A REPORT ON THE BASELINE STUDY AND SUPPLY CHAIN ANALYSIS OF THE HOME GROWN SCHOOL FEEDING PROGRAM (HGSFP) IN THE NADOWLI KALEO DISTRICT

By: SAVE-Ghana

Submitted to: SNV

JUNE, 2013.
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<tr>
<td>BMGF</td>
<td>Bill and Melinda Gates Foundation</td>
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<tr>
<td>CSOs</td>
<td>Civil Society Organizations</td>
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<tr>
<td>CTO</td>
<td>Chief Technical Officer</td>
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<tr>
<td>DDO</td>
<td>District Desk Officer</td>
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<td>DIC</td>
<td>District Implementation Committee</td>
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<tr>
<td>FBO</td>
<td>Farmer Based Organization</td>
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<td>FGD</td>
<td>Focus Group Discussion</td>
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<td>GES</td>
<td>Ghana Education Service</td>
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<td>GSFP</td>
<td>Ghana School Feeding Programme</td>
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<td>HGSFP</td>
<td>Home Grown School Feeding Program</td>
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<td>MoFA</td>
<td>Ministry of Food and Agriculture</td>
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<td>NAFCO</td>
<td>National Buffer Stock Company</td>
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<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>NKDA</td>
<td>Nadowli Kaleo District Assembly</td>
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<td>PGHGSFP</td>
<td>Procurement Governance for Home School Feeding Programme</td>
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<tr>
<td>PNDC</td>
<td>Provisional National Defense Council</td>
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<td>SHF</td>
<td>Small Holder Farmers</td>
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<td>SIC</td>
<td>School Implementation Committee</td>
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<td>SIDSEC</td>
<td>Sustainable Intergrated Development Services Centre</td>
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<td>SMC</td>
<td>School Management Committee</td>
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<td>SNV</td>
<td>Netherlands Development Organization</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>WVI</td>
<td>World Vision International</td>
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Acknowledgement

We would like to register our indebtedness first to SNV our partner in the implementation of this project for finding us worthy and credible enough to undertake this exercise and for the support of Madam Alimata Abu the Project Associate Advisor and Mr Sylvester Ekpe whose experience and guidance throughout the implementation of this project helped us to get this far.

We also deeply appreciate the support and cooperation of the Nadowli Kaleo District Coordinating Director, the Deputy District Coordinating Director, the District Finance Officer and the District Desk Officer of the School Feeding Programme for their presence at the inception and validation workshops during which they made a lot of inputs and for cooperating with us as the Local Capacity Builder (LCB) in this project.

We are also grateful to the Nadowli Kaleo District Director of the Ministry of Food and Agriculture (MoFA) for cooperating and providing us with the necessary information in this survey and particularly for releasing his Agriculture Extension Agents (AEAs) and Supervisors to support us as Research Assistants in the data collection process. By this, we are extending our appreciation to the AEAs for their support in the data collection.

We are indeed grateful to everyone who supported us in whatever capacity and form to come this far in this project. We will forever appreciate this partnership and cooperation from all of you.
Executive Summary

The Procurement Governance for Home Grown School Feeding (HGSF) program is a four-year initiative funded by the Bill and Melinda Gates foundation through SNV-Netherlands Development Organization that is aimed at securing smallholder farmer participation in Home Grown School Feeding programs in Mali, Kenya, and Ghana. The project is designed and estimated to enable as many as 10,000 smallholder farmers in Ghana, at least 30% being women within a period of four years, to derive increased and stable income through effective participation in a Home Grown School Feeding program that uses open, transparent, accountable procurement practices in its implementation, affecting all stakeholders along the supply chain. The project is aimed at piloting new interventions to strengthen farmer-caterer linkages through an improved procurement process, and enhanced supply chain that guarantees social accountability in the HGSFP through effective and participatory mechanisms. In order to achieve the above objectives it was paramount to establish the existing situation on the ground for retooling, effective targeting and management through a baseline and supply chain analysis with information from the key actors of the GSFP supply chain to inform the project implementation and to subsequently measure the progress made at the end. Data collection tools were therefore designed by SNV to elicit both quantitative and qualitative information from the key actors; Caterers, Traders, Farmer Based Organizations (FBOs), MoFA and Non-governmental Organizations (NGOs), Financial Institutions (FI) and Key Informants who were purposively sampled in view of their roles in the GSFP. A four member MoFA team who are very familiar with the district were recruited as Research Assistants to collect data from all the actors. Some of the key findings of the survey include the following:

- Caterers who are 100% women have also employed a total of 116 people who are also all women as cooks.
- Fifty-three per cent (53%) of the membership of the FBOs interviewed in this study are women which is significant for the target of the project.
- Most FBOs, Caterers and Traders do not keep accurate records to help them evaluate their own progress.
- The caterers buy their food stuffs from the open market and not from Smallholder Farmers which defeats the purpose of the HGSFP.
- Thirty-five (35%) and 41% of FBOs and caterers respectively operate only as informal business enterprises which affects their ability to access credit and negotiate for favorable business terms.
- Caterers did not receive training on SF procurement before being contracted but were selected based on their existence both as formal or informal business enterprises or some recognition of their capacity to supply to the SFP.
- The caterers are not organized into associations and none of them belongs to any national level association which suggests weak compliance in respect of best practices in terms of standards and code of ethics.
- The caterers’ main challenge remains the fact that they have to pre-finance the feeding for several months with very irregular and delayed refund from government.
• The main food stuffs grown by smallholder farmers and FBOs include maize, rice, beans, groundnuts, yam and millet/sorghum. All these including cassava/gari which is mostly purchased from external markets are the main food stuffs on the school menus.
• Other actors of the SFP aside caterers, framers and traders who are playing direct and support service roles include Agro Input Dealers, Transporters, MoFA, the GSFP regional secretariat, NGOs, the National Buffer Stock Company (NAFCO), Environmental Health Department, the District Implementation Committee (DIC) and the School Implementation Committees (SIC).

On the whole, the survey was successful despite challenges like incomplete questionnaires attributed to inappropriateness of the issues to the respondents and poor record keeping which made the completion of the quantitative information sections of the questionnaire impossible for the respondents.
CHAPTER ONE: INTRODUCTION

1.1 Background

In 2003, African governments endorsed the Home Grown School Feeding Program (HGSFP) of the Comprehensive Africa Agricultural Development Program (CAADP) and in the same year, the New Partnership for Africa’s Development (NEPAD) identified Home Grown School Feeding (HGSF) as having an immediate impact on food security in Africa, with the potential to contribute to long-term development goals (WFP, 2009).

The Ghana School Feeding Programme (GSFP) was started in October 2005 as an initiative of the Comprehensive Africa Agricultural Development Program (CAADP) Pillar 3 aimed at enhancing food security and reducing hunger in line with the UN Millennium Development Goals (MDGs) on hunger, poverty and malnutrition. The programme seeks to among other things increase school enrolment, attendance and retention, reduce short term hunger and malnutrition amongst kindergarten and primary school children and boost domestic food production through the provision of one hot adequately nutritious meal, prepared from locally grown foodstuffs, on every school going day (WFP, 2007).

For now, the program has successfully increased school enrollment and attendance with about 90% coverage in most districts. However, the program has not yet met its goal of boosting agricultural production by using locally grown foodstuffs. Linking school feeding programs to domestic smallholder farmers will ensure that farming becomes sustainable as farmers’ incomes increase making the availability of nutritious meals for the children more a reality. Current procurement processes, however, generally fail to create this link or are not set up to facilitate smallholder access to Home Grown School Feeding (HGSF) programmes (SNV, 2012).

According to the World Food Programme (WFP), “there are 66 million primary school-age children who attend classes hungry across the developing world, with 23 million in Africa alone” (WFP, 2012). The introduction of the GSFP and particularly in the Nadowli Kaleo district could not have come at a better time because the district is one of the relatively young and struggling districts among the poorest of the 216 districts in the country.

The GSFP is decentralized under the local government structure with a framework for the active participation of local actors like the District Implementation Committees (DIC), the School Implementation Committees (SIC), Caterers and Small Holder Farmers (SHF) through Farmer Based Organizations (FBOs) in the implementation process. However, many of the actors have not been adequately informed about their roles and responsibilities resulting in a lack of involvement in the decision making process and some lapses in the implementation.

It was for efficiency in the implementation of the programme that the Procurement Governance for Home Grown School Feeding (PGHGSF) programme funded by the Bill and Melinda Gates Foundation (BMGF) seeks to improve the Home Grown School Feeding (HGSF) procurement process and strengthen the capacity of all actors to ensure that smallholder farmers have access to the HGSF markets, enhance the supply chain governance of HGSF programs to ensure effective, transparent and accountable delivery of products across the supply chain and to develop effective and participatory mechanisms for increased accountability by and for the programs’ stakeholders.
The project seeks to increase the number of contracts awarded to smallholder farmers from HGSF programmes to supply their locally grown products by introducing innovative mechanisms that involve all stakeholders along the supply chain. In the end, important changes to current practices that result in greater openness, transparency and accountability in the procurement process of HGSF will enable smallholder farmers to access the market created which will serve as an incentive to increase production and eventually ensure food security in the district.

