyan dairy producers, providing free milk (body essential vitamins)

to 4.3 million primary school pupils, (United States Department of Agriculture 2009). This creates a direct and increased farmer net earnings hence improved living standards and has the ability to influence growth from small scale to emergent farmer category (Gilligan 2008).

However, the distinctive and innovative element of FFE programs, compared to traditional school feeding programs, is the prioritization of smallholder local economic activities in a way that maximizes sustainable benefits on prices, opportunities for commercialization, market linkages and access to productive assets for smallholders and other stakeholders along the value chain (Studdert 2004). The FFE programs are intended to draw both indirect and direct benefits for the local communities where the program is being implemented (Drake 2009).

Figure 2.1: Impact of FFE on local community



Source: Adapted from (Espinoza *et al.* 2012). In relation to Kenya and Botswana

Figure 2.1 shows that the FFE program is thus a multi-dimensional model that can be implemented in different ways. Related designs and scope differ in each country depending on the model used to link schools to local production, their context and the objectives they intend to achieve (Espejo 2009). There is no one model that is fit for all contexts. Countries have developed their own models, based on their specific desired context and objectives, and even within one country different models may coexist (Wheeler 2009). For instance, the Government

of Zambia through the MoGE since 2003 has provided school meals to vulnerable learners in thirty-eight (38) districts of the country. This is by means of learners being provided with a meal while attending class referred to as school meals programme (MoE 2002).

2.2 Key perspectives of Food for Education Program

Historically, the involvement of large foreign development actors has greatly limited the sub-Saharan government's role in the direction and stewardship of these programs (Bundy et al. 2009). The heavy reliance on foreign aid and management has subjected the programs to fluctuating and often conditional, international support affecting sustainability (Finan 2010). In an effort to transition toward a more sustainable and nationally integrated alternative, most sub-Saharan governments advanced the Homegrown School Feeding Program (HSFP) around 2009 (Alderman et al 2012).

Though financial strains and infrastructural challenges have called into question the government's ability to successfully fund and operate their own food for education programs, sub-Saharan government's renewed commitment to education, agriculture, and rural development shows great promise (Galal 2005). Additionally, since the drought crises of 2001/02, it has become evident that governments consider these programs as safety nets, which in addition to their contribution to education also provide direct food support to affected children and their families, as part of national poverty and hunger-reduction policies (Borja *et al.* 2012).

Furthermore, reports also establish that Food For Education programs are important not only for their educational benefits, but also because in the short term they provide a safety net during crises and in the long term they act as investments incentives in human capital development, local economies improvement, hunger reduction and gender equity (Alderman et al 2012). Therefore, this means that programs need to be country driven to attain sustainability and development of local economies (Alderman et al. 2012).

Sub-Saharan government policies commit to moving away from a project-based approach to a more country long-term, sustainable approach to HSFP's (espejo et al. 2009). This includes an emphasis on government ownership and on making program more cost efficient, it also should highlight local procurement or enterprising and the link with smallholder farming and a commitment to better and more local nutritious food baskets (Bundy 2012). The policy is

appropriate because governments with the long-term objective of phasing out donor assistance, leaving behind sustainable, cost-effective national food for education programs that are embedded within broader ministerial interlinked national policies and frameworks (Alderman 2012).

2.2.1 Food for Education, Local Production and Productivity

There is growing excitement around the idea that food for programs that use food produced and purchased locally or at least within the boundaries of a country, can generate additional benefits for the children involved and also for local farmers, communities and economies (Wheeler 2011). For instance, linking the program to the agriculture sector has direct economic benefits and can potentially benefit the entire community as well as the children. The link to local agricultural production can help in the sustainability of the programs and create predictable and structured markets for local produce (Francisco 2009).

This approach has been identified as one of the critical elements in transitioning to sustainable programs. For instance, in the Ghana school feeding program, the caterers are not restricted or guided in their procurement and are able to procure on a competitive basis but at least 30% should be purchased from small-scale farmers where quality and quantity can be attained by local producer's Technical assistance (Plan 2011).

The link with local agriculture can help improve the quality of school food. Local procurement can also be an opportunity to provide a greater diversity of foods, including those that are fresh and unprocessed (Alison 2011). Several middle - income countries (e.g. Brazil, Chile and Scotland) have demonstrated the effectiveness of purchasing school food locally to feed children better and stimulate the local economy (Jomaa 2011). A number of low-income countries are now exploring ways to purchase food closer to schools, in particular from smallholder farmers to provide them with a stable market for their products, increase their incomes and reinvest resources into the local economy (Bwonda 2005). They are also empowering school-level committees to purchase food closer to the schools, so that the community is involved in making decisions and managing resources

The concept of procuring locally is already well-accepted in rich and middle-income countries, and it is being increasingly adopted in low-income countries (Alison 2011). As a result of the

local procurement concept and evidenced achievements, the rethinking of food for education programs towards sustainability and local development, several middle and low-income countries are attempting to reform existing school meals programs with the above issues in mind. Brazil is perhaps the best-known and most successful program providing a stable market to family farmers (Buttenheim 2011). Ecuador, Honduras, Namibia and Peru also are linking their programs to local production (Buttenheim 2011). In the case of Ghana, School Feeding Program was designed as a strategy to increase domestic food production, household incomes and food security in deprived communities (Government of Ghana, 2006a).

According to the WFP (2013) State of Food for Education Worldwide Report, most countries that are fine tuning the link of the HSFP and agriculture development have faced some challenges which include:

- a. The implementations of Food for Education Programmes aimed at supporting small scale farmers such as those in education, agriculture and private sectors (NGO's inclusive) not being well coordinated. The argument is that the link between food for education and local agriculture does not work unless there is investment in the production and post-harvest management of food (WFP 2013. p. 51). Therefore, key design and implementation factors need to be taken into consideration while implementing school feeding that incorporate local agricultural production.
- b. The way in which governments procure products from local farmers differ from country to country, some governments transfers cash to schools so that the schools can procure the food from local markets, as is the case in Kenya (USDA 2009). Others direct the resources to districts or regions which are responsible for local procurement, like in Brazil (FAO 2014). Others use catering companies at different levels to provide food to schools, as in Ghana (Morgan 2008). All of these models have trade-offs that need to be considered, raising the need for country-specific studies.

The main focus on agriculture in meeting school demands for food include ensuring a stable supply of food to schools all year long especially in arid areas where food may not be available locally; enhancing the nutritional quality of the food (for example through fortification) as well as taking into consideration that local capacities to process or fortify food may be limited; ensuring the quality and safety of the food; maintaining overall program costs at reasonable

levels while benefiting local farmers at the same time; and having a contingency plan for when food is not available in the country due to drought, floods or any other disaster (Sonnino 2008).

The program, “One School, One Canteen” a food for education program under the Government of Côte d’Ivoire, has been supporting local communities or farmers and encouraged to manage the homegrown school feeding program by producing foods that meet set standard specification (Probart 2016). The program support aims at enabling the smallholder farmers to increase productivity and progressively meet the school food requirements. The support also includes providing hybrid seeds or seedlings including tools, advice on the establishment of cooperatives (e.g. legal support, creation of internal rules and regulations and financial management); and training on farming and livestock techniques, livestock health protection (including vaccinations), sanitation, food conservation and processing and marketing techniques (Francisco 2009).

Furthermore, Agricultural extension services are provided by a number of institutions linked to the Ministry of Agriculture, in close collaboration with the school feeding unit. While as the Government has been focusing on creating productivity among small scale farmers, it also buys food for the program from large suppliers when smallholders cannot meet the demand. In the 2008-2009 academic years, two hundred and sixty-five thousand (265,000) school children in two thousand and twenty seven (2,027) schools in Côte d’Ivoire benefited from this program. Additionally, nine hundred and sixty-one 961 production centers participated and sold one thousand two hundred and seventy (1,270) tons of food, the program creates a permanent market for small scale products of food in the country (MoA 2010 p. 65).

The school projects are with limited production capacity, with over sixty – seventy percent (60 – 70 %) of the food imported from outside the district (USDA 2009). Rural farmers live among the poorest communities where school feeding is targeted and are usually located far away from the point where they can access key agricultural inputs such as water, fertilizer, pesticides and seed, lack adequate large-scale storage facilities, have little access to affordable bank credit, and are unable to efficiently transport bulk harvests (MoA 2010). As a result, instead of funneling money into local communities, many claim that the main beneficiaries of FFP are non-local commercial food traders.

The agricultural sector and the livelihoods of family farmers in sub-Saharan Africa can be improved through greater engagement with markets. This transformational potential is presently constrained by the failure of input and output markets, poor infrastructure and sub-optimal use of productivity enhancing technology (Chandler et al. 2016). However, by “structuring” demand in ways that make it easier, less risky and more profitable for family farmers to engage with markets, and by providing an array of complimentary services (training, credit, access to technology), food procurement for social protection programs (such as Food for Education) can be used to kick start this market-based transformational process (Sumberg 2010). Studies also indicated that some of the support the farmers received didn’t suite the local farmer’s capacity and was only available to a limited number of farmers hence not impacting to all farmers but a selected few (Chandler et al. 2016).

2.2.2 Food for Education , Child Development and Health

Although food for education programs are promoted for increasing educational achievement, they also play an important role in achieving the nutritional goal (albeit for children that already passed the critical early childhood influencing phase). For families facing poverty, food choices are usually limited, resulting in nutritionally inadequate diets that are often deficient in vital micronutrients (Ash 2003). Deficiencies of micronutrients such as iron or vitamin B-12 can result in increased vulnerability to infections, stunted growth and diminished cognitive performance in school-age children (Arsenault 2009). There is a direct link between food for education and nutrition sectors. It boosts a child’s nutritional status and ability to learn and also increases a child’s access to education in areas where this is still a problem (Pollitt 1995).

There is evidence that indicates that food for education acts as an incentive to get children into school and help keep them there, enhancing enrolment and reducing absenteeism (Bloem. 2008). Some studies have shown strong benefits for girls in countries where gender disparities are still a problem. When children are in school, school feeding program can contribute to their education by avoiding hunger, improving their nutritional status and improving children’s cognitive abilities. This, however, depends on the quality of the food basket and whether or not it is providing the most important micronutrients that a child needs to develop and learn (Arsenault 2009). The importance of locally sourced food supplies thus relates to the appropriateness,

acceptance and quality of the food which greatly enhances social economic outcomes directly and/or indirectly.

2.2.3 Food for Education and Social Protection

Providing food for consumption at school is beneficial for learning because it relieves immediate short-term hunger, enhancing attention and higher cognitive abilities (Simeon 1998). Alleviating short-term hunger among children at school may contribute to improved performance in school tests and promote normal progression from grade to grade in completing basic education. The ration should be served as early as possible during the school day, for maximum benefit while the child is in school. Therefore, social protection systems are designed to help households manage risks in the face of these challenges. Unemployment benefits, health insurance, access to social services and social safety nets are all part of the system of policies designed to protect people from destitution and help them invest in their future (Jacoby 2002).

Poor people are disproportionately at risk of losing their homes, their livelihoods and their assets because of unemployment or sickness of a family member. People already living in poverty are less able to bounce back or recover from the effects of a financial crisis, spikes in food and fuel prices, conflict, disasters, droughts or floods. After being hit by these events several times, they become less and less resilient. They also resort to negative coping strategies, such as taking their children out of school, often to have them work or the one meal a day which is mostly used in sub-saharan region. Any gains made in the past are quickly lost to a downward spiral of chronic poverty and vulnerability (Bundy and Burbano, 2011).

Like cash transfers or any other type of conditional transfer, food for education represents a transfer of income to a household (Grosh et al. 2011). If counted, the economic value of the meals amounts to significant amounts for a poor household. Providing income support to vulnerable households through food for education enhances their ability to withstand a shock. All these programs are a set of public and private policies and programs aimed at preventing, reducing and eliminating economic and social vulnerabilities to poverty and deprivation (Grosh et al. 2011).