1.2 District Profile
In view of the fact that the new Daffiama-Busie-Issa district was recently created out of the Nadowli district and that there is a challenge presenting information on the Nadowli Kaleo district as it stands now separately, the district profile in this report represents information on the original Nadowli district.

The Nadowli District was carved out of the Wa Municipality in 1988 as part of the decentralization policy of the Provisional National Defence Council (PNDC) government under the Local Government Law of 1988 (PNDC Law 207) with Nadowli as the administrative capital 43 km from the Upper West Regional Capital, Wa. It is bordered to the south by Wa Municipality, to the west by Burkina Faso, to the north by Jirapa District and to the East by Sissala West District covering a total land area of 2,742.50 km².

The total population of the district from the 2010 census report stands at 94,388 out of which 44,724 are males and 49,664 are females giving a ratio of 44:51, a situation with a clear need for gender mainstreaming.

The District is generally a low lying but gently undulating area with a few peak areas between 1000ft and 1150ft. The area lies within the guinea savannah vegetation zone characterized by short deciduous trees such as the shea, dawadawa, kapok and baobab tree, a short grass cover and a unimodal rainfall pattern. The rainy season extends from April to October with a mean annual rainfall estimated at 1100 mm, maximum in August, followed by a long spell of dry season between November and March characterised by dry hazy winds (harmattan).

The district has a lateritic sandy loam type of soil which is relatively poor in organic matter and soil nutrients due largely to bush burning and poor farming practices.

Like many rural communities in Ghana, agriculture remains the mainstay of the people engaging about 85% of the labour force while commerce, industry and services account for about 14%, 5% and 1% of the labour force respectively according to the Nadowli District Medium Term Development Plan, 2002-2004. Out of the 85%, only 25% use intermediate technology services in their production process resulting into a cycle of low yields, low income low investments the end effect of which is food insecurity.

One unfortunate situation farmers in this district are confronted with is the lack of storage facilities. The rate of post-harvest loss as a result is as high as 30% in the district forcing farmers to dispose their produce soon after harvest. In doing so, farmers are also confronted with the challenge of lack of markets and so they sell their produce at low farm-gate prices thereby earning very little for their hard work (NDA, 2012).
The mean annual household income of the district is estimated at GH¢480 whereas the mean annual expenditure stands at GH¢504 giving us a net deficit which is mostly made up by remittances from migrant households.

Major crops cultivated in the area include sorghum (guinea corn), millet, maize, beans, groundnuts, yam, rice, potatoes cotton, soya beans, tiger nuts and vegetables. The people are also survived by the rearing of animals which include sheep, cattle, goats, pigs, and a variety of poultry breeds but also depend on some indigenous economic trees including the baobab, shea, dawadawa and kapok trees among others.

The Nadowli Kaleo district has a total of 157 basic schools made up of 60 primary schools, 34 JHS and 63 kindergartens (Source: DDGES, Statistics Unit - 2013) with the total pupil population of about 20533 (10382 females, 10151 males). The Ghana School Feeding Program (GSFP) started in the Upper West Region in 2005 with just eighteen (18) beneficiary schools. In 2005/2006 academic year the GSFP was introduced in the then Nadowli District in one (1) School namely Kyang R/C with an addition of one more school, Meguo R/C Primary in the 2006/2007 academic year. In 2010/2011, the district feeding schools increased to seven (7) schools. Following a retargeting exercise that took place between 2011 and 2012 across the country, currently, with the 491 feeding schools in the Upper West region, the programme covers 70 primary and kindergarten schools engaging the services of 76 caterers in the Nadowli Kaleo District.

These figures according to the Nadowli Kaleo District Assembly’s profile represent about 100% coverage of the district with a total of 34,115 children being 20,234 boys and 13,881 girls benefiting.

From the position of the GSFP regional secretariat and the District Desk Officer (DDO), the program has made great achievements including; 80% to 99% coverage of schools in the various districts, increased enrolment, attendance and retention in most beneficiary schools, training for caterers and SIC members, increased community participation in the program and the establishment of a standard menu for caterers among others. The implementation of the program is however not without challenges some of which include; delays in the release of funds for payment to caterers, lack of kitchens and access to potable water for some schools, misconception and politicization of the program by ill-informed individuals and the heavy schedules of the DDOs who are mostly District Planning officers, Budget Officers or District Deputy Coordinating Directors. Notable also is the fact that some of the caterers under feed the children with the Gh¢ 0.40 currently paid per child for a meal compared to Gh¢ 0.60 per student per day for three meals in the Senior High schools.

1.3 Objectives of the Assignment
The objectives of the assignment which is two-fold i.e. a baseline development and supply chain analysis include;

1.3.1 The Base Line Study
- To collect both quantitative and qualitative data to capture the current status of governance in the procurement process and in the GSFP
- To produce relevant baseline information to inform the project implementation and to measure the progress made at the end, in each of the following key thematic areas of the project:
improvement of the school feeding procurement process, enhancement of the Home Grown School Feeding supply chain and promotion of good governance with the development of social audit

1.3.2 The Supply Chain Analysis
The objectives of the Supply Chain analysis are to use the findings of the base line study to:

- Define the end food product(s) demanded by the school feeding programs
- Identify foodstuffs grown by local farmers that can form part of the main menus for school feeding in the district.
- Determine the core processes in the supply chain
- Map the main actors involved in these processes as well as the supporting actors (e.g. Financial institutions, extension services, and certification)
- Develop the supply chain map showing flow of goods and linkages between the primary actors and the final consumers
2 Chapter Two: Methodology

2.1 Tools used
The study relied on both primary and secondary data as different categories and levels of analysis were required in order to produce this report. The secondary data was gathered through the review of articles and reports on the background, the concept and implementation strategies of the HGSFP as well as the profile and Medium Term Development plans of the Nadowli district over the years. This data was also both qualitative and quantitative in nature.

The primary data was collected through field work targeting key stakeholders of the GSFP in the district. This data was collected using pre-designed questionnaire instruments from the Netherlands Development Organization (SNV) with Farmer Based Organizations (FBOs), Caterers, Traders and beneficiary schools as respondents. Other respondents were institutions such as the Ministry of Food and Agriculture (MoFA), Non-governmental Organizations (NGOs), Financial Institutions operating in the district and the Ghana Education Service (GES) eliciting both qualitative and quantitative information from them. The questionnaires were largely quantitative in gathering information for the baseline survey while that of the supply chain was by the use of in-depth interview and Focus Group Discussion (FGD) guides.

2.2 Sample size
In view of the fact that so much quantitative information was required to establish the baseline of the Home Grown School Feeding Programme (HGSFP), sampling a cross section of the target populations would result in gaps in the survey and a misrepresentation of the reality. The study therefore sought to collect information from every caterer, trader, FBO and institution linked to the GSFP. The selection of these groups of people and institutions was purposive because the study is in relation to a program that no other person has ample knowledge about except the above mentioned who are linked to the programme. The study targeted seventy (70) caterers, twenty-six (26) FBOs, eight (8) NGOs and MoFA which were to respond to the same instrument, the District Assembly through the District Desk Officer (DDO), one financial institution and a key informant. In view of challenges like unwillingness of some institutions and individuals to respond to the questionnaire, data was eventually collected from forty-six (46) caterers, seventeen (17) FBOs, three (3) NGOs, MoFA, the District Assembly through the DDO, one trader supplying to the school feeding programme and a key informant.

2.3 Identification and Orientation of Data Collectors and Entry Clerks
After the LCB orientation on the tools at the Tamale workshop, four (4) data collectors and two (2) data entry clerks were identified during the district inception workshop. On the 28th of May 2013, these data collectors and entry clerks were put together in Wa at the SNV conference Hall and trained on the tools designed for the study in the baseline development and Supply chain Analysis in order to avoid ambiguity and misinterpretation of the questions. The facilitators were Alimata Abu of SNV GHANA and Boniface Nyewie, the Programme Manager for SAVE GHANA. Below are the names and contacts of the data collectors and data entry clerks.
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<th>Portfolio</th>
<th>Contact numbers</th>
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<td>Florence Tantuo</td>
<td>Data Collector/ MOFA AEA in charge of Kaleo</td>
<td>0208914414</td>
</tr>
<tr>
<td>Kyelnye Abdulai</td>
<td>Data Collector/MoFA Service Personnel in charge of Takpo and Sankana</td>
<td>0206425995</td>
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<td>Iddrisu Braimah</td>
<td>Data Collector/MOFA AEA in charge of Nator</td>
<td>0208395288</td>
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<td>Stephen Yelsong</td>
<td>Data Collector/ MOFA Supervisor</td>
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<td>Comfort Tommie Rabiatu</td>
<td>Data Entry Clerk/ SAVE GHANA</td>
<td>0208782642</td>
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<tr>
<td>Fuseini Latif</td>
<td>Data Entry Clerk/SAVE GHANA</td>
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2.4 Data Collection
Primary data was collected directly from the field by four (4) MoFA staff (Extension Officers) who were recruited based on their previous experience in similar exercises and the fact that they work across the district with a good knowledge of the geography of the district as well as the social dynamics of the people..

2.5 Data Quality Management
SAVE-Ghana went through a process of data cleaning to ensure consistency in the responses and also made follow ups and called up some of the respondents for further information for completion of gaps in the questionnaire. Some of the respondents were called up again to complete gaps that were left out. It became clear in the process that some of the gaps were as a result of the fact that some questions were either not applicable in the view of respondents or they just did not have that information. The margin of error in this report has therefore been reduced to the barest minimum but we accept any discrepancies in the report nevertheless.

2.6 Data Entry and Analysis
The baseline survey tools which were designed with multiple response options were entered into a purpose-designed excel spread sheet for analysis. The analysis for the baseline survey which was largely quantitative focused on the existing situation in terms of numbers of actors, their level and depth of participation in SF as regards procurement processes, flow of funds, supply chain and stakeholder accountability. Linkages between their modus operandi and the quantities they handled in the last season or last school term as well as their interactions with other stakeholders along the line of delivery to the GSFP were also considered. The analysis generated tables and charts for clear presentation of the information so gathered. Data for the supply chain analysis was processed through a qualitative process eliciting the information from respondents in relation to their activities and
involvement in the GSFP but more importantly the challenges they face as well as their impressions about governance issues in relation to the GSFP.

2.7 Limitations of the Assignment
The study is in two parts the first being a baseline development on the procurement governance process of the GSFP which basically is to present a situational analysis as it pertains out there. The second part is on supply chain analysis in relation to the GSFP. The limitations of this study included the fact that no baseline research on SF had been conducted previously in the district thereby making access to some information from some stakeholders difficult. The baseline was also restricted just to the previous academic year in which case we did not have to concern ourselves with current information though relevant. The study was also limited to the current Nadowli-Kaleo district and not the old Nadowli district which had a detailed profile.

2.8 Challenges of the Assignment and lessons learnt
The following were the challenges faced in the data collection process;

- There was no comprehensive information on the caterers operating in the district and so some caterers could either not be traced or it took a longer time to get them interviewed.
- Even though a district inception meeting was held prior to data collection, information about the survey had still not gone down well and most caterers were still very suspicious and were initially hesitant to provide information.
- Most FBOs, Caterers and Traders had the problem of poor record keeping and could not respond to all the questions because they did not have the information required.
- The supply chain tools for caterers, traders and FBOs which were by FGDs were most difficult to administer because it was very difficult bringing the target respondents together.
- The AEs were recruited as research assistants to help collect data were very helpful because they already work within most parts of the district and are in touch with the people. They were particularly more helpful in collecting data from the FBOs and MoFA itself.
- In this study caterers were to introduce the traders or suppliers they deal with to enable us collect supply related information from them. Findings from the caterers are that only one of them has permanent trade links with traders while the rest buy from the open market from traders they have no information about and so they cannot be traced.
3 CHAPTER THREE: BASELINE FINDINGS AND ANALYSIS

3.1 Introduction
This chapter presents the findings of the survey as gathered through the use of research tools administered to key actors of the GSFP in the Nadowli Kaleo District. Even though the district profile represents the old Nadowli district which includes the newly created Daffiama-Bussie-Issa district, data collection was limited to the Nadowli Kaleo District and all findings presented here do not include information from Daffiama-Bussie-Issa area.

3.2 Smallholder Farmers/Farmer Based Organizations (FBOs)
FBOs are voluntary interest groups of smallholder farmers which serve as platforms for knowledge sharing and also an avenue through which they influence the prices of their produce in the market with opportunities to press home certain demands and particularly policy interventions. FBOs engage in series of activities as may be deemed feasible for the wellbeing of the individual members including production, processing, storage, bulking, transporting and marketing among others. FBOs are indispensable in the supply chain of the GSFP and the achievement of the objectives therein. This is as a result of their role as primary producers irrespective of whether they supply directly to the SFP or not. The Nadowli Kaleo District has a total of 26 FBOs recognized by MoFA, however this study covers 17 of them. There are however other FBOs in the district working in partnership with NGOs (SIDSEC and UW Agro Industries).

3.2.1 Registration Status of FBOs
From Figure 3.3.1, only 12% and 18% of the FBOs have been registered as business enterprises and farmer cooperatives respectively. The greater majority of 35% exist as loose farmer organizations that probably meet irregularly to pursue their interest as a result of which they may not be able to lobby and to influence policy and the prices of their produce.

Figure 3.3.1: Registration Status of FBOs

Source: SAVE-Ghana Field Survey, 2013
The rest of the 35% also had no idea what their status was and so could not respond to that item.
3.2.2 Membership of FBOs
As evidenced in the table below, a great number of women (165) are actively involved in agricultural activities and have the tendency to get more organized in order to take advantage of opportunities available for them to improve their livelihoods as against a total of 145 men. The number of women (165) representing 53% of the total membership of the 17 FBOs that responded to this questionnaire justifies the rationale for the GSFP.

Figure 3.3.2 Membership of FBOs by Sex

![Membership of FBOs by Sex](image)


3.2.3 Crop Value Chains of FBOs and their Members
As captured in Figure 3.3.3 below, all the FBOs are engaged more in the production

Figure 3.3.3 Crop Value Chain FBOs deal with

![Crop Value Chain FBOs deal with](image)

and related activities of maize and groundnuts followed by beans and cowpea while yam and plantain remain the lowest. This could be influenced by the environment, the multiple uses into which maize and groundnuts can be put and even the ease of production and storage.

3.2.4 Storage Facilities Used by FBOs
All 17 FBOs indicated that they store their produce in their own facilities prior to disposal or use. None of them store in school, caterer and trader facilities because they have not been linked to the GSFP supply chain and they have no relationships with them. The capacity of the storage facilities of 12 FBOs put together out of the 17 FBOs totals 174 metric tons.

3.2.5 Storage Problems Encountered by FBOs
Eleven (11) out of the 17 FBOs said that they do not encounter storage problems while six (6) of them also experienced storage problems in the last harvest season which included heat/moisture, pests and pilferage related storage problems.

3.2.6 FBO Participation in SF Procurement and Training
None of the FBOs have ever participated in SF procurement or received any training from any institution. No institution has ever invited them to any procurement process or to be trained on SF supply chain related issues. They have also never received any financial support to supply to the SFP.

3.2.7 Inspection of FBO Storage Facilities
As shown in Figure 3.3.5 below, 65% (11) of the FBOs have never had their storage facilities checked or inspected by any authority however, 29% (5) of them have their storage facilities inspected by MoFA and 6% (1) of them has its storage facility inspected by the DDO. This suggests that the 11 FBOs whose facilities are not inspected do not receive any technical advice on storage and would most likely experience storage problems.

Figure 3.3.5 Inspection of Storage Facilities of FBOs

### 3.2.8 Regularity of Inspection on FBOs’ Facilities

On the regularity of checks, out of the 6 FBOs that have their facilities checked, 33% (2) indicated that they have their facilities checked monthly, 17% (1) quarterly, 17% (1) semi-annually and 33% (2) annually as presented in Figure 3.3.6 below.

**Figure 3.3.6 Inspection of FBO Facilities**


### 3.2.9 Details of FBOs Activities

For the different crop value chains that the FBOs deal with, they engage in production, bulking storage, transportation, processing, negotiation and sale of their produce. Their total volume of production in the last season was 764 metric tons followed by storage which also totaled 584 metric tons while sales recorded 52 metric tons. Processing, transportation and bulking recorded the least volumes of 2 metric tons, 8 metric tons and 9 metric tons respectively. Within the period, 6 FBOs were able to negotiate sales deals while only 4 FBOs received technical assistance.

### 3.3 Traders/Suppliers

Traders/suppliers have always served as middlemen and women between smallholder farmers and all consumers and in this case the caterers who do the purchases to cook for food preparation. The only trader who featured in this study does her business as an informal business enterprise that was started in 2010. She has no employees and is not affiliated to any national level organization. The only activity she engages in is the storage and sale of cassava and gari up to four (4) metric tons. From the interview, she has never participated in any school feeding procurement process meaning that relationship with the caterer(s) is an informal one. She has neither received training nor financial support to supply to the GSFP.

All her food stuffs are stored in her own facility and she does not experience storage problems. This is because she frequently dries the food stuff as a quality management measure. All her stock is bought...
from external markets but all grown within the country because cassava is not a major food crop produced in the district.

She reaches the farmers she buys from via telephone but thinks that none of them determines the prices of the products but rather, the market forces.

She has never attended any SF coordination meeting and social audit event since the start of her business.