The 1997 economic crisis in Indonesia led to a doubling of the numbers of out-of-school children, while droughts in sub-Saharan Africa have been associated with declines in both

schooling and child nutrition (Bundy et al. 2011). In the 2008 crisis, about half of the households surveyed in Bangladesh had reduced spending on education to cope with rising food prices, with girls particularly at risk (Bundy et al. 2011).

In the case of the Guyana food for education programmes and its impact on education, three survey rounds took place in 2007, 2008 and 2009 in two of the poorest regions of the country (Borja 2014). Results showed a significant positive impact on school attendance, academic performance, classroom behavior, nutritional status and community participation, especially for the poorest. Enrolment and attendance increased by 16 and 4.3 percent respectively in the assisted schools between 2007 and 2009. In the same period, children benefitting from the programme grew 0.8 centimeters more than children attending non-assisted schools (Borja 2014).

However, critics of the program also indicated that as a result of the program being inter-ministerial coordination (Education and Health) was poor and each ministry wanted credit for the success hence affecting objective success and the requirement for participation to school feeding which required a proposal writing and training also affected the programs ability to be national in nature because of lack of required resources to conduct program pre-requisites for implementation (Suraya 2012).

The challenge in low-income countries is how to ensure institutionalization given limited resources and capacities (Alderman et al. 2012). Some key issues have commonly been raised by countries implementing the School Feeding Programs in the context of education and social protection:

1. The careful selection of program beneficiaries making sure that the poorest children are getting most of the benefits is one way to make the best use out of scarce resources. It also ensures that the programs are contributing to equity levelling the playing field for the most disadvantaged, with these objectives in mind. However, Burbano contends that countries can also direct these programs to a specific group of the population that is more vulnerable or more at risk (Burbano 2011).
2. Keeping a systems view refers to School feeding as only being part of the entire network of programs that support vulnerable families (Alderman et al. 2012). Countries are trying

to ensure that food for education is complementing, not duplicating, the efforts of other programs. They are also linking the program to other interventions that support children in their different stages of development.

This has shown that critical understanding of context specific realities in the design and implementation of FFE Programme is important in shaping outcomes.

2.2.4 Local Small and Medium Enterprise Development

Small and medium sized enterprises (SMEs) are important drivers of growth in economies across Sub-Saharan Africa, accounting for up to 90% of all businesses in these markets (World Bank 2010 p. 28). Small and medium enterprises (SMEs) are decided by the number of employees and or revenues they have or can generate. To be considered a small and medium enterprise, these two determinants must fall under a certain standard held by the respective country. Different countries have varying standards to qualify for this identification (Kaili *et al.* 2017).

SME initiatives are preferred because they link to locally produced food for long-term food and nutrition security, supporting not only school children but also the development of markets, smallholder farmers, traders, and local food processing industries (Herforth 2015). This approach creates opportunities for generation of local value addition and hence improving the local economy, the food for education program is tailored to promote processing, milling, fortification and catering industries. This is a win-win situation, as children could get more nutritious food, while promoting growth of local processing and production industries. Interest in “win-win” solutions and the recent convergence of policy debates relating to agriculture and social protection draw attention to the relationship between agricultural development and social protection interventions in SSA (Natalia 2006). The conventional view is that agricultural policies promote productivity enhancement and income growth, while social protection seeks to stabilise yields and consumption (especially when production fails) (Dorward *et al.* 2006).

In food for education program SME participation plays a valuable role in creating income earning opportunities in agriculture and non-agricultural sectors in both the rural and urban areas (Borja 2012). Further, SME’s play an important role in spurring agricultural commercialization and agri-business development through ensuring a stable supply of inputs, equipment and services to farmers, advertising and marketing excess agricultural produce in domestic and

international markets, transferring technology, maintaining quality standards, improving value chain management, promoting new farming organizational models (e.g. contract farming) and leading research initiatives.

Consequently, while government promotes the creation of an enabling environment and facilitates access of the most vulnerable segments of the population to economic opportunities, the private sector is at the core of the established markets, training and research (Ahmed 2015). The involvement of SME's in food for education Improves income and wealth generating opportunities for low income groups in both rural and urban areas (Fenando 2003). In the context of HSFP, the program creates demand for goods and services which requires government's long intellectual and policy direction, and probably links most directly to ideas and experience around small-enterprise favored procurement and this demand assist growth of SME's (Tendler 1996).

An effective way to reach low income consumers and create a market for SMEs producing nutritious foods is to link the latter to public institutional procurement systems (Ahmed 2015). This includes programmes as food for education and food assistance program, through these programs, sub-Saharan governments can drive increased demand for nutritious foods (Wheeler 2011). There are several initiatives underway to develop local procurement strategies to supply institutional feeding program, both government led and supported by development partners such as the WFP, NEPAD, CAADP (FAO 2018).

In the case of Gambia, the Government makes direct cash transfers to small businesses or volunteer groups, who are made responsible for food for education, working either outside or within the school structure (Maluccio 2006). The small businesses plan, source and prepare daily lunches for children, with autonomy over menus and provenance of food, focusing on local farmers and school-grown vegetables (Freidman 2011). Recruiting meal managers from the community encouraging families to be involved in the preparation and sourcing of meals and shifts the focus of food for education provision to sustainability and community cooperation and later encouraging development of economic cooperatives that benefit the community (Francisco 2009).

With the potential benefits that can be derived from the implementation of the food for education programs, Governments in sub-Saharan Africa have not created deliberate policies to

see to it that SME inclusion is policy and have not realized agriculture and economic benefits that can be attained from their involvement in the program (Freidman 2011). The governments have also failed to steer production through proper definition of the nutritional needs of the program, hence having little or no involvement of SME's in the food for education program and hence this requires more efforts from other interested player or sectors to foster agriculture and economic development while not only focusing on the core intention of the program which is education development of sub-Saharan region.

2.3 Governance and Multi-sectoral Coordination Mechanisms

Food for education programs interventions require multi-sectoral approach and dialogue for its multiple positive impacts. Consequently, different sectors coordination must be complementary. This is critical for a successful implementation, which will maximize financial and human resources (Freidman 2011).

In most of SSA food for programs, the programs are not only focused on the parent Ministry of Education but ministries such as the Local Government and Rural Development, Agriculture, Health, and Finance have oversight responsibility in the operations and performance and providing technical assistance to the Program (Francisco 2009). But what has been observed is that the program has been left as a sole responsibility of the ministry of education as basically an educational needs program without taking into account the needs of other partnering ministries (Akhter 2009).

Effective coordination and execution of food for education program requires strong multi-sectoral governance and institutional arrangements, given the close involvement of sectors such as Education, Health, Agriculture and others (Becx 2009). Diverse governance and institutional arrangements across sub-Saharan countries are key to effective and sustainable program, a multi-sectoral coordination platform with legal backing and specific responsibilities and accountabilities (Becx 2009).

Therefore, the effective implementation of the school meals program relies on partnerships and resource mobilization from various sources including public and private sectors (Becx 2009). Fostering partnership between local, regional, national and international actors will ensure that

the objectives of the program are met. The FAO has provided key guidelines on how FFE Programmes can be improved within host communities (Table 2.2).

Table 2.2: Main activities different sectors can play for FFE to attain multi-sectoral

Ministry	Main Activity
Educational Sector	<ul style="list-style-type: none"> ❖ Planning Activity <ul style="list-style-type: none"> ▪ Provide overall support including funding ▪ Ensure interests of children and girls are met ▪ Set targets and criteria – number of students, schools ▪ Overall lead of the program ❖ Program coordination and performance management <ul style="list-style-type: none"> ▪ Set program coordination and performance management systems ▪ Capacity building on coordination, program and performance management ▪ Monitor and report program performance ❖ Procurement and logistics management <ul style="list-style-type: none"> ▪ Develop procurement standards by working with other actors ▪ Manage procurement process ❖ Standards, guidelines and quality assurance <ul style="list-style-type: none"> ▪ Development of standards, guidelines, and quality assurance activities
Agriculture & Livestock Sectors	<ul style="list-style-type: none"> ❖ Planning <ul style="list-style-type: none"> ▪ Integrate the School Nutrition and Meals Strategy with agricultural sector plans (capacity development, cooperatives, storage, production, extension, input provision etc.) ❖ Program coordination and performance management <ul style="list-style-type: none"> ▪ Capacity building on performance management, including monitoring and evaluation surveys ❖ Procurement and logistics management <ul style="list-style-type: none"> ▪ Manage national storage and supports in sourcing and logistics ▪ Monitor and provide market prices to stakeholders and implementers of school meals initiatives ▪ Support regions and MOE in procurement and value addition including identifying major aggregators and processors ❖ Standards, guidelines and quality assurance <ul style="list-style-type: none"> ▪ Develop food quality, procurement and related standards in collaboration with the Countries Bureau of Standards
Health Sector	<ul style="list-style-type: none"> ❖ Planning <ul style="list-style-type: none"> ▪ Minimum school meal composition identification, aligning nutrition and other health activities with the program ❖ Program coordination and performance management <ul style="list-style-type: none"> ▪ Capacity building on performance management, including monitoring and evaluation surveys ❖ Standards, guidelines and quality assurance <ul style="list-style-type: none"> ▪ Work on food quality standards ▪ Ensure food safety ▪ Enforce food quality standards
Any other Interested Sectors	<ul style="list-style-type: none"> ❖ Planning <ul style="list-style-type: none"> ▪ Integrate activities with the school meals program plan ❖ Procurement and logistics management <ul style="list-style-type: none"> ▪ Capacity building on procurement, storage and logistics management ❖ Standards, guidelines and quality assurance <ul style="list-style-type: none"> ▪ Provide technical inputs to development and revision of standards and guidelines ▪ Capacity building

Sourced: (FAO 2011)

Recent studies indicate that food for education programs are well poised to be part of a comprehensive package of interventions that address multiple needs as can be identified by individual national governments. They can also be integrated into national development strategies to fight hunger, poverty and malnutrition, increase health and health-seeking behaviors and take wealth to disadvantaged communities of the country (Sarah 2008). Therefore, governments should increasingly invest in FFE as a strategy to combine benefits in education, health and nutrition as well as local economic and agricultural productivity with the view of intergenerational well-being (FAO 2011).

There is also evidence that benefits from implementation of FFE can be divided between those that are direct (arising from expenditure for the purchase of food and additional marketing and income opportunities for food producers and suppliers (SME's) and those that are indirect (arising through spill-over and multiplier effects) (Poulton 2006). They can also be divided between those that relate to income and those that relate to capital formation (i.e. human and social capital). The government's procurement model and the scale of HSFP purchases will determine the magnitude of direct benefits (increased income, income smoothing and human capital formation) and how these benefits are distributed between producers and other supply chain actors (Sumberg 2010).

The success and potential benefits of FFE programmes to generate maximized multi-dimensional success lies in the designing of a multi-sectoral intervention and are integrated into broader national social protection systems and policies (Luca 2013).

2.4 Importance of Design and Implementation stages in FFE

Recent studies have shown that planning and designing a FFE should start with analysis and assessments of the general context and of the existing relevant policies and programs. To achieve this complete diagnostic, a multi-stakeholder national planning approach is necessary and critical for the success and the sustainability of a FFE (Vermeersch 2004). Additionally a national planning approach for FFE can lead to a consensus of the population which include among others civil society, private sector and the government on the relevance and vision, the goals and objectives, the impacts, the feasibility of the program and on the required investments and actions to be undertaken for its implementation, continuous strengthening and sustainability

(Afrida 2007). Studies have also shown that most critical element for a successful multi-dimensional planning for FFE is an adequate and precise context analysis and assessments - exploring the potential of FFE in the country, understanding the different existing environments on education, agriculture, nutrition, social protection and school feeding in the country and how they can support the overall vision (Alison 2011).