### 3.3.1 The Role of NAFCO as a Supplier in the SFP

For various reasons, the small holder farmer has limited participation in the school feeding food supply chain due to inefficient supply chain practices such as limited access to information, limited collaboration between supply chain actors, limited access to credit and delay in release of funds to GSFP caterers from GoG, coupled with the low financial capacity of caterers to pre-finance their businesses and farmers’ inability to accommodate extended credit sales (beyond 30 days). NAFCO was set up by the Ministry of Food and Agriculture (MoFA) to ensure food security and to insulate farmers against losses resulting from anticipated increases in production. A key objective of NAFCO is to promote the consumption of locally grown produce. MOFA initiated the Block Farm interventions including NAFCO to increase the level of cereal production locally such as rice, maize and soya. The role of NAFCO therefore is to purchase these cereals from farmers and the request to supply state institutions should boost cereal production locally and consequently its consumption. The GSFP became one of the largest client/consumers of rice produced locally, purchased and processed by the National Buffer Stock Company (NAFCO) since 2011. This arrangement came about partly in response to the challenge of delay of release of funds from GoG to GSFP Caterers. GSFP has an MOU with NAFCO to supply rice to School Feeding caterers so that the GSFP can deduct the cost of the quantity of rice supplied through the District Assembly and pay NAFCO any time Government releases funds for the payment of caterers. Payments are deducted directly from the payments due caterers. In recent times NAFCO has been an important actor in the GSFP because it supports caterers particularly through the supply of rice to enable them deliver to the GSFP.

In the last academic year (2012/2013) NAFCO supplied a total of 1052 bags of rice to the caterers in three batches of 250, 400 and 402 bags. This certainly was relieving to the caterers particularly those who often have problems pre-financing the feeding for as long as a school term before payment.

In the opinion of some of the caterers, the arrangement with NAFCO to give them the rice on credit was commendable but complained that the rice supplied is sometimes infested with weevils. They expressed fears it could have harmful effects on the pupils if it is cooked for them.

In line with that the following could help NAFCO play its role in the school feeding program more efficiently;

- The Food and Drugs Board (FDB) should check on the quality and expiry date of NAFCO’s rice before they supply it to schools.
- NAFCO should have a warehouse in each district where they can store food stuff for redistribution to caterers.
✓ NAFCO/LBC should be part of the SF coordinating meetings and organize training workshops for caterers and other stakeholders to understand their mode of operation.

The supply chain arrangement with NAFCO would be improved if;
✓ They build warehouses in the district to stock food from local farmers.
✓ The people of the district appreciate by tracing to the farmers involved and consume what is grown in the district.
✓ If they can reduce the prices on the supplies of rice to caterers

3.4 Caterers

3.4.1 Status of Caterers
Caterers are key actors in the GSFP as they are the direct link between food stuff producers and suppliers (farmers and local markets) and final consumers of the food—the school children. All the forty-six caterers who responded to the questionnaire were females which confirm the dominance and passion of women in the field of catering.

By the procurement process of the GSFP, some of the caterers were contracted as formally registered business enterprises or existed as informal business enterprises recognized by the District Assembly to be able to participate in public or SF procurement.

*Figure 3.5.2: Registration Status of Caterers*

![Registration Status of Caterers](image)


The study revealed as depicted in figure 3.5.2 above that 41 caterers representing 89.1% of those who responded to the question on their status operated only as informal business enterprises with only 6 representing 13% being registered as business enterprises. Two (2) of them representing 4% though not registered, met the requirement to take part in SF procurement processes. This suggests that many of them either did not run catering services prior to the introduction of the SFP or their capacities were not up to the huge task of pre-financing the supply of one hot adequately nutritious meal per child per day.

3.4.2 Caterers’ Membership of National Level Organizations
These caterers are not part of any national level catering or SF related organization which means that at the district, regional and national levels, there is not any platform that can serve as a voice for the interests and concerns of the individual caterers and there is no opportunity for their own learning or sharing of experiences in which case standards or principles/ethics would be difficult to enforce.

### 3.4.3 Training Received by Caterers

As contained in Figure 3.5.3 below, out of the 46 caterers who responded to the questionnaire, only 39% of them have received trainings on food quality and hygiene in relation to the SFP which according to them were organized by the regional office/secretariat of the GSFP.

Figure 3.5.3 Training of Caterers

![Training of Caterers](image)


### 3.4.4 Caterers’ Employees working on SF Related Activities

To enable the caterers offer quality services in view of the number of children they are responsible for, all the caterers have employed the services of an average of 3 cooks totally 116 all on full time bases. Except in the case of one caterer, these employees of the caterers who are mostly cooks have never received any formal training to deliver to the SFP but barely rely on the instructions of their bosses and their experiences in the kitchen as women over the years. This has a lot of implications on the quality of meals delivered to the children particularly that cooking for large numbers is not the same as cooking a family meal.

### 3.4.5 Food Stuff Used in School Feeding Menu

Even though so many other crops are cultivated in the study area, the dominant food stuff used for the school meals are rice, maize, beans/cowpea and cassava products (gari and cassava dough). As presented in Figure 3.5.4 below, rice, maize and cassava/gari have the same patronage of 20% followed by beans and cowpea at 16%. Other crops including soya beans despite its touted nutritional value, has just 4% patronage while the traditional grains of sorghum and millet have a negligible 1% use by the caterers.
Figure 3.5.4 Food Stuff Used for School Meal


Rice, maize and cowpea were the most used food stuffs in the menu last academic year with the total quantity of rice used totaling 184 metric tons at the cost of Ghc 138,575; maize totaling 128 metric tons at the cost of Ghc 44,949 while cowpea totaled 114 metric tons at the cost of Ghc 16,502. Millet and sorghum were the least used totaling 3 metric tons at the cost of Ghc 912.

Table 5.7.1 Quantities of Food Stuffs Demanded last Academic Year

<table>
<thead>
<tr>
<th>Food Stuff</th>
<th>Quantity (m/t)</th>
<th>Cost (Ghc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>184</td>
<td>138,575</td>
</tr>
<tr>
<td>Maize</td>
<td>128</td>
<td>44,949</td>
</tr>
<tr>
<td>Beans</td>
<td>23</td>
<td>6,410</td>
</tr>
<tr>
<td>Cassava/Gari</td>
<td>64</td>
<td>14,592</td>
</tr>
<tr>
<td>Millet/Sorghum</td>
<td>3</td>
<td>912</td>
</tr>
<tr>
<td>Cowpea</td>
<td>114</td>
<td>16,502</td>
</tr>
<tr>
<td>Others (G’nuts, Soya Beans)</td>
<td>10</td>
<td>730</td>
</tr>
</tbody>
</table>


3.4.6 Decision on School Menu/Ration

If the response of the caterers is anything to go by, they are not fully responsible for which food stuffs used on the school menu as 74% of them indicated that the decision on the school menu is by the GSFP with just 12% saying they decide what to cook based on what foodstuff is available and 10% also suggesting the school’s involvement in the choice of menu. The GSFP regional secretariat however says the menu is jointly decided by the DIC, the GSFP and the caterers.
3.4.7 Main Sources of Caterers Supplies
The concept of the PGHGSFP is that it will create a ready market for the produce of local farmers within the beneficiary communities or districts a good percentage (at least 30%) of who are expected to be women thereby increasing their productivity and incomes for an eventual improvement in the standards of living of these rural farmers. This implies that caterers are supposed to have direct links with Small Holder Farmers (SHF) and purchasing directly from them.

Figure 3.5.6 Caterers Sources of Supplies of Food Stuff


From Figure 3.5.6 above, the sources of supplies of all the caterers aggregates to 35% from Market Queens and 31% from traders with only 19% of supplies from SHFs 10% from NAFCO. This clearly justifies the need for this study from which the gaps making it impossible for the goals of the HGSFP to be achieved can be highlighted.

3.4.8 Places of Storage Prior to Usage/Disposal
Majority of the caterers (76%) i.e 35 of the 46 caterers as shown in Figure 3.5.7 below use their own facilities for the storage of the food stuff mostly in their homes and then issue enough for cooking each day while 29% (13 caterers) and 11% (5 caterers) have access to school and community storage facilities respectively where they keep their food stuff. It suggests that neither the DA, the GSFP nor beneficiary communities have been able to assist many beneficiary schools with facilities where the caterers can store their food to ensure food safety and quality control. Out of this number, only one caterer received financial support from a relative to improve her storage facility.
3.4.9  Caterers’ Storage Problems
Thirty-seven percent (17) of the caterers encounter storage problems while the rest of the 63% (29) caterers do not. For those who encountered storage problems, there were pests, moisture/heat and pilferage related problems. In Figure 3.5.8 below are the details.

Out of this, 27% was pests related storage challenges, 7% moisture and heat related problems and 4.3% pilferage related problems. As a result, out of a total of 153.25 metric tons of food stuff that they bought and put into storage, as much as 21 metric tons representing 13.7% was lost in storage.
3.4.10  **Getting in Touch with Local Farmers**
A few of the caterers who have bought food stuff from the local farmers have indicated that the interaction and business relationships between them and farmers are from their own initiative. They visit the farmers or meet them in the open market for transactions. No other stakeholder in the GSFP has played any role so far in linking caterers to farmers in the district.

3.4.11  **Quality Management Measures at Storage**
As high as 89% of the caterers (41) apply quality management measures in the storage of their food stuff.

*Figure 3.5.9 Quality Management by Caterers*

![Quality Management Measures by Caterers](image)

The common measures used are storing in sacks, storing on pellets and frequent drying which are represented by 32%, 31% and 27% respectively. A very innovative and simple method which is by storing in pic sacks rather attracted just 6% of them as a quality management measure. Pic sacks are special sacks fabricated to keep grains and legumes safe without chemical treatment of the food stuffs. Figure 3.5.9 below presents it clearly. As a multiple response item, some employed more than one of the quality management measures presented in the table below.

3.4.12  **Food Stuff Price Determination**
In an answer to the multiple response question of price determination, 72% (33 caterers) of respondents think prices are fixed by the market forces while about 16% (7 caterers) say price is determined through negotiation between caterers and farmers and 9% (4 caterers) also see the market prices of food stuff as an imposition by the farmers.
### 3.4.13 Location of School Meal/Food Preparation

Among the 46 caterers, 40 of them who responded to the question on where the school meals are prepared, 8% (4 caterers) of them indicated they prepare their food in the open air within the school premises while the rest of the 92% (36 caterers) prepare their food in the school kitchens.

### 3.4.14 Quality Control Measure at Kitchen

Eighty percent (80%) of the caterers’ kitchen facilities are checked or supervised by the DIC representatives, SIC representatives, MoE officials, Environmental Health officials, the caterers themselves and the WFP in order of highest to lowest to ensure high standards while 20% have never had their facilities supervised. None of the respondents indicated that MoFA has done any supervision of caterers’ facilities for cooking of school meals or storage of food stuff.
3.4.15 Frequency of Inspection of Caterers’ Cooking Facility
On the question of how regularly their facilities are inspected, 19.4% (9 caterers) have indicated that their facilities are checked quarterly, 41.3% (19 caterers) monthly and 11% (5 caterers) weekly. The rest have their facilities checked daily, annually, semi-annually or twice a week and this is detailed in Figure 3.5.12 below.

Figure 3.5.12: Inspection of Caterers’ Cooking Facility


3.4.16 Training Received by Caterers
The study shows that only 39% (18 caterers) have received training to deliver to the SF either from the GSFP regional secretariat or the DA through the DIC. With the exception of one caterer whose employees benefited from a formal training, the employees of the rest of the caterers of an average of 3 per caterer have not received any training.
Only two of the caterers have also ever attended SF coordinating meetings convened by the DDO and DIC for the SF secretariat.

3.4.17 Financial Support Received by Caterer to Supply to School Feeding
As presented in the figure below, only 11 caterers representing 24% received financial support to supply to the SFP three (3) of them in the form of credit totaling Gh¢ 9000 from two financial institutions Agriculture Development Bank (ADB) and Social Security Bank (SSB) as well as PRONET North (an NGO) while eight of them also received support in the form of pre-financing totaling Gh¢ 6940 from World Vision International (WVI).

3.4.18 Financing the Purchases for SF
Caterers finance the delivery of food to the school children with their own resources and in some cases they use their own farm produce to feed the children. They think that banks can be useful in offering the right financial services but would need to improve their services by timely disbursement of such facilities and also by reducing the interest rates. The banks and other institutions like NGOs and MoFA can help them better by giving to them those loans and micro-finance services.
3.4.19 Participation in Social Audit Events of the School Feeding

None of the caterers have ever attended any social audit event in relation to the GSFP. These events have either never been organized in the district or the caterers have never been invited to be part of it.

3.5 District Assembly (DA)

In view of the fact that the GSFP falls under the jurisdiction of the Ministry of Local Government and Rural Development (MLGRD) the DA is tasked with the responsibility of coordinating, supervising and monitoring the implementation of the program in the district.

The SFP started in the then Nadowli District in the 2005/2006 academic year with a few schools and gradually scaled up.

The DDO in-charge of the SFP who even though officially designated to facilitate and coordinate the SFP has never received any training on procurement for SF.

In the 65 days of the last school term in 2011/2012 academic year, the request for funds for SF by the DDO took two weeks from the point of planning. It took another two weeks after the request for funds to be paid into the accounts of the district. There was no response to questions on time difference between receipt of funds through announcement of tender, contract awarding and delivery of the product.

3.5.1 The School Meals

From the angle of the DDO, menus of the schools are decided by the DIC with all meals prepared in the school kitchens or within the school premises as indicated by the caterers. Some of these kitchen facilities have seen improvement with financial support from the Local Government Authority and for that matter the District Assembly.

Food stuff from the NAFCO which is periodically supplied to caterers as a form of pre-financing is normally stored in a convenient place at the DA until distribution is done. These facilities have been improved periodically to ensure the quality of the food stored in there again through the support of the Local Government Authority. To ensure that some standards are complied with, the facility is inspected quarterly by officials of the Environmental Health Service and the GSFP. The district however still encounters storage problems including pilferage and pest attack.

3.5.2 Participation in SF Coordination and Social Audit Events

Contrary to responses from the FBOs and caterers, the DDO reported that, in collaboration with the DIC, the assembly organizes SF coordination meetings and social audit events annually. In regular participation in these events are CSOs/NGOs, FBOs and the general public. The DDO has also participated in social audit events attended by CSOs/NGOs called Social Accountability Audit convened by the GSFP National secretariat of the GSFP and in collaboration with the Ghana Audit Service.

3.5.3 Ministry of Food and Agriculture (MoFA)

Information obtained from MoFA indicates that their role as a public sector institution includes agricultural policy formulation, planning and coordination, monitoring and evaluation in their bid to offer essential services such as capacity building of farmers, promotion of farmer to market access, provision of extension services, technology transfer, farmer and public education and sensitization and
research into improved varieties of crops and breeds of animals and provision of technical advice towards the overall goal of improved livelihoods.

### 3.5.4 Production levels in the last Season

From MoFA’s authenticated records for the last farming season, the production levels for the major crops produced in the district are captured in table 3.7.1 below. Maize, groundnuts and cowpea stand out clearly as the largest agricultural products of the district and the only point of sale of these foodstuffs are at the local markets with the main local market located in Tangasia in the district.

#### Table 3.7.2 Production levels and Prices

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Production (MT)</th>
<th>Average Price per bag Last Season (Gh₵)</th>
<th>Main Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>20,527</td>
<td>80.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Rice</td>
<td>314</td>
<td>80.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Sorghum</td>
<td>16,011</td>
<td>160.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Millet</td>
<td>8,299</td>
<td>200.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>26,475</td>
<td>80.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Soya Beans</td>
<td>716</td>
<td>70.00</td>
<td>Local Markets</td>
</tr>
<tr>
<td>Cowpea</td>
<td>23,980</td>
<td>200.00</td>
<td>Local Markets</td>
</tr>
</tbody>
</table>

Source: MoFA, Nadowli.

### 3.5.5 Knowledge of FBOs in the district

MoFA has verified data on the functional existence of 17 FBOs in the district with a total membership of not less than 310 out of which 136 of them are women. There is information also about other FBOs that exist under the supervision of some NGOs (SIDSEC, WVI, ACDEP, UW Agro Industries) operating in the district.

### 3.5.6 Support to FBOs

In the year 2012, MoFA supported a number of FBOs by giving them training, extension services, technology transfer and loans (credit facility) aimed at ensuring food security in the district. In Table 3.7.2 below is a list of some of the FBOs that received various supports from MoFA. Beneficiaries from Daffiama and Kojokperi which are now under the newly created Daffiama-Busie-Issa district are mentioned here because the Nadowli-Kaleo District Directorate of MoFA still administers the new district pending the establishment of a fully operational district office in the new district.
### Table 3.7.3 FBOs that benefited from MoFA support

<table>
<thead>
<tr>
<th>NAME OF BENEFICIARY FBO</th>
<th>NUMBER OF FARMERS</th>
<th>LOCATION</th>
<th>SUPPORT RECEIVED</th>
<th>Credit/Loan (Gh¢)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Training</td>
<td>Extension</td>
</tr>
<tr>
<td>Progressive Farmers Ass.</td>
<td>16</td>
<td>Dawuri</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sagdiibu Farmers Ass.</td>
<td>4</td>
<td>-</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Tietaa Maale Farmers Association.</td>
<td>22</td>
<td>Golyiri</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Amayaana Women Group</td>
<td>18</td>
<td>Kojokperi</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Puli Farmers Association</td>
<td>22</td>
<td>Kaleo</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Changu Farmers Ass.</td>
<td>13</td>
<td>Changu</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Buu Farmers Association</td>
<td>12</td>
<td>Kaleo</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Tietaa Farmers Ass.</td>
<td>11</td>
<td>Daffiama-Dakyie</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>118</strong></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>


**3.5.7 The Use of Cereal Banks**
MoFA in collaboration with the DA owns some cereal banks in the district that serve as storage facilities to some farmers which were located in Fian, Kojokperi, Nadowli, Takpo and Daffiama which are also used as national food reserves from which the local markets are supplied. These banks are under the management and supervision of MoFA with the purpose of enhancing food security in the area. Most of them regrettably have been abandoned and are wasting away this is because they were establish for a FASCOM project where fertilizers where mostly stored for distribution to farmers maintenances became un sustainable following the end of the project.