The context analysis needs to be complemented with an assessment of the existing national school feeding program in order to understand the efficiency and operational capacity of the program as well as its alignment with the national context and goals by also analyzing the following underpinning critical factors:

- National policy and legal framework
- Financial capacity and stable funding
- Institutional capacity for implementation and coordination
- Design and implementation
- Community participation

Reports of many foods for education programs indicated that most FFE worked in isolation of other interlinked ministries and hence the planning only attended to the policy needs of the host ministry of the program against its inter-sectoral needs of the larger community (Gilligan 2010). Furthermore, reports that the national multi-dimension planning lays the basis for the Design and Implementation of FFE Programmes, this phase starts with an evidence-based implementation framework that translates the vision into a plan with a concrete set of actions aligned with national objectives and the programs goals (Jomaa 2011). The plan, based on the assessment findings, helps develop the policy and legal frameworks, the composition of the food basket, the link between schools and smallholders, and the models for the procurement and distribution of the food.

A vision, political commitment and evidence gathered from the context analysis and different specific assessments will allow national authorities to produce a set of goals, objectives and costed actions for the implementation of the HGSEF program. This plan is not only critical for the success of the program, but it would also help justify the choice of operational model for the intended objectives (Afridi 2007). Reports indicate that a clear policy for FFE programs is

critical, because it provides the framework for the design of FFE programs and ensures consistency with the goals identified in the national dialogue. Given that FFE programs are multi-sector program, an adequate policy needs to cover program elements related to education, nutrition and health, agriculture development, market access and public procurement (Afridi 2007).

Governments can develop a FFE policy, adapt existing food for education or social protection policies, or set up a system of interrelated policies and laws to cover the various program aspects. Evidence Based Implementation Framework policy and legal framework stable funds coordination and capacity nutrition sensitivity links to local production in many countries, developing a FFE policy creates an opportunity to develop a more comprehensive school health and nutrition policy. However, regardless of the specific approach, any FFE program policy needs to be integrated with and linked to existing policies on agriculture, food systems, nutrition and health, among others (Alderman 2006).

2.5 Challenges in implementing FFE programs

An empirical review of the food for education program, information points to four main challenges faced by governments trying to implement a multi-sectoral impact school feeding which include among others (Borja et al. 2012);

The first factor is that there is insufficient planning for institutional capacity, food for education programs are a complex undertaking. They require significant institutional capacity to operate, and often the ministry involved does not have the capacity required. Governments tend to underestimate the resources, the know-how, the systems, the number of staff and the infrastructure required to run effective multi-sectoral school feeding programs. In many cases, programs are started without sufficient capacity for management and day-to-day oversight. Plans should be established at the outset on how to increase the existing resources; human, physical and financial, of the ministries involved. Several countries are currently tackling this through assessments (Barja et al. 2012).

The second challenge is the lack of national nutrition and quality standards which is aimed at ensuring that children are eating safe and nutritious food. It is imperative to establish national quality, safety and nutrition standards and to ensure consistency in the provision of school meals

across the country. This is especially challenging in decentralized programs. When the schools buy the food themselves, committees in charge of food procurement must comply with minimum standards (Barja et al. 2012).

The third challenge is an issue of dealing with accountability, program monitoring and preventing corruption. As in any other public programs, it is critical to make sure that resources are being used appropriately. But school feeding programs are especially challenging because they involve buying large quantities of food, and these transactions are vulnerable to corruption and the favoring of special interests. It is therefore, important to design accountability measures into the programs. Just as an example, informing beneficiaries of their entitlements, establishing systems to receive complaints from beneficiaries and setting up mechanisms to track the flow of resources from the ministry down to the school level (Barja et al. 2012).

The fourth challenge is that the Lack of Coordination and communication with other would be benefiting sectors. The ministries of education, health and agriculture are important actors in school feeding programs. Others include the ministries of local government or women and children and Non-Governmental Organization dealing in child care. Coordinating the actions of all these sectors means putting in place mechanisms to share information, plan and make decisions. In several countries, there are steering groups or technical committees for this purpose. However, it is a continuous challenge to ensure that all players take part and coordinate with each other (Barja et al. 2012).

2.6 Study's grounding theory – (Behaviorism theory)

Behaviorism refers to a psychological approach which emphasizes scientific and objective methods of investigation (Bandura et al. 1963). The behaviorist theory surrounds fundamentally grounded forms of positive and negative feedback. Pavlov exemplified this stimulus-result theory through his experiments (Gredler 2006). When repeated stimuli are presented, learning is cemented however; learning is not achieved by the stimulus-result alone but through repetition. This is known as Classical Conditioning. Skinner developed his theory of Operant Conditioning (Gredler 2006). The Skinner box exemplifies the relationship of pressing a button that releases food; therefore learning how to press the button becomes the stimulus, and the response is food (Ormond, 2006). Both Skinner's and Pavlov's theories are very similar and both illustrate behavioral changes, resulting in learning based on reward and punishment systems (Gredler,

2006). The approach is only concerned with observable stimulus-response behaviors, and states all behaviors are learned through interaction with the environment (Bandura et al. 1963). Behaviorism is a learning theory that only focuses on objectively observable behaviors and discounts any independent activities of the mind (Hull 1943). Behavior theorists define learning as nothing more than the acquisition of new behavior based on environmental conditions. Classic conditioning occurs when a natural reflex responds to a stimulus (Evans et al. 2009). We are biologically “wired” so that a certain stimulus will produce a specific response. One of the more common examples of classical conditioning in the educational environment is in situations where students exhibit irrational fears and anxieties like fear of failure, fear of public speaking and general school phobia (Evans et al. 2009). Behavioral or operant conditioning occurs when a response to a stimulus is reinforced. Basically, operant conditioning is a simple feedback system: If a reward or reinforcement follows the response to a stimulus, then the response becomes more probable in the future (Hull 1943). The critics of behaviorism believe that behaviorism does not account for all kinds of learning, since it disregards the activities of the mind (Chomsky 1959). Behaviorism does not explain some learning—such as the recognition of new language patterns by young children—for which there is no reinforcement mechanism (Chomsky 1959). Its positive and negative reinforcement techniques can be very effective—such as in treatments for human disorders including autism, anxiety disorders and antisocial behavior. Behaviorism is often used by teachers who reward or punish student behaviors.

2.7 Conceptual Framework

Fundamentally, people are poor because they lack access to income-earning or generating activities, opportunities or the lack of capacity to respond to presented opportunities (World Bank 1991). The starting point in interventions related to multi-sectoral gains of FFE Programme is an understanding of specific markets and of the constraints that inhibit market development in an intervention (Gibson 1999). In middle income countries of Asia social enterprising has emerged over the past several decades as a way to identify and bring about potentially transformative societal change (Riddle *et al.* 2000). The aim is to benefit a specific group of people, permanently transforming their lives by altering a prevailing socioeconomic equilibrium that works to their disadvantage (Gibson 1999). The intervention must be resourcefully sustainable, otherwise the new socioeconomic equilibrium will require a constant flow of

subsidies from taxpayers or charitable givers, which are difficult to guarantee indefinitely (Riddle *et al.* 2000). To achieve sustainability, social enterprise's costs should fall as the number of its beneficiaries rises, allowing the venture to reduce its dependence on governmental support as it grows (Martin et al 2017). Many governments are increasingly sourcing food (fresh or dried) for school feeding locally from smallholder farmers in a bid to boost local agriculture, strengthen local food systems, and ultimately move targeted people out of poverty (WFP 2016 p. 1). These benefits can be further increased by building links with schools, national nutritional child requirements and local smallholders (Alderman et al. 2012). FFE programmes present an opportunity to improve the livelihoods of smallholder farmers, rural population and to strengthen the nexus between nutrition and national agriculture (WFP 2016 p. 3).

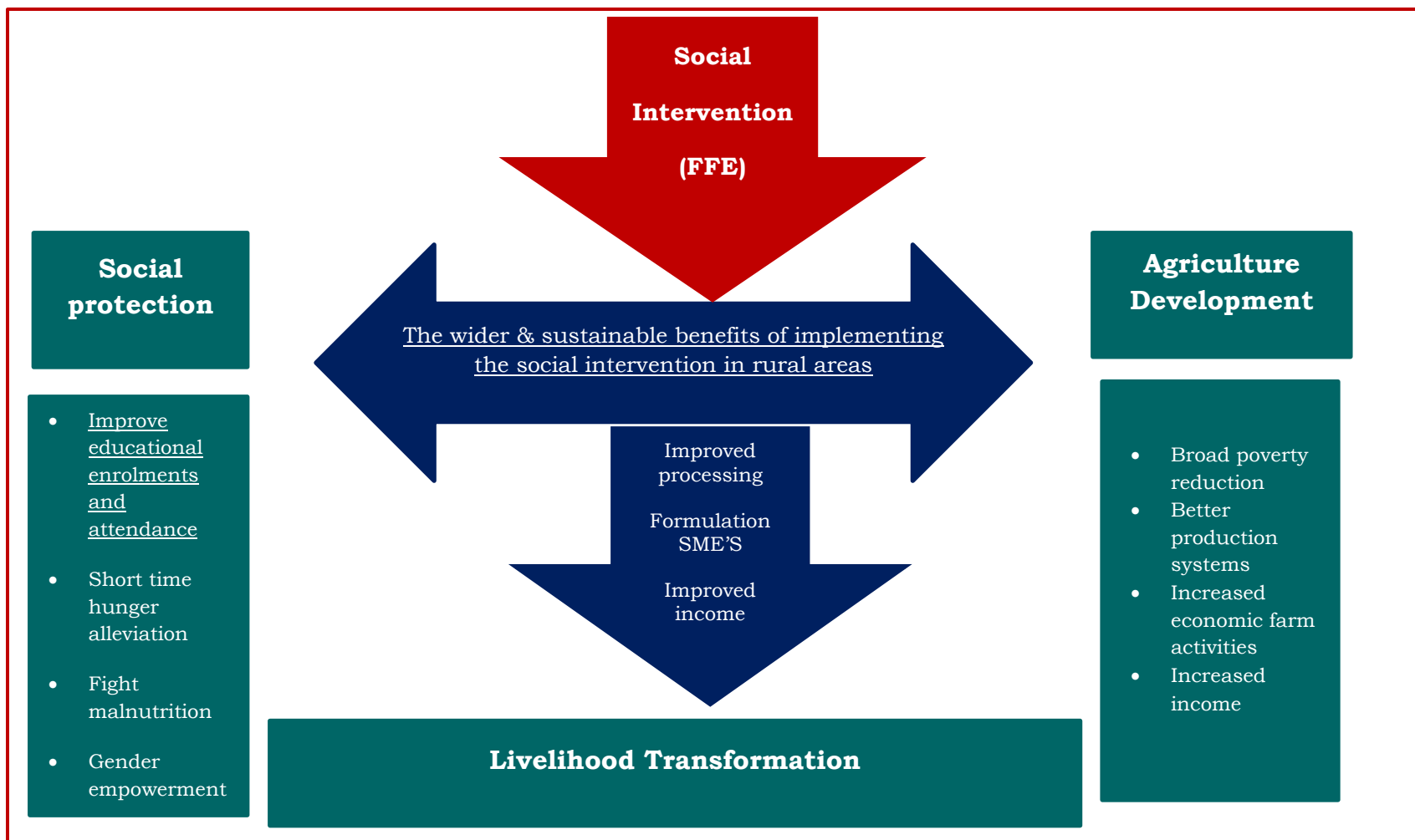


Figure 2.7.1: Conceptualized research model (Developed by authors)

In Zambia, school feeding is widely recognized as an important intervention for alleviating hunger while at the same time supporting the realization of education, agriculture, nutrition and health sector development goals (MoGE 2019 p. 2). FFE programmes are a multi-dimensional model that can be implemented in different ways to link schools to local production depending on a country's objectives which they intend to achieve (WFP 2016 p. 4).