**3.5.8 Participation in SF Coordination and Social Audit Events**
MoFA has never participated in any SF coordination meeting in the district and has also never been part of any social audit event about SF because they have never been invited.

**3.6 Financial Institutions**
The only financial institution operating in the district is the Nadowli branch of the Sonzele Rural Bank of Jirapa. No caterer indicated any transactions or receipt of any credit facility from the bank. All efforts to collect information from them proved futile as the branch manager was not only hesitant at
responding to the questionnaire but also insisted they have to send it to their mother branch for approval before any such information could be given.

### 3.7 Key Informant

The respondent, Madam Florence N. Tantuo who is a Chief Technical Officer with MoFA indicated her role in agricultural value chains is in the dissemination of relevant information particularly on new findings and the impact of policies in relation to production and ensuring effective comprehension of issues. She has had several trainings on agricultural value chains and is very well abreast with the case of Nadowli district. In her opinion, farmers in the district have never been linked to the GSFP and so no formal relationships exist between the two key actors in the SF supply chain.

#### 3.7.1 Challenges and Opportunities

The barriers to efficiency in the agricultural value chains from her position as an informant include the following:

- Little or no research done to improve efficiency in the value chains of the major crops in the area which are maize, rice, yam, cassava, fruits, vegetables and cassava (Gari processing).
- The cost of technology transfer and level of education are barriers to technology transfer in the district as a result of which farmers do not have the full benefit of improved and recommended technologies.
- The cultivation of these crops annually is dependent on the mercy of nature as there are no irrigation systems in the area.
- Marketing is poor and farmers do not get value for their toils.

The respondent however did not identify any opportunities in the agricultural value chains.

### 3.8 Barriers to SF Supply Chains

The most disturbing challenge here is the delay in paying caterers after pre-financing the feeding of children for months. A timely release of funds to be paid to caterers who would in turn also pay farmers who might have supplied them would be the best way forward.

### 3.9 Non-governmental Organizations (NGOs) interventions

Three of the NGOs operating in the district (ACDEP, World Vision and PRONET) which are into capacity building, education and sensitization, policy advocacy and extension services indicated that they support some FBOs by linking them to financial institutions for credit. With only PRONET North giving training, extension services technology transfer and supply of equipment to farmer groups. Only ACDEP has ever participated in a coordination meeting about SF where issues of production and supplies were discussed but none of them participated in any social audit events about SF because they do not know about it neither have they been invited to attend any meeting of the sort.
4 CHAPTER FOUR: SUPPLY CHAIN STUDY

4.1 Introduction
This section presents and discusses the findings on the food stuffs used, core processes, the key actors and the roles they play, the interrelationships between them and the constraints and opportunities existing in the SF supply chain and how these impact on the effective and efficient delivery of the final product to the beneficiaries. It is expected that this study will lead to the development and analysis of the SF supply chain map for the district that will in turn lead to actions or interventions to address the constraints and take advantage of the opportunities for an improved SF supply chain.

4.2 Supply Chain Study

4.2.1 Definition of the end food product(s) demanded by the school feeding programs
In the Nadowli Kaleo district, the main meals fed to the children include plain rice, rice and beans, gari with beans, Banku and “Tuo Zaafi’ (TZ) which come with different accompaniments in the form of soup or stew prepared from ingredients such as cooking oil, tomatoes both fresh and canned, fish (mostly dry or smoked), dawadawa, maggi cubes, groundnut paste, okro, pepper, salt and onions among others. These meals permanently on the menus of schools were decided by the DIC in collaboration with the regional secretariat of the GSFP. These meals come from the major food crops in the agricultural value chain which are maize, beans, cassava groundnuts and rice.

In Table 4.2.1 are the list of food stuff used in the SFP and their sources. Caterers guarantee that the food stuff they buy comes from locally produced sources. They are able to determine this subjectively by the low level of value addition and packaging. The quality of the local food stuff is different from those coming from outside. Production and demand statistics from the FBOs and caterers in the last farming season and the last academic year shows that, rice produced locally totaled 314 metric tons while the 46 caterers used just 184 metric tons the whole academic year. The rest are millet/sorghum (24,310 metric tons produced) against (3 metric tons used) by the caterers, cowpea (23,980 metric tons produced) against (114 metric tons used), maize (20,527 metric tons produced) against (128 metric tons used) and groundnuts and soya beans (27,191 metric tons produced) against (10 metric tons used) by the caterers. These statistics suggest that caterers can get all their supplies directly from the farmers if the linkage is well established and that SHFs will indeed benefit from the SFP through increased incomes.

The food stuffs used in the school menu are delivered in their raw form. The cereals are delivered in bags while cassava comes in the form of dried cubes or sticks in a bags. Vegetables used for soup come fresh in containers but is mostly damaged because of its perishability. Most of the food stuff are available all year round but has peak seasons during which prices are low and lean seasons during which prices sour up.

To ensure that the food bought is of good quality, caterers go to the market themselves and insist to have the bags opened to verify grains to be sure it is free of pest infestation and that it is well processed. The quality of the food stuff in their view, can be improved if farmers and traders use good storage structures and systems, dry their goods periodically, store on pellets and making use of Pic sacks.
According to the caterers, they face competition from other buyers such as petty traders, market queens who aggregate the products and to sell later, Bursars of the second cycle educational institutions and other traders from Techiman. Some group of caterers predict an increase in the quantity of food to be bought next year because the free feeding in school is encouraging many parents who would otherwise not have sent their wards to school to do so.

**Table 4.2.1 Food Stuff and Sources**

<table>
<thead>
<tr>
<th>FOOD STUFF</th>
<th>SOURCE OF SUPPLY</th>
<th>PLACE OF PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Traders and NAFCO</td>
<td>Locally Grown</td>
</tr>
<tr>
<td>Maize</td>
<td>Local Farmers, Traders, Market Queens</td>
<td>Locally Grown</td>
</tr>
<tr>
<td>Beans/Cowpea</td>
<td>Traders and Market Queens</td>
<td>Locally Grown</td>
</tr>
<tr>
<td>Gari</td>
<td>Traders and Market Queens</td>
<td>Locally Grown</td>
</tr>
<tr>
<td>Cassava</td>
<td>Market Queens and Local Farmers</td>
<td>Locally Grown</td>
</tr>
</tbody>
</table>


**4.2.2 Identification of foodstuffs grown by local farmers that can form the main menus for school feeding in the district**

The school menu across the district is the collaborative decided of the GSFP, the DIC and the caterers. The decision is informed by the local food stuffs available all year round and the ease of cooking for large numbers. The menu is therefore not an exclusive list of possible food items as there are many other food crops and dishes that can form part of the school menu.

**4.2.3 Potential Food Items on the SF Menu**

The school menus have not made room for all food stuff gown in the district. Table 4.2.2 below presents other food stuff that could be very useful in improving the nutritional status of the children.

**Table 4.2.2 Potential Food Items for School Menus**

<table>
<thead>
<tr>
<th>FOOD STUFF</th>
<th>PRICE PER BAG (GH₵)</th>
<th>SOURCE</th>
<th>PERIOD AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soya Beans</td>
<td>100</td>
<td>Locally Grown</td>
<td>October. – December</td>
</tr>
<tr>
<td>Bambara Beans</td>
<td>160</td>
<td>Locally Grown</td>
<td>November – January</td>
</tr>
<tr>
<td>Yam</td>
<td>N/A</td>
<td>Locally Grown</td>
<td>November – May</td>
</tr>
<tr>
<td>Sweet Potato</td>
<td>N/A</td>
<td>Locally Grown</td>
<td>January – April</td>
</tr>
<tr>
<td>Fruits (Mango, Pawpaw)</td>
<td>N/A</td>
<td>Locally Grown</td>
<td>February – April</td>
</tr>
</tbody>
</table>


Soya beans according to nutrition experts has the highest nutritional value among all the legumes and can be put to varied uses while Bambara beans is about the same nutritional value as beans or cowpea. Bambara and soya beans are also the most expensive though available in significant
quantities. The challenge in using Bambara and soya beans would then have to do with cost given that each child is fed on Ghc 0.40 a day. Bambara beans also take much time and energy to cook while soya beans would have to be processed into other forms before it becomes consumable.

### 4.2.4 The Core Processes in the Supply Chain

The core processes in the supply chain of the SFP include production, extension services, processing, post-harvest storage, transportation, marketing, storage, food preparation and delivery to the school children.

The bulk of the production of food stuff in the district is done by SHFs while a small proportion is also produced by organized farmer organizations in the district. This is with the technical support of MoFA and some NGOs in the district. NGOs also help the farmers to access credit facilities to increase and improve production levels.

The food stuff produced is processed through activities such as thrashing/de-husking, cleaning, drying, sorting and bagging to ensure high quality and to prevent losses. This is mainly done by individual farmers and FBOs but traders also find themselves processing food stuff like rice and groundnuts into paste for soup.
Table 4.2.3 Actor Function Worksheet of the District

<table>
<thead>
<tr>
<th>Functions</th>
<th>ACTORS</th>
<th>Support Services Actors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Actors</td>
<td>SHFs/FBSs</td>
</tr>
<tr>
<td>Consumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food safety &amp; quality training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Menu Determination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foodstuff Supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulation &amp; Coordination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The delivery of the final product of the school feeding program to the children is preceded by a complex array of interrelationships between different actors in the agricultural and SF value chain. The supply chain functions include; Regulation and Coordination, Monitoring and Evaluation, Financing, Input Supply, Extension Service, Production, Processing, Bulking, Storage, Transportation, Food Stuff Supply, Menu Determination, Food Preparation, Food Safety and Quality Training and Consumption. Along this chain are Smallholder Farmers and FBOs, Food Processors, Traders/Market Queens, Retailers, NAFCO, Caterers and Pupils as direct actors and MoFA, Agro Input Dealers, Financial Institutions, NGOs, the District Assembly/DIC/SIC, the Ministry of Local Government and Rural Development (MLGRD) represented by the GSFP, Financial Institutions (FIs), Food and Drugs Authority, Environmental Health Department and Transporters as indirect or support service actors.

4.2.5 Production
MoFA plays a significant role in the production, processing and storage of food stuff by giving extension services and technical advice to FBOs and individual SHFs. FBOs and SHFs are at the center of the processes of production up to marketing of their produce. Some of the SHFs produced with the support of financial institutions even though from outside the district.

4.2.6 Storage
Storage is done by the FBOs and SHFs immediately following harvesting except in the case of perishable goods. ACDEP also does grain banking which is sold back in the lean season. The DA also plays a minimal role in storage by supporting in the provision of grain banks. After buying from farmers, traders also store the food stuff for sale later or do sales gradually. The caterers also have storage facilities where the raw food is stored prior to cooking.

4.2.7 Transportation
In the area of transportation of the food stuff, it is done solely by transporters as their main function even though caterers also transport their food stuffs from the market to their storage facilities. In a few cases, farmers themselves do transportation when they take their produce to the markets.

4.2.8 Marketing
Marketing is between farmers and traders, farmers and caterers and also between traders and caterers because the market remains farmers’ only sales point since they do not have direct marketing relationships with caterers. The same lack of relationship is what compels caterers to also depend on the open market for their supplies of food stuff. The caterers engage in purchasing and transporting the food stuff they require to supply to the SFP and together with cooks that they employ, they deliver the final product.

4.2.9 Development of the supply chain map showing flow of goods and linkages between the primary actors and the final consumers
In this entire process, there are weak and strong relationships between the various actors. As depicted in Figure 4.2.1 below, MoFA has a strong relationship with the farmer organizations and individual farmers through the technical services they are mandated to offer but maintain loose relationships with NGOs, the DA and traders.
Figure 4.2.1 Supply Chain Map of the District of Nadowli-Kaleo District

FBOs (17 active)
Farmers = 310 (44% Female)

Traders = 1 (Supply of rice, maize, beans, cassava/gari & groundnuts)

Food Processors (Supply of gari, dough, groundnut)

NAFCO (1052 bags)

Caterers=46 (70)
Cooks=115

70 Schools, Children-34,105

Support services, funding, regulation, coordination, steering, quality control etc.

Policy Guide, Coordination, Funding (, MLGRD, GSFP, DA)

Food Safety & Quality Training (EPA/FDA, MoFA, DA, GES)

Financial Services
Bank: Sunzele Rural Bank branch

Source: SAVE-Ghana Field Survey, 2013
There is a strong product supply flow between food processes, traders and NAFCO while there is a weak supply relationship between caterers and SHFs and FBOs. This stems from the fact that supply relationships between caterers and farmers have not been facilitated and so have not been established. Caterers therefore buy from traders in the open market and market queens but do not have formal trade agreements. There is also a strong supply relationship between caterers and the school children since caterers supply them with one hot meal on each school day.

Funds flow is stronger between the GSFP and caterers because caterers pre-finance the supply to the school children and are later reimbursed through the GSFP. Funds flow is fairly good between the financial institutions and traders as well as food processes. This could be because they have a more reliable source of income and can easily access loan facilities from the financial institutions. Funds flow is weak between financial institutions and caterers as well as farmers and this could be attributed to the delay and irregular payment of funds to caterers after they pre-finance sometimes for over a school term. In the case of farmers, agriculture is considered the most risky business venture because farmers solely rely on nature which cannot be predicted and financial institutions have the experience of struggling to retrieve loans given to farmers.

There is a strong supply contract relationship between NAFCO and the GSFP and also between the GSFP and caterers which are two-way relationships. NAFCO supplies rice to caterers on credit at a given price through the GSFP and caterers are bound by an agreement to pay back to NAFCO when government pays their funds.

The map also shows that MoFA and Agro Input Dealers offer extension services to farmers while the Food and Drugs Authority (FDA), Environmental Protection Agency (EPA), MoFA, the District Assembly and Ghana Education Service also give food safety and quality training support services to caterers and for the benefit of the school children.
5 CHAPTER FIVE: SUPPLY CHAIN ANALYSIS

5.1 Objectives for Improvement of the Supply Chain

The objectives of the supply chain analysis include:

- Definition of the end food product(s) demanded by the school feeding programs
- Identification of foodstuffs grown by local farmers that can form the main menus for school feeding in the district
- Determination of the core processes in the supply chain
- Mapping the main actors involved in these processes as well as the supporting actors
- Developing the supply chain map showing flow of goods and linkages between the primary actors and the final consumers
- Validating the mapping together with the actors

The outcome of this is a clear understanding of the supply chain situation of the HGSFP where the actions and inactions of the various stakeholders of the program which are potentially detrimental to the achievement of the program’s objectives will be mapped out and strategies adopted to resolve the challenges therein.

5.2 Benchmarking

The whole concept of school feeding for Kindergarten and Primary School children could have been crafted out of the system where second cycle students in the age range of 14 to 19 on the average are not only fed but are also resident on campus for reasons of control and management efficiencies. The current concept of the SFP is such that caterers pre-finance the provision of one hot and adequately nutritious meal to each child on each school day and are paid later by the central government through the local government authorities as and when funds are available. This for now is bedeviled with a lot of challenges which are fast eroding the benefits the programme is set to achieve.

The GSFP feeds the children on Ghc 0.40 per meal per day while students in the boarding houses of the secondary schools are fed on Ghc 1.80 for three meals a day. Even though several factors determine the quality of cooked food and that quality in itself is relative, the feeding grants for the two systems suggests that, students in the secondary school boarding system are likely to be better fed than the Kindergarten and Primary school children on the GSFP.

Even though the system run by the second cycle institutions has its own challenges, there exist some significant levels of variations in the manner the second cycle institutions feeding system is administered which probably accounts for its relative smooth running compared to the HGSFP.
5.2.1  **9.2.3 Source/Procurement of Food Supplies**
Unlike the HGSFP, the supply of non-perishable food stuff is awarded to food contractors who go through formal procurement processes to supply to the school. The matrons are allowed to purchase the perishable food stuff themselves on weekly bases but with the approval of the procurement committee.

One very important thing to note about school feeding at that level is that, the Matrons are all professionally trained and have a national level association called the National Association of Domestic Matrons and Bursars (NADMAB) which is currently lobbying for a desk in the GES and the Ministry of Finance and Economic Planning to advocate for their interest. The association also serves as a regulatory body that controls the activities of their members.

By estimation, the food contractors supply between 50% and 100% of the food stuff used in each school term according to a school matron. The variation in the percentage of supplies is due to the fact that the matrons themselves procure food items like yam which is perishable and seasonal in terms of availability.

5.2.2  **9.2.4 Crops in the School Menu**
The major food crops used in the school menu are the same as those used in the menus of the GSFP that is rice, maize, beans, cassava/gari with the exception of yam. This is accordingly in view of the fact that the number of students at that level is enormous and therefore impossible for any food crop that is not readily available in large quantities and all year round to be introduced into the menu.

5.2.3  **9.2.5 Decision on School Menu**
Unlike the HGSFP where the menu is influenced greatly by the DIC and the SF secretariat, the menu at the second cycle level is decided by the school’s food committee which is usually made up of the matron, representatives of all the year groups of the school, the Dining Hall Prefect and the Dining Hall Master. At that level, the decision on the menu is independent of any administrative control and is what informs the choice of food crops to be awarded to contractors to supply.

The respondent was convinced that all their supplies come from local SHFs and FBOs within the area and that the prices are arrived at through negotiations between both parties.

5.2.4  **9.2.6 Purchases and Storage of the Food Stuff**
The second cycle institutions have facilities within the school premises for storage except that they are mostly in very bad conditions with storage challenges which are pests and moisture/heat related. The institutions prefer purchasing their food stuff in bulk mostly enough to last for a school term. This accordingly is because it is cost effective and also because some food stuff are not available all year round or have to be purchased from outside the district.
To ensure that the food stuff which they purchase in bulk is safe for consumption, they first do quality checks on the supplies and also chemically treat the quantity they estimate would not be consumed immediately.