In order to develop the rural agriculture sector, improve rural social protection and ultimately improve the rural standard of living in rural districts of Zambia, the FFE programmes have been introduced. The social intervention ensures that school-aged children are motivated and kept in school through reducing absenteeism, improved enrollment by providing food to learners during school periods. This intervention is expected not only help local schools maintain learners in school but will also provide a market incentive to rural farmers for both fresh and dry agro-products. The intervention can also be used to addressing schooling aged learner's nutritional deficiencies by providing nutritious foods in the FFE diet. The essence of this intervention is to empower the rural economy through acceptable predominate rural activities for enhanced sustainable growth. The social intervention provides source of income generation for local people while its implementation is also a social safety net for identified particular social solutions that require address in the rural area.

2.8 Knowledge Gaps

Broadly speaking, the idea by governments to implement food for education program is to limit the role of foreign players such as the WFP and NEPAAD in order to transform the FFE into an independent national enterprise which can be a driver of local economic development (Bondwa 2012). The idea is to create locally driven programs which will not only be supported by the larger population but also involve economic benefits for the targeted population. While weighing the advantages and disadvantages of starting FFE, it became very clear that such a project had a long-term positive impact that would not only benefit the students but also the farmers and local community (Alison 2011). My review in literature imply that food for education programs just by name means that the program is developed for the purpose of not only targeting educational sector but many other sectors to derive benefits from its implementation so as to make the program sustainable in its implementation of which literature reviews do not provide such details of other sectors that have benefited from the implementation of such large intervention.

Secondly, the question of sustainability of the school feeding program in developing countries is also core issue in many of the studies on school feeding programs. It is still debatable however if the current strategy can work in countries with limited education budget (FAO 2014). This therefore calls for further experimental designed studies that may help come up with the best and sustainable food for education programs model that may work in the countries with low resources such as Zambia. The researcher, therefore, stress the importance of understanding the current food for education program and its design structure of being a multi-pathway program of not only impacting on the educational sector alone but with views of improving other interlinked sectors within the hosting communities. Interrogating program implementers, community leaders, parents and other stakeholders will help in coming up with a strong conclusion as to whether home-grown school feeding programs are essential ingredients of a multi-sectoral social intervention strategy or not, and literature reviewed in this study has not provided sufficient information. The results of this study can therefore help in filling that gap. It is also useful to the program planners and policy actors in developing countries as they will be able to plan while knowing the perceptions of the smallholder farmers, communities, program implementers and other interested stakeholders on food for education programs. Studies that are neglecting or not incorporating views of these groups are missing a very crucial component that may help in future planning of other school feeding programs. This study was thus aimed at filling that research gap by investigating or interrogating the home-grown school feeding being a social intervention suggesting being a multi-dimensional program.

2.9 Chapter Summary

Overall, this chapter has shown that Food for Education Programs are effective means of increasing students' enrollment and retention and the program being a social multipath way for local community development strategy especially in the developing countries where hunger has been reported affecting children's school enrollment and attendance rate (FAO, 2012; Jomaa *et al.* 2011; Bundy *et al.* 2009). However, it should be noted with care that, students' enrollment and attendance rate alone in the developing countries are not sufficient conditions or explanations on increasing students learning, other education outcomes and broadening the benefits of implementing FFE program. There must be some of the endogenous factors to supplement it so that students can perform better and are encouraged to be in school (Jomaa *et al.*

2011). Some of the factors that need to be controlled as well include quality of teaching, school infrastructures and parent's participation or involvement in the FFE program (FAO, 2012). Students' attendance can also be determined by factors other than presence of food alone but other wider benefits derived from implementation of such a social safety net program. For example, students' attendance can be influenced by parents' perceived value of education, costs of schooling and the impact livelihood transformation as a result of education and programs around education (Bundy *et al.* 2009). The emphasis here is that school feeding may be considered as a strategy to bring learners to schools and grow the local economy, but the program cannot stand-alone without being complemented by other interventions. This raises the need for context specific exploratory studies such as this one that can explore and understand prospects for multi-sectoral gains in FFE programmes in poor countries such as Zambia.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter discusses the research design and methodology employed in this study. The chapter provides all strategies that describe how, when and where data was collected and analyzed. It also justifies the choice of the Conceptual Framework (Section 3.1), Research Design (Section 3.2) and Research Instruments, procedures which were used for data collection and analysis (Section 3.3).

3.1 Case Study Research Design

This study employed a case study approach. A case study is a research strategy and an empirical inquiry that investigates a phenomenon within its real-life context (Guba 2011). A case study research strategy is appropriate for studies interested in in-depth investigation of a single individual, group or event to explore the cause of underlying principles (Cresswell 2009). The strength of case study research design lies in the ability to analyse persons, groups, events, decisions, periods, policies, institutions or other systems that are studied holistically by one or more methods (Hunler 1999). Case studies are useful in asking the ‘what’ ‘how’ and why questions pragmatically compatible with the investigatory framework (Yin 2009). A case study also recognizes that the phenomenon under investigation and context might have unclear boundaries (Yin 2013). In this study, the case study approach enabled in-depth understanding of how food for education programmes plays out at district and community level agribusiness expansion, education and improves livelihood by allowing comparison between and within communities.

In this study, case study research design was seeking to assess the impact of food for education programmes towards being a multi-sectoral social intervention in Sinazongwe and Kazungula districts. This approach was crucial in teasing out specific rural experiences about wider implications and impacts of homegrown school feeding program, elements that benefit greatly from a case study strategy.

3.2 Researching Food for Education Program in Sinazongwe and Kazungula

3.2.1 Kazungula district

Kazungula district is a rural district of Southern province in Zambia, which borders with Namibia, Zimbabwe and Botswana. The district is located 65km from Livingstone which is Zambia's tourism capita and 565km from Lusaka the capital city of Zambia (CSO 2015). The district has an estimated population of about 104, 731 people of which seventy two percent (72%) are living in the rural areas of the district (CSO 2015). Agriculture, fishing, and tourism being the primary economic activity while the district is also involved in some low value cross boarder trading. The district has a total of one hundred and thirteen (113) schools participating in the school feeding program (MoE 2012 p. 13). The district started participating in the school meals program in 2007. The primary target school population for this study are the sixty-four (64) schools that started participating in the intervention before 2010. The district has eight (8) schools that lie within thirty kilometres to the central business district while the fifty-six schools are in rural parts of the district.

3.2.2 Sinazongwe district

Sinazongwe district is a rural coal mining town of Southern province which is located 285 from Livingstone and 335km from Lusaka (CSO 2015). The district is among the six (6) districts that are identified to participate in Republic of Zambia's food for education program "Home-grown school meals program". The district has an estimated population of 101, 617 people out of which seventy five percent (75%) live in the rural areas of the district (CSO 2015). The district is predominantly driven by agriculture, fishing, thermos-electricity generation and coal mining as key economic activities (CSO 2015). Sinazongwe district has a total of one hundred and two (102) schools participating in the school meals program with three schools yet to be included in the program. The district has forty (40) schools that started participating in the school meals program before 2010, which was the study's target school population

3.3 Methodology

This study took a mixed research approach. Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the board purposes of breadth and depth of understanding and corroboration of the research (Johnson *et al.* 2007). Mixed research method as a tool for research focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies (Denzin 2008). Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone (Polit 1999).

3.3.1 Selecting the Sample

A sample is a set of research participants who provide the research data for a research project from a given population (Steven 1996). The sample for this study was drawn from the 106 schools which started participation in the FFE programme before 2010 in Kazungula and Sinazongwe districts of Southern Province. Out of the 106 participating schools in the districts, this study engaged four (4) schools; two (2) schools were purposively selected from schools close to the district's central business, while the other two (2) schools were also purposively selected from the rural parts of the districts. The selection of schools from different geographical locations provided the study an understanding of how the program is implemented in different areas. Geographic focus on a school provided a cross-cutting way of looking at processes of the FFE programmes in isolation, particular to a school and surrounding communities. It allowed the researcher focus on "real world" relationships and dependencies in the FFE programme and processes that give character to the school or location and its community participation in the programme. The study selected the sample by grouping participating schools into 2 clusters differentiated by the distance from the district's business Centre. The selection of the sample assumed that rural schools are not homogenous. It assumes that diversity even within the rural set up hence the selection of schools close to the district's central business assumed as being in urban set up and those further away typically assumed rural as being in set up.

This study involved learners, school heads, program focal teachers, parents, key community leaders, district commissioner and various departmental district officials, the selected respondents provided data on how the program was being implemented in the two districts (see appendix 6).

The study also included ministries, NGO's, and any other cooperating partners related or linked to food for education programmes in the two districts and have an impact on the result of this research, these were important because they provided data on program policy and plan (see appendix 6).

3.3.2 Data Collection Approaches

This study basically used four research instruments to collect data on multi-sectorial gains achieved from the implementation of food for education programme in the two districts. Qualitative data was collected using Interviews and Focus Group Discussion guides. This was by way of taking note of all data in relation to the research objectives and questionnaire for quantitative data.

A. Qualitative Data Collection Approaches

- *Preliminary Field Visits*

Preliminary fieldwork is defined as the formative early stages of research in the field that allow for exploration, reflexivity, creativity, mutual exchange and interaction through the establishment of research relationships with local people often prior to the development of research protocols and ethics applications (Johnson *et al.* 2007). The preliminary fields visits connect both to the extent to which observations should be generalized to other settings and local representation of various groups which is a feature for quantitative data approach (Gilbbert *et al.* 2008). The aim of conducting preliminary field works in the two districts was to enable the researcher to understand through observation the culture and social norms in the communities, scope of works, scale of the problem and obtain local opinion of the program. This exercise ultimately helped the researcher to determine the link of existing literature on HSFP and variety of factors intended to be studied in the school meals program. The preliminary field study also assisted the researcher to gain insight on the food for education programme in the two districts.

- *Key informant interviews (KIIs)*

Key informant interviews are in-depth interviews of a select (nonrandom) group of experts who are most knowledgeable of the organization or issue (Lavrakas 2008). The purpose of conducting these KIIs was to generate findings or data from multi-diverse views based on the respondent's expertise, position, occupation, knowledge and experience. Key informant interviews provided learning opportunity of outstanding success and notable failures of the food for education programme in the two districts.

Key informant interviews were conducted at district, school and community levels. The first key informant interview participant was purposively selected at district level being the District Commissioner; the rest of the participants' snowball sampling chain technique was adopted. Snowball sampling is defined as a technique for finding research subjects whereby one subject gives the researcher the name of another subject, who in turn provides the name of the third and so on (Spren 1992). While at school and community level the school head, local clinic nutritionist, and headmen were purposively be identified. The key informant interviews were important on addressing questions related to understanding the purpose of the program plan, impact (learners and community) and community involvement in the program.

- *Focus Group Discussions*

A focus group discussion involves gathering people from similar of backgrounds or experiences together to discuss a specific topic of interest. It is a form of qualitative research where questions are asked about their perceptions, attitudes, beliefs, opinion or ideas (Holloway, 1997).

The focus group discussions were generally more useful to primarily consolidate ideas that would have been picked up from the initial two forms of data collection. The purpose of the proposed focus group discussion was to allow the members to freely express clear ideas and share feelings of the FFE Programme in the two districts. Focus group discussions were important in addressing questions related program plan, policies and evaluation of program failures and successes. The respondents in the focus group discussions included targeted headmen, local clinic nutritionist, parents, teachers and cooperating partners (NGO's). Whilst there might be some disadvantages in grouping participants of different backgrounds at the same time, the nature of the community and participants made it difficult to divide the participants.

The researcher using tactical probing ensured that all participants freely and openly participated in the discussions on aspect of their concern which helped solve power relations during the meetings.

- *Documentary Evidence or specific literature reviews*

Documentary evidence (Gilbert, 1993) refers to the use of 'documents' in research, which provide a record of the social world. A review of the literature concerning the subject of study was done to further understand the HSFP implementation in the two districts. Specific literature review addressed questions mainly related to the how the HSFP has been implemented in the two districts.

Quantitative Data Collection Approach

- *Questionnaire*

A questionnaire is defined as a research instrument that consists of questions or other types of prompts that aims to collect information from a respondent (Steven 1996). The questionnaire was mainly used as a tool to collect quantitative data which was used to ascertain the multi-sectoral achievements of the FFE in the two districts; the questionnaire was mainly administered to parents with children in schools benefiting from HSFP schools. The questionnaires addressed questions related to involvement or participation and livelihood transformation after the implementation of the FFE in local areas.

3.3.3 Data Analysis

Qualitative data from interviews and the focus group discussion was analyzed using NVivo software. Generally, the data was biased towards getting an in-depth understanding of the meaning and definition of the situation as was presented by the data collection tools which was both handwritten and typed during discussions and hence was checked for consistence in order to eliminate misleading data.

Qualitative data was analyzed using the thematic analysis manually by firstly getting familiar with the data, coding them and searching for themes with broader patterns of meaning. Thematic analysis emphasizes pinpointing, examining, and recording patterns of meaning (or "themes")

within data (Maxwell 2004). After thematic data analysis NVivo software was used to finally consolidate or analyse the data as it is as powerful qualitative analysis software that gives one-click access to word frequencies and key words in context, allowing you to identify patterns in the content across various text and data sources (Johnson *et al.* 2007). The NVivo software is important in organizing and analyzing the content to discover deep insights and the software helped to find connections and understand underlying themes and patterns that helped inform and support decisions.

The process of analysis started from the first time the data began to be collected and continued until the research study was completed so as not to compromise on the data that was collected from the preliminary fields visits to focus group discussions.

3.3.4 Ethical Considerations

Ethical approval for this study was obtained from the University of Zambia Research Ethics Committee. Before engaging in study, participants were explained to what the study was all about (academic in nature) so that they can make informed decisions to either participate in the study or not. Verbal permission was then sought from the participants of the research before commencement of the study of impact on multi-sectorial gains in the two districts under the homegrown school feeding program. The study also adhered to the principle of respect for autonomy and respect for the rights of the individuals participating in the research study. Furthermore, the respondents were informed that participation in the study is voluntary and must be done at one's own will and that they have the right to withdraw from the study. Lastly the participants were informed that this research will be purely and exclusively academic in nature and any consequent result will be treated as such. For this reason, the contents and findings were not going to be used in any way for other purposes than academics.

CHAPTER FOUR: PRESENTATION OF THE RESULTS

4.0 Introduction

This Results Chapter presents dynamics related to the implementation of the HSFP, how HSFP operate and how it delivers to learners, community, agriculture support and health factors related to children of school going age. The Chapter addresses objective by drawing on data collected across various sources: key informant interviews at district and community level, focus group discussions and questionnaires at community level.

4.1 Research Objective I: What is the nature of the food for education in rural Zambia?

The first objective of this study was to explore the nature of FFE programmes in rural Zambia particularly Sinazongwe and Kazungula districts in southern province. To address this, the study began by exploring key social economic challenges facing the two study districts some of which relate to the design and implementation of the food for education programme. District interviews revealed three key challenges common in the two districts. The first being the high rate of HIV and AIDS in the districts. The Zambia Population-Based HIV Impact Assessment of 2016 indicates prevalence rates of HIV among adult ages 15 to 59 years is at 12.3 percent for Sinazongwe district compared to 14.9 percent in Kazungula district (CSO 2015).

In Sinazongwe district the high HIV rate at 12.3 percent was mainly attributed to high social movements as they relate to mining activities in the district among truck drivers and an influx of mine workers on the one hand and thermo-power plant workers on the other hand (DC1 05.08.2019).¹ Booming economic activities combine with an influx of new people in the district compounded with the hunger situation among the local residents has arguably given a rise of commercial sex workers in the district. These elements have been cited as increasing HIV/AIDS prevalence in the district.

District interviews in Kazungula district on the other side, suggest that the 14.9 percent HIV rate was mainly attributed to the district's geographical location bordering 3 countries Zimbabwe,

¹ Reference to field notes and interviews have been coded to ensure anonymity. NB: DC1 refers to Sinazongwe Education Official whilst DC2 refers to Kazungula Education Official.

Namibia and Botswana. District interviews suggested that the geographic position of the district towards ports of exit for shipment of goods has given rise to many traders and truck drivers using the Kazungula border pontoon exit (DC. 15.08.2019). Again, the suggestion is that the movements of cross-borders traders and drivers have given rise to the numbers of commercial sex workers in the district resulting in the high HIV and AIDS statistics of the district. Some field observations at Kazungula district border post also indicated that the numbers of truckers parking and waiting for exit was on the rise. Interviews with truckers also indicated that truckers confirmed an average of 2 to 3 days before crossing and clearing presenting various avenues and opportunities to engage in illicit sex activities at the border. Overall, district interviewees in both study areas were agreed that the districts were highly prone to poor annual agriculture yields due to dependence on rain fed agriculture practices. Some of these issues are outlined here below.

District and community interview discussions revealed that Sinazongwe district is located in the valley as a result the district receives low rains affecting farming activities in the district which are predominantly dependant on rain. District interviews indicated that the district in the past 5 years has on average produced about 3, 052 tons or 61, 040 bags of maize against an estimated population of 101, 617 people is not sufficient for population's required food for consumption (DC1 05.08.2019). Interviewees suggested that the low agriculture yield in the district requires agriculture technical support and increased agriculture productivity.

It was observed that Kazungula district on the other hand is mainly a sandy district owing to its proximity to the Namib Desert and the district receives low rainfall. District interviews indicated that about 72 percent of the population is involved in subsistence agriculture production to support their families and hence there is need to support agriculture as it is the main economic activity of the district (DC2 15.08.2019).

The challenge of malnutrition in Sinazongwe district and rural Kazungula district was also reported from the interviews. District officials suggested that the malnutrition in the districts can be attributed to inadequate food intake, unsafe drinking water and social poverty facing children in local communities (DC1 05.08.2019). Health officers in Sinazongwe district suggest that cases of malnutrition in children were higher in the valley area of the district. Kazungula interviews on the other hand revealed that children in the rural areas are affected by undernutrition.

Data analysis and reflections revealed that the high rate of HIV and AIDS, poor annual agriculture productions and yields and the health challenge of malnutrition in the two study districts have raised the importance of the home-grown school feeding programme in the districts. Other elements related to Research Objective I are outlined here below.

a. Beneficiary inclusion, Exclusion and Objectives of Food For Education Program

District interviews indicated that schools in the study districts built before 2008 participate in the home-grown school feeding programme. Review of HSFP policy (2008) suggest that by the year 2020 government plans to target at least 2, 000, 000 learners country wide and including schools constructed after the HSFP implementation year (2008). District interviews also indicated that there are no prescribed criteria used in selecting schools to participate from the implementation of the HSFP in the districts. Interviewees such as those under the MoGE noted that once a district has been identified as vulnerable by the ministry of education, all schools under such a district are automatically included in the HSFP intervention.

Policy review and district interview identified four key objectives of the home-grown school feeding programme implementation. The objectives of the home-grown school feeding are summarised in Table 4.1:

Table 4.1: Summary of HSFP objectives (MoGE 2019)

s/n	Objective	Reason or Description
1.	Improve student enrolment	District interviews suggest that household food insecurity and parents lack of motivation for school contribute to poor enrolments
2.	Reduce student dropouts	Policy review indicates that hunger and long distance to school contribute to school dropouts rising the importance of home-grown school feeding programme
3.	Agriculture support	Policy document indicate that the introduction of HSFP aims at market creation, increased agriculture production, productivity and also encourage agriculture food production off rain fed production to production of food throughout the year
4.	Health Support	Police documents reviews that HSFP can help address the high malnutrition rate of 41 and 39 percent of the population for Sinazongwe and Kazungula respectively.

The first relates to the need to improve student enrolment. Policy reviews suggest that the social economic status of identified districts do not support employment creation. DC1 (05.08.2019) suggests that the social economic situation of Sinazongwe district forces parents to use children in household food security activities instead of enrolling school aged children into schools. FGD further reviewed that most of the rural parents did not value school as an equaliser in preference for children to be involved in low income generating activities.

The second considers the need to reduce pupil school dropouts. District interviews suggest that as a result of hunger and long distances to school pupils easily drop out of school. Kazungula focus group discussions also pointed out that traditional practice of early child marriages contributes to school dropout. Parents' interviews suggest that families are usually large of about 6 to 10 members and children equally have to participate in family food security activities. Parent interviews also indicated that school user fees are high, and they are unable to afford. District interviewees suggested that most rural parents are not motivated to take children to school and hence any pupil drop out is a nothing news.

The third element relates to the need to support agriculture activities. District interviews indicated that the districts experience poor annual harvests. Community focus group discussions indicated that farming activities are mainly subsistence farming with little options of where to sale the produced crop where there is excess produce. Furthermore, district interviewees suggested that the HSFP is intended to create market for agro-products. Policy review indicated that HSFP towards agriculture support is aimed at increasing agriculture production, productivity and henceforth raise the rural per capita income of the rural communities and aims at encouraging community food production throughout the year unlike dependence on rain fed agriculture production.

The final component relates to health support: District interviewees indicated that due to poor diets in most of the district communities, the districts are faced with high rate of undernutrition. Expert interview in Sinazongwe indicated that about 42 percent of the population is affected by malnutrition. On the hands in Kazungula district expert interviews indicated that malnutrition statistics show that 38.6 percent of the population is malnourished. Policy document suggest that the introduction of the HSFP is a central way to address the high malnutrition levels in the districts of study.

4.2 Research Objective II: How is food for education programme implemented to attain multi-sectoral in Kazungula and Sinazongwe districts.

The second objective aimed to explore the implementation of the Food for Education Programme and how this shape possible attainment of multi sectoral gains in Kazungula and Sinazongwe districts of Southern Zambia. Two elements were identified as important in the implementation of FFE programmes.

a. Health aspect of HSFP

Health aspect of the study was important in exploring and understanding how the HSFP is addressing one of the social challenges of malnutrition among school aged children, dietary content of HSFP and the importance of having a diverse diet. Pupil's health aspect of the HSFP is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth as highlighted in Chapter 2.

▪ *Sinazongwe District*

An analysis of diet provisioning in Sinazongwe district revealed narrow as opposed to diverse diet. Key informant interviews in Sinazongwe district revealed that children lacked protein, vitamin A, C and D in the diets. Key informant interviews revealed that most recorded cases of malnutrition in the district suggested that children in the valley areas of the district recorded the highest cases. Expert interviews in Sinazongwe district suggest that the implementation of the HSFP in the district cannot in any way address the nutritional needs or deficiencies of the school aged children. One of the key reasons attributed to this was the school meals diet which is mainly a carbohydrates diet. The diet consists of foods such as boiled maize (*Magwaza* as it is locally known) rarely sample and grits porridge which cannot address the nutritional needs or deficiencies of school aged children (DC1 05.08.2019).

A widely held view among respondents was that “the lean dietary content of the district’s HSFP menu was not enough to address the nutritional deficiencies of school aged children of the district” (See Figure 4.1)

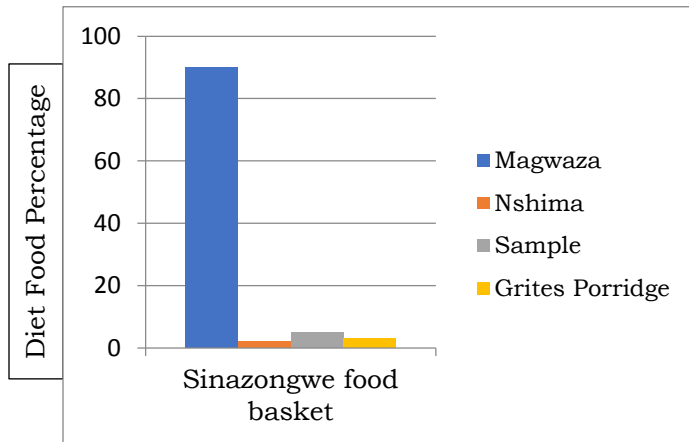


Figure 4.1 Percentage dietary composition – Sinazongwe district (Drawn from school stores records).

Focus group discussions in Sinazongwe district revealed that pupils in term one of the school calendar were provided with meals on a daily basis beside receiving the maize in February 2019 after schools had already opened. The other challenging points to consistency in the provision of meals in the HSFP. For instance for the entire term two in 2019 the schools did not provide meals for pupils. Focus group discussions attributed the lack of meals to as a result of maize not having been supplied by MoGE for the HSFP in the district.

- *Kazungula District*

Kazungula district on the other hand recorded diversity in the diet. District interviews in Kazungula district on the other hand suggests that the diet of the Kazungula HSFP contained sample, porridge and nshima (carbohydrates), fortified cooking oil (containing vitamin A, C and D) and pulses or peas (essential minerals ie iron). Interviews with the district Nutritionist suggested that the nutritional diversity in the diet contained sufficient nutritional requirements to address deficiencies that many children of school going age lacked or require. A widely held view among study participants was that “the diet provisioning to school children is wide and is able to support the health support objective of the program because of some fortified foods included” (See Figure 4.2).

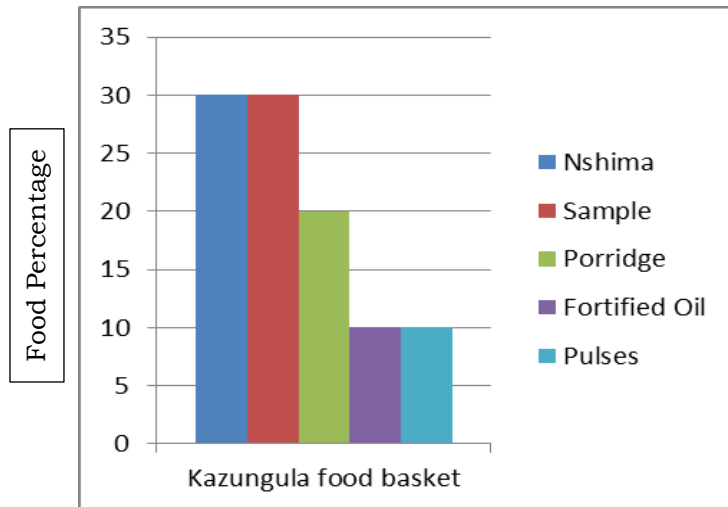


Figure 4.2: Percentage Dietary composition – Kazungula district HSFP (stores records).

In Kazungula district focus group discussions with key community leaders, parents, teachers revealed that meals were provided during lunch periods on a daily basis during school days. Even in the case of term two maize was not supplied to schools, the schools still had sufficient maize. District interviews with MoGE revealed that the district had sufficient maize which was supplied in the previous term (term one). District interviews suggest that the maize supplied by the MoGE was more than sufficient for one term and hence extending to the next term of the school calendar.

b. Impact on learners in terms of enrolment, attendance and reducing school dropouts

Focus group discussion in Sinazongwe district show high school dropouts records especially in the rural parts of the district. Focus group discussions primarily suggested three reasons:

- They revealed that girls are highly affected by cultural practices of early or child marriages
- While for the boy's preference for farming and working as farm labour was common factor as well as being family herds men as most of the families are involved in cattle ranching
- Parents inability to pay school fees ranging from K50 to K120 depending on the school. There was district confirmation that the district has an ongoing programme in partnership with several non-governmental organisations like FAWEZA of withdrawing girls that drop off from school and married off called "safe house" (DC1 10.08.2019).

In both study sites within Sinazongwe, Focus Group Discussions stated that ‘the home-grown school feeding programme impacted well on school attendance of pupils in schools in the community’. They argued that the school meals provide food to pupils who are affected by hunger in their households. Parents also revealed that HSFP was important as an incentive to push children to attend school. Rural school pupil interviews suggest that they are influenced to attend school whenever meals are provided as this make them stay longer in school and concentrating on learning besides the long distance they walk to school (Figure 4.3).

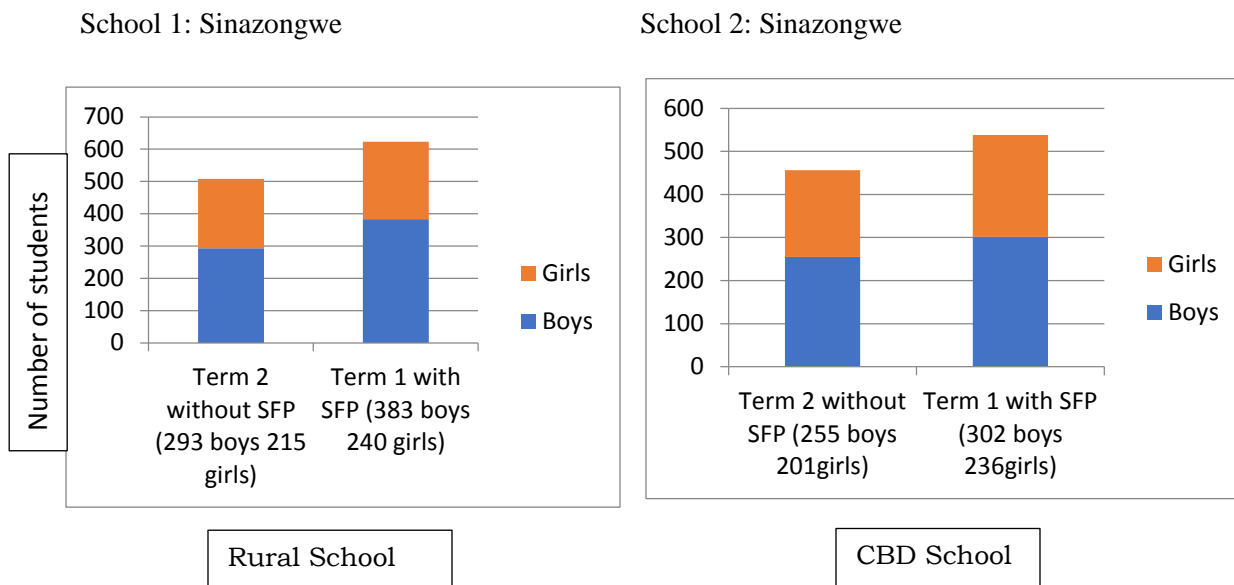


Figure 4.3: School attendance – Sinazongwe District (School records)

In Kazungula district on the other hand, focus group discussions in the rural community revealed that the community experienced school dropout largely due to three factors 1) the traditional custom of child marriages 2) the long distances that pupils have to walk to schools which range from 3 to 8 kilometres in some cases and 3) boys are motivated to work in white commercial farmers’ farms as farm labourers.

In both study sites within Kazungula, members of the Kazungula rural focus group discussions stated ‘the HSFP had a huge impact on ensuring that the pupils attend school and are kept in school’. Furthermore, the FGD’s revealed that in periods when the schools are not providing meals the number of pupil attendees drops. While the focus group discussion in the urban area indicated that pupils dropout in the schools was insignificant because parents are motivated to enrol their children and keep them in school (Figure 4.4).

School 1: Kazungula

School 2: Kazungula

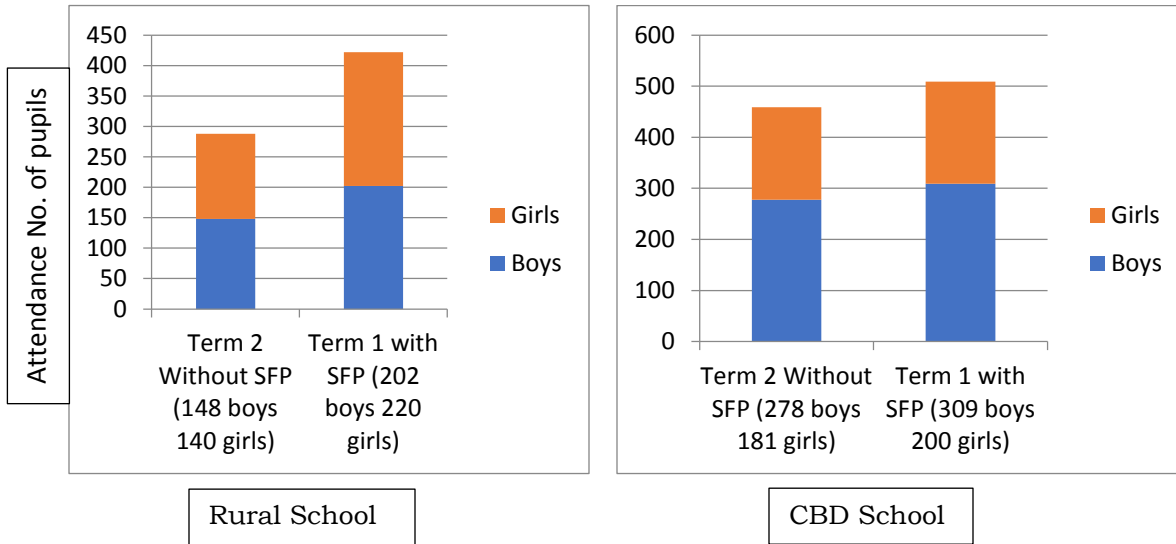


Figure 4.4: School attendance – Kazungula District Schools (School records)

Urban school pupil interviews from Kazungula district suggested that they are not influenced by food to attend school, but parents push them to attend classes and are provided with better meals from home as compared to what is provided under the HSFP.

Accordingly, differences were seen in the local perceptions of how school meals influenced attendance (Figure 4.5 and Figure 4.6). Community interviews and FGD's revealed in both rural and urban interviewees of Sinazongwe district that the HSFP was very influential in ensuring pupils attended school. Kazungula district interviewees suggested mixed feelings with rural interviewees suggesting that school attendance is highly influenced by provision of meals while urban interviewees suggested that provision of school meals does not entirely influence school attendance. Rural teacher and Sinazongwe urban interviews suggested that the implementation of the HSFP highly influenced the pupil attendance because of the many challenges that pupils are faced with in their communities.

Sinazongwe District

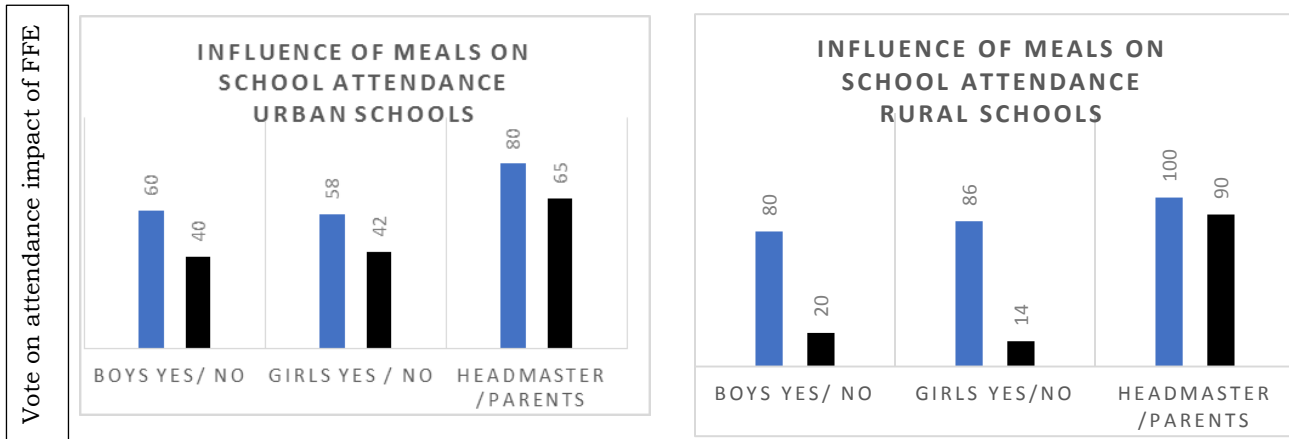


Figure 4.5: Influence of school meals-Sinazongwe

Kazungula District

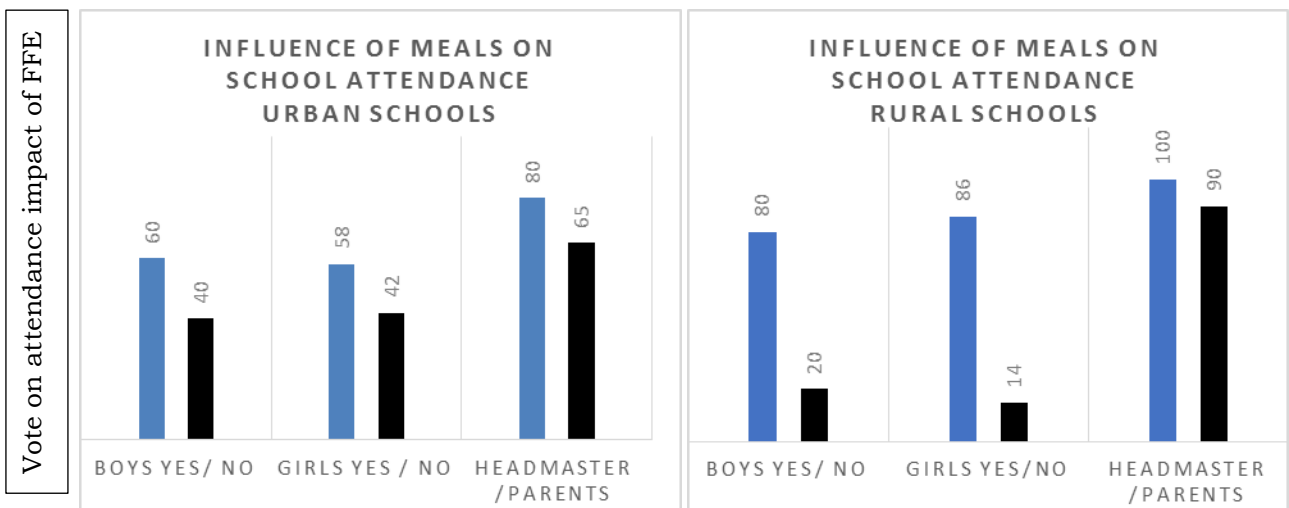


Figure 4.6: Influence of school meals - Kazungula

On the other hand the urban teacher and parent interviews suggest that the HSFP has little or no impact on the pupil attendance because of the different social status of most parents in the community.

4.3 Research Objective III: How the food for education program is impacting on related rural economic sector.

The final Research Objective aimed to explore and understand what economic sectors were targeted to benefit from the implementation of the Food For Education Programme and in

relation to community engagement. Three elements were identified as important in exploring and understanding multi-sectoral gains of FFE Programmes.

a. Developing Markets for SME’s Development using HSFP intervention

In Sinazongwe, different sources of food for HSFP extracted from district, community interviews, questionnaires as well as focus group discussions indicated that the main dietary food was supplied by the Food Reserve Agency. Focus group discussions and questionnaires suggested that no local food suppliers or farmers supplied food to schools for the home-grown school feeding programme. District interviews confirmed the home-grown school feeding programme used a centralized procurement system for food procurements. They argued that maize is purchased by the Ministry of General Education from the Food Reserve Agency and maize is collected from depots in or outside the district for onward distribution to the participating schools. The second argument is that the Food Reserve Agency buys the maize from small scale farmers.

Kazungula district interviews on the other hand revealed that beside the maize that is centrally procured from FRA through the MoGE the HSFP also procured cooking oil and pulses or peas. District interviews revealed that the fortified cooking oil and pulses or peas are actually a donation to the HSFP by the World Food Programme. There was confirmation that the fortified cooking oils and pulses or peas were imported mainly from Brazil or Indonesia (WFP) (DC2 15.08.2019) (See figure 3).

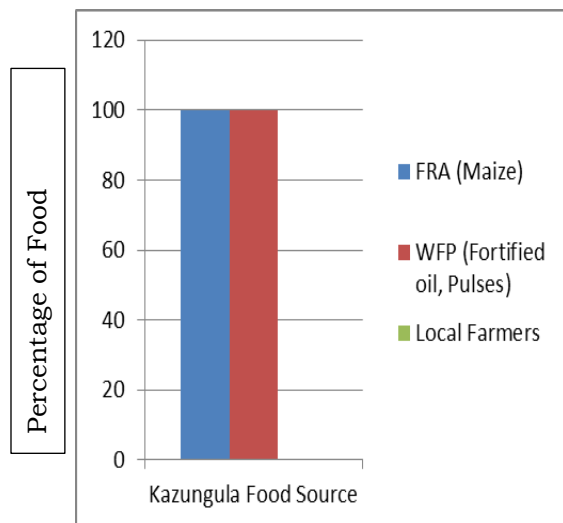


Figure 4.7: Percentage of Food Sources for FFE (District school meals records)

District interviewees in both study district and focus group discussions revealed that the local farmers and community member only involved in the home-grown school feeding programme through the provision of: 1) fire-wood, 2) water for cooking, 3) maintenance of cooking thatched houses, 4) and also voluntarily provided rain fed fresh vegetables such as pumpkin leaves during the rainy season. The provision of fresh vegetables in the rainy season has been limited and constrained by lack of gardening initiatives, highlighting the weak links between the community supply mechanisms and the HSFP. There was a feel that parents are willing to sell to the school if the opportunity opened. They envisage this would address marketing challenges as FRA is in many cases located 20 – 30 kilometres away from local community (Kazungula) and 80 kilometres in Sinazongwe districts.

Analysis from parent questionnaires shows that the activities of parents and the community in the home-grown school feeding programme do not lead to substantial wealth accumulation to improve the living standard of the community but are a voluntary activity to enhance the programme's operations.

b. Food for Education and Wider Sector Implications

Impact of HSFP on other sectors of the study was important in exploring, understanding and to evidence community impacts homegrown school feeding programs in host districts in relation to research objective 2 in evidencing community impacts homegrown school feeding programs

In Sinazongwe on the one hand, district interviews in Sinazongwe district suggest that the HSFP did not encourage the growth of local processing sector or industry. District interviews suggested that the procurement model and the lack of processing of the maize for school meals did not support the sector. Focus group discussions suggested that the local milling plants had the capacity to mill the food that is required for school meals. Community focus group discussions further indicated that local milling plants may only require capacity building in food fortification processes. Interviews with local miller such as malumaluma confirmed that they are not engaged to meal maize into either sample or mealie meal despite the mill having the capacity to do the work.

Focus group discussions indicated that milling of maize into grits or maize meal was an initiative of school PTA committees and that parents were required to make financial contributions of K15

for a term to meet the cost of processing. However, parent interviews suggested that most of parents are not capable or are strained to raise required amount for the initiative. Furthermore, parent interviews indicated that besides the initiative being a financial strain, the initiative helped the children to have at least a different meal other than boiled maize.

In contrast, Kazungula district revealed schools in the district had a variety of food for school meals diet which is processed with help of the World Food Programme (DC2 15.08.2019). Key informant interviews revealed that the WFP conducts capacity building, programme monitoring and conducts pilot studies to enhance the operations of the programme. District interviewees revealed that local milling plants were engaged to process the maize into mealie meal, sample or grits. Local millers such as magumwi confirmed that the WFP paid for the maize processing. Focus group discussions also indicated that local milling plants managed to process the maize as per the demands of the school.

District interviewees in both study districts suggest that local transporters have benefited from the implementation of the FFE in the districts. District interviews further suggested that only locally domiciled transporters are engaged to move the maize from the FRA depots to the participating schools throughout the district. Interviews with district MoGE revealed that since inception the FFE local transporters are engaged to move the maize from FRA throughout the district helping them grow their capacity. Interviews with transporters suggested that the MoGE through DEBS office contracted locally based transporters to move maize to various schools in the districts. Furthermore, transporter such as Mayala Villa and T Mughudulwa revealed that at least every 4 months they move maize for school meals making a difference with operations under such difficulty economic times. Transporters also revealed that the transportation rates are competitive only that the routes they operate during distribution of maize are bad to impassable coupled with delayed payments, made operations difficulty.

CHAPTER FIVE: DISCUSSION

5.0 Introduction

This chapter provides analysis between what literature on food for education and results of the implementation of the food for education programme in host communities of Sinazongwe and Kazungula districts. Previous studies on food for education programs have focused narrowly on implications for enrolment, neglecting the extent to which these programs created prospects for multi-sectoral gains in rural communities. The overall aim of this study was to explore food for education programs and implication for multi-sectoral gains in rural Zambia.

5.1 Exploring experiences and dynamics of food for education programs

This study highlights the perception that the food for education programme is multi-sectoral and sustainable social safety net by policy and practices. Governments may seek to target resources to poor communities and households for a variety of reasons, both related to economic growth and equity objectives (Eenhoorn et al. 2009). Targeting may also be useful to maximize impact on key development indicators or to optimize resource expenditures in the face of budget constraints (Pritchett 1997). Whilst Gelbach *et al.* (2000) argues that targeting specific populations can help to solidify nation-building, the poor and vulnerable in society. This study established that the selection of schools was not important but merely focused more on the district vulnerability, which led to capable communities within a district that do not need FFE intervention to being included in the current implementation.

Primarily, school feeding programs constitute critical social interventions that have been introduced in many developed and developing countries of the world to address the issue of poverty, stimulate school enrolment and enhance pupils' performance (Alderman et al. 2008). Providing school meals is therefore vital in nourishing children (Buttenheim et al. 2011). Parents are motivated to send their children to school instead of keeping them at home to work or care for siblings (Akanbi, 2013). This study confirms that the implementation of the FFE programme, enrolment and attendance numbers have increased but the population is equally on the rise in the districts and it is thus difficult to determine strictly as to whether the FFE programme can be solely the reason to the increased enrolment rate or not. However, upward attendance is linked to the hunger situation in the communities and FFE programme pushes

attendance in school which improves performance of learners. Analysis has shown that performance is improved due to consistency of attendance which was a positive aspect of the FFE programme but the extent to which FFE programme shapes enrolment is less clear in the districts.

Childhood and adolescence are critical periods for health and development as the physiological need for nutrients increases and the consumption of a diet of high nutritional quality is particularly important (Afridi 2007). Eating habits, lifestyle and behavior patterns are established during this period that may persist throughout adulthood (Guo et al. 2002; Lissau et al. 2004). Healthy nutrition improves child well-being and learning ability, leading to better academic performance (Bundy et al. 2009).

Previous studies have shown positive links between children who are well nourished and improved learning, attendance, behaviour and consequently child-teacher relationships (European Food Commission, 2001). Good nutrition also fosters mental, social and physical well-being, contributing to increased self-esteem and positive body image (Yach, 2006). In this study analysis shows that besides the lean diet of the FFE programme, the programme lacks consistency in the provision of school meals. This study established that the lack of consistence in the provision of food for learners disturbs the momentum of the food for education in addressing increased enrolment, attendance and nutritional needs of pupils in schools.

Food for education programs are important not only for their educational benefits, but also because in the short term they provide a safety net during crises and in the long term they act as investments incentives in human capital development, local economies improvement, hunger reduction and gender equity (Chandler et al. 1995). This, therefore, means that programs to be country driven to attain sustainability and development of local economies (Alderman et al. 2012). By explicitly connecting specific needs of both demand (Educational and Healthy needs) and supply (family farming or agriculture support) sectors, targeted public procurement can support a socially and economically resilient rural economy (Graeub et al. 2015). The distinctive and innovative element of FFE programmes, compared to traditional school feeding programs, is the prioritization of smallholder local economic activities in a way that maximizes sustainable benefits on prices, opportunities for commercialization, market linkages and access to productive assets for smallholders and other stakeholders along the value chain (Studdert 2004).

The FFE programs are intended to draw both indirect and direct benefits for the local communities where the program is being implemented (Drake 2009). This study highlighted the role of procurement of supplies for food for education program require decentralization for community participation with a drive to improve agriculture production and productivity, increased market access, local processing industrial growth. Decentralization will lead to more reliable incomes, while contributing to food security at household and community levels. Analysis showed that the current FFE programme design denies local farmers of a market opportunity created from its implementation at various schools for crops that are locally produced and further denying community income per capita growth.

The assumption is Food Reserve Agency procures from local farmers is failure to drawing a clear economic programme for district empowerment by food for education programme. For the schools to procure food locally there is need to decentralise the procurement design of the FFE programme that way, local farmers can benefit by selling to schools.

Conceptually speaking, people cannot be forced to participate in projects which affect their lives but should be given the opportunity to participate where possible and capable (Ahmed et al. 2000). To achieve social transformation, participatory approaches in social interventions need to work alongside each other at different levels first by identifying individual and community capabilities to contribute to the programme (Martin et al 2017). The developed conceptual framework guided the study on the wider multi-sectoral prospects (social protection and agriculture development) of implementing FFE programmes unlike the narrow view taken by many studies in Zambia. The conceptual framework guided the probing on the level community participation in the FFE programme. Analysis shows that community participation was relegated to only provisioning of free labour and fresh rain fed vegetables and hence not empowering the community economically.

The results presented in this chapter offers an opportunity for wider reflections. The first reflection is that universal inclusion in education has attracted high-profile attention internationally as an ideological project. As Dyer (2014, p.9) notes, “Education policy discourses in Education for All era have articulated an increasing concern over those who remain excluded” and the role of the public policy in representing inclusion and exclusion. Exclusion is understood as an undesirable state and amenable to correction – by appropriate policy intervention such as through the Food for Education Programmes. The unincluded learners are characterised as

‘marginalised,’ ‘excluded,’ ‘backward,’ or ‘deprived,’ and their presumed characteristics make for a huge category of people who regardless of their differing values and way of life are described as ‘hard to reach’ (UNESCO 2010). Education for all was proposed in a holistic, broadly conceived vision as inclusive concept and ‘an active commitment’ to removing education disparities was demanded. In the current study, possibilities of attaining education for all within the framework of Food For Education Programmes might slender in rural geographies. This raises the need for robust programme design that can incorporated roles from multi-level stakeholders. A focus on community participation *vis a vis* local sourcing strategies can enhance wider impacts and greatly enhance prospects for multi-sectoral gains.

CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter provides a conclusion to the study. The overall objective of this study was to explore Food For Education programmes and implication for multi-sectoral gains in rural Zambia. Specifically, the study explored the nature of food for education programmes in rural Zambia. It explored processes and practices underpinning multi-sectoral attainment in the food for education programme in Kazungula and Sinazongwe districts of Southern Zambia. The study also evidenced community impacts of the food for education programmes in host communities of Kazungula and Sinazongwe districts.

6.1 Conclusions

In this study of the food for education and prospects for multi-sector gain in rural Zambia, the research has assessed how different actors interact to shape the operations of the food for education. The study was located more widely within an intellectual framework of universal inclusion which has attracted high-profile attention internationally as an ideological project. Education policy discourses in Education for All era have articulated an increasing concern over those who remain excluded and the role of the public policy in representing inclusion and exclusion. Exclusion is understood as an undesirable state and amenable to correction – by appropriate policy intervention such as through the Food for Education Programmes. The unincluded learners are characterised as ‘marginalised,’ ‘excluded,’ ‘backward,’ or ‘deprived,’ and their presumed characteristics make for a huge category of people who regardless of their differing values and way of life are described as ‘hard to reach’ (UNESCO 2010). It was noted across the study that education for all was thus proposed in a holistic, broadly conceived vision as inclusive concept and ‘an active commitment’ to removing education disparities was demanded.

This study has shown that FFE programme is narrowly linked to other related sectors, advancing pupil attendance, enrolments and retention. The study showed that the programme did cause significant increase in school enrolments attendance because of food provisioning at school but both its nutritional and community participation of the programme are negligible. Community

participation in the intervention is primarily towards provisioning of free services such as labour and rain fed agriculture produces but this is narrow and unsustainable with insufficient impact and delivering economic benefit to the host communities. Difference in interventions shape project outcomes and related benefits but both state and non-state supported interventions produce narrow linkages with communities and are unsustainable. Overall, evidence showed that possibilities of school and community empowerment are slender at the moment but centrally lie in the ability to decentralise the delivery of the intervention. As a result, the current intervention somewhat takes power away from schools and local communities to participate in FFE programme which affects the sustainability of the programme.

One key gap identified from analysis is that FFE programmes require a multi-level interaction and multi-level actors because of limited government institutional capacity with one actor to effectively and efficiently operate such a program. Some governance gaps relate to three focal areas:

- Limited capacity to monitor the program as it lacks uniformity in implementation. The operation of the school meals program in one district differs from the other.
- Lack of prescribed nutritional requirements for pupils to be included in the nutritional plan for targeted population which involves nutritional diversity in the diets.
- The programs lack of a clear economical plan for smallholder farmers around the schools besides its agriculture support objective. For instance, the involvement of Food Reserve Agency in the program is way of government trading within its own resources unlike the two market social interventions for smallholder farmers working within their own developmental mandates.

Analysis provides insights into the realities of the operation and relationship between the food for education programs, agriculture support and health sector (as per conceptual framework) in determining prospects of program sustainability within which the community can benefit. Findings of this study also enable us to reflect on the limits of what the food for education program can achieve with regards to driving growth among the local processing industry, a healthy rural child community and improved agriculture production and productivity. The study sets us to think about how we can enable the food for education program focus on being a multi-

sectoral social intervention not only at policy level but at implementation or local level. This study is specific to the topic of enquiry but raise sufficient questions to help further research.

The governance issues surrounding the food for education program and multi-sectorial intensions require much to be done through settling bottlenecks in health issues (through defined spread or diverse diets), agriculture support (creating an economic linkage for smallholder farmers) and redefining a helpful food for education procurement model for host communities. Literature demands that program planners and implementers require to put the community at the center of the program, for it to be sustainable and the community draw benefits from the program.

Based on the behaviorist theory, it would therefore, be concluded that the food for education programme acts as a stimuli in that reinforcements which in this case the provisioning of food to school going children follows a response to a stimuli that leads to improved health, agriculture, low levels school dropouts for both boys and girls as well as greater concentration by pupils. This view is in line with BF Skinner approach that used reinforcement technique to teach pigeons to dance and bowl a ball in a mini-alley.

6.2 Recommendation

This study makes the following recommendations:

- a. The study shows that the food for education programme in Kazungula and Sinazongwe districts increased school enrolment and attendance because of food provisioning at schools but both its nutritional and economic values of the programme are negligible. Thus, program planner should look for ways to improve the quality of school meals if the health objectives of the program aspect are to be satisfactorily achieved. To this end, the food for education programs need to be designed as part of an effective package of interventions that address the nutrition and health needs of school-age children in the districts.
- b. It is important to strengthen the community participation in organising and implementing food for education programmes. Programme planning and implementation requires to put the community and social economic needs at the center of the program planning, for it to be sustainable and allowing the community draw economic benefits from the program.

This is because community participation will not only economically improve livelihood or standard of living but equally encourage parents to maintain children in schools as schools create agro-markets for the community.

- c. Program administrators should identify and address any potential bottlenecks in implementation. This study revealed that there exist delays in commencing food for education every term, particularly in the beginning months, due to administrative inefficiencies. Thus, food should be delivered on time so as to minimize the number of days with no feeding since delay could also undermine the impacts of food for education on school enrolments and attendance.
- d. It is observed that children's involvement in household food security works is high in the districts to the extent of affecting their school attendance. Thus awareness creation for the households could change their attitude towards schooling and enable them to enroll children to school during the right age. This could be carried out by local education authorities or other concerned development partners through campaigns or educating the local people.

6.3 Considerations For Future Studies

The study on Food for Education Programmes and Prospects for Multi-Sector gains in Rural Zambia: Experiences of Kazungula and Sinazongwe Districts of Southern Zambia indicated one key positive attribute of the program being the increase of pupil enrolment, attendance and reduced pupil dropouts during periods when meals are provided. Further research should be carried out to determine why there exist delays in commencing and administrative inefficiencies food for education every term, this is in reference to the findings of this research where it was found that there are delays in the commencing of food for education at beginning months due to administrative inefficiencies. This so because food should be delivered on time so as to minimize the number of days with no feeding since delay could also undermine the impacts of food for education on school enrolments and attendance.

Since the researcher just concentrated on two districts of Zambia that is communities of Kazungula and Sinazongwe districts, it is recommended that further research be conducted in other districts where the food for education programme has been implemented due to the fact

that there are differences in social economic activities from one district to the next, the geographical locations also are which could cause different threats and approaches.

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APPENDICES

Appendix 1 Structured Focus group discussion questions

FGD – HSFP (Key community leaders, school head, local clinic & parents)

Research Topic: **Food for education prospects of multi-sector gain in rural Zambia – The case of Kazungula and Sinazongwe districts**

Question: Why was the community identified for the school feeding program?

Question: How many children are benefiting from the home-grown school feeding program in the community and is there a targeted number of learner to be included and by when do you expect to reach the target

Question: What are the governments set objective for school feeding programs in district

Question: Do you think the intervention is meeting these set objectives

Question: Are there any nutritional deficiency that the home-grown school feeding program aims at improving among children?

Question: What nutritious component are factored in the diet of FFE program and what are the sources of supply

Question: How is food being supplied to FFE program in the district?

Question: What are the forms or ways of community participation?

Are you allowed to supply agricultural produce?

Why is this so?

Question: How is the food for education program helping this community?

Question: How would you want to involve the community in food for education program?

Question: Are there any ways that you can want the food for education program to improve?

APPENDIX 2 Structured questionnaire

Questionnaire – (Parents) randomly selected

Research Topic: Assessing the impact of the home-grown school feeding towards being a multi-sectoral social intervention in Kazungula/Sinazongwe districts – case study of MOE participating schools

1. Sex

Male

Female

2. Age.....

3. Name of the village.....

4. Ward..... District

5. Level of education.....

Question: How long have you lived in this area:

Question: Are you aware of school feeding program? (**tick one**)

No

Yes

Question: Do you have a child in school feeding program? (**tick one**)

No

Yes

If Yes, how many are they? State the gender of your child and grade

.....

If No, why

How has the SF program helped to maintain your child in school?

Question: How is the food in the SFP delivered to the learners

Eat prepared food while at school

We take home for parents to prepare

Question: How many times are children given food while at school?

Question: What type of food is in the diet?

In your opinion, do you think that school feeding program contributed to the enrollment of your child in school?		
Item	Response	Tick
1	Strongly agree	
2	Agree	
3	Not at all	
4	Not sure	

Question: Do you think school feeding program helps in reducing students' dropout?

- i. Extremely contributes
- ii. On average
- iii. Does not contribute
- iv. Not sure

Question: How is the community involved in the intervention (HSFP)?

Question: In terms of agriculture production, have you produced anything to sale for school feeding program?

- No
- Yes

What do you produce?

If No why

If Yes how often?

How is the price compared to other district prices?

Question: If at all you do not supply anything for school meals, do you know the source of the food?

Question: Has the hosting of the home-grown school feeding program as a community helped

Yes

No

If yes how?

Question. Are there any ways that you can want the home-grown school feeding program to improve?