### 5.2.5 Challenges
The main challenge at that level is that infrastructural deficiencies have left many of them cooking in the open and where there are kitchens, there are in very deplorable conditions for which they continue to appeal to government for support.

### 5.3 Supply Chain Governance and Governance for Empowerment (GfE)
In a group discussion with caterers and also from the responses of other actors including MoFA, ACDEP and the FBOs, the following assessments of the governance parameters in relation to the SF supply chain were made as presented in Table 5.3.1 below where (5 means Excellent, 4 means Very Good, 3 means Good, 2 means Poor and 1 means very poorest) with suggested means of improvement. The highest they graded was three (3) on the average across all parameters with some parameters graded by some respondents as low as one (1). Clearly, none of the parameters was graded up to four (4) and this suggests that the governance process has not been very effective generally and more needs to be done if the objectives of the HGSFP will be achieved.

**Table 5.3.1 Assessment of Governance Parameters**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Definition</th>
<th>Ranking (1-5)</th>
<th>Means of Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Caterers</td>
<td>MoFA</td>
</tr>
<tr>
<td>Effectiveness and Efficiency</td>
<td>Sharing information freely among actors</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Relationships between actors developed</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Membership associations provide needed services to members</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Equity, Inclusiveness and</td>
<td>Actors organizations are functional at all</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>levels</td>
<td>Functional at all levels.</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| Actors are bound by mutually beneficial contractual agreements that are fully complied with. | 2 | 2 | 2 | 3 | • Maintain Strategy  
• Contract Enforcement |
| Special attention is given to women’s involvement in all supply chain functions | 3 | 3 | 3 | 2 | • Maintain Strategy |
| Rule of Law | Standards and regulations exist and operational | 2 | 2 | 1 | 4 | • Re-visit the Rule of Law and Make Amends  
• Enforcement |
| Accountability and Transparency | Information is flowing freely | 2 | 2 | 2 | 3 | Make information flow freely |
| Information is shared to all operators and stakeholders | 2 | 2 | 3 | 4 | Information should be shared to all operators and stakeholders |
| Participation and Voice | Collaborations on common vision exist | 1 | 2 | 3 | 2 | • Strengthening of collaborations.  
• Definition of visions. |
<p>| Involvement of all functional operators and other stakeholders in decision making and achieving | 2 | 2 | 3 | 2 | • Involving all in decision making |</p>
<table>
<thead>
<tr>
<th>buy-in</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlimited access to information, public facilities and decision making structures to make better informed choices</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4 • Involving grass root structures</td>
</tr>
</tbody>
</table>


5.4 Identification of Constraints and Opportunities
The challenges in relation to the SFP cut across the various institutions or actors in the supply chain.

5.4.1 Challenges and Opportunities of Caterers
The challenges of caterers in the SF supply chain include the following;
- Delay in payments to them after they pre-finance the process
- Inability to provide collaterals to the financial institutions to access credit facilities
- High cost of inputs and poor timing in the case of pre-finance the SF with their farm produce
- The lack of secured storage facilities in the schools
- High transport cost
- Poor communication network in some of the beneficiary communities making it difficult for them to access information
- Poor record keeping

They however consider the following as opportunities and are hopeful that the situation will improve,
- It should be possible for the financial institutions to grant them loans based on the contracts awarded to them which means they would surely be paid
- Schools and PTAs can also help with the provision of storage facilities
- FBOs and NAFCO will collaborate well with them
- Communication network is still spreading and will improve with time
- Caterers can form associations for learning and sharing purposes.
- Stakeholder meetings can be used to strengthen the procurement and supply process
- The capacity of all actors can be built through training workshops.
5.4.2 Challenges and Opportunities of FBOs

On the part of FBOs and SHFs, their challenges include;

- Difficulty in reaching consensus as a group
- Poor transportation network and high cost of transport
- Lack of resources to pay for inputs and other serves
- Non-compliance to the principles of the SFP
- Inability to access credit facilities
- Group sustainability
- High interest rates

The opportunity however is that, farmers are very willing to come into contractual agreements with prospective buyers including the caterers supplying to the SFP. They also think that there is room for more financial institutions in the district and if that is done, services to them will improve.

5.4.3 Challenges and Opportunities of NGOs

NGOs operating in the district are also confronted with some challenges which affect their activities and their contribution to the agricultural value chain and the SF supply chain for that matter. They include the following;

- High illiteracy rate of the farmers they deal with
- High cost of equipment
- Majority of farmers are not organized into groups
- Those farmer groups that exist are not able to coordinate their own activities
- Banks are not able to meet the demands of all groups they link to them
- The farmers do not have storage facilities
- There is a high default rate among farmers who receive credit facilities from banks.

They also identify the following as opportunities;

- Farmers have the capacity to build community warehouses
- The banking sector is getting more competitive and farmers can exploit that.
- NGOs have organized capacity building programs which farmers can take advantage.
- Stakeholders are demanding more accountability and forming more groups which will help strengthen governance issues.
6  CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion
Barring all odds, the GSFP has been resilient over the years since its introduction in the district with coverage increasing steadily to a near 100% coverage in the words of a regional monitor of the program. School enrolments have shot up with admissions taking place throughout the academic year which is unprecedented in the records of the Ghana Education Service (GES). One can therefore say on authority that the objective of the GSFP to increase enrolment and retention is already being achieved in the Nadowli Kaleo district. The main foodstuffs used are also almost all grown in the district by the smallholder farmers in medium to large quantities except that caterers are not buying directly from them as envisaged in the concept of the SFP. Despite the unfriendly pre-financing policy associated with the SFP, most caterers have endeavored to regularly deliver to the program and in good quality too.

6.2 Recommendations
Based on the challenges of the various actors and the opportunities that exist for improvement, we make the following recommendations which will go a long way to improve the implementation of the SFP in the district and beyond;

- The SFP secretariat should be decentralized to the district level with a full time employee responsible for the planning, implementation, coordination and monitoring of all SF related activities instead of the current arrangement where Local Government staff at the DAs with very busy schedules, are tasked with the responsibility of running the program at that level.
- In order to deal with the problem of delayed release of funds to the DAs for payment to caterers, DAs should find alternative funding sources to pre-finance the caterers pending the payment by central government.
- The procurement and contractual process should be more transparent and should strictly follow the principles of the SFP which requires caterers to be present all times to supervise and ensure quality in the final product delivered to the children.
- Supervision on the caterers should be intensified as many of them abandon their responsibilities to the cooks they engage.
- Caterers should get organized into groups through which some standards and ethics of their profession would evolve but also serve as a platform for learning. Such associations will also facilitate their access to credit facilities through linkage to FBOs and SHFs.
- There should be flexibility in following the menu to allow for the inclusion of other food crops which may seasonally available.
- The SFP should provide standard measurements for all food items that go into the food preparation process to ensure that all children across the district benefit equally.
• The DA should guarantee for the caterers they recruit to access loans from the financial institutions to pre-finance the SFP.
• All caterers and farmers should be trained on keeping records on their activities to be able to track leakages and losses.
• SHFs should also be assisted to access mechanization services and probably pay after harvesting.
7 CHAPTER SEVEN: ACTION PLANNING

7.1 Supply Chain Governance Analysis, including GfE elements

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score (as weak, fair, good or strong)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Level of formal cooperation or information sharing among actors</td>
<td>Weak</td>
<td>Little knowledge about SF issues and so did not know about roles</td>
</tr>
<tr>
<td>2  Existence of formal contacts among actors</td>
<td>Weak</td>
<td>Farmers’ currently still wasting away because there were no contacts and lack of information</td>
</tr>
<tr>
<td>3  Level of traceability of produce/foodstuffs to producers</td>
<td>Weak</td>
<td>There are no formal relationships between caterers, traders/suppliers and farmers</td>
</tr>
<tr>
<td>4  Level of quality control</td>
<td>Fair</td>
<td>Poor Storage facilities and pest infestation while some of the chemicals are dangerous</td>
</tr>
<tr>
<td>5  Membership and functionality of associations, if any (e.g. assoc. is able to represent members and establish agreements with other actors)</td>
<td>Fair</td>
<td>FBOs are organized and have good leadership while caterers are not</td>
</tr>
<tr>
<td>6  Access to information, public facilities and decision making structures to make better informed choices</td>
<td>Weak</td>
<td>Structures and relationships have not been well established</td>
</tr>
<tr>
<td>7  Level at which opportunities for quality improvements and requirements regarding inclusive business (employees, smallholder participation) exist</td>
<td>Good</td>
<td>There are platforms like school PTAs and SMCs sharing for improvement can take place.</td>
</tr>
<tr>
<td>8  Existence of standards and/or regulation</td>
<td>Good</td>
<td>MOFA educates farmers on processing and storage while a few caterers have also received training on</td>
</tr>
<tr>
<td></td>
<td>ensuring standards</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Enforcement of standards and regulation</td>
<td>Fair</td>
</tr>
</tbody>
</table>
7.2 Supply Chain Constraints and Opportunities Analysis and Action Planning

This section of the report is the outcome of responses from a District School Feeding Stakeholder validation workshop. During the workshop, actors present who were mainly caterers, small holder farmers and representatives of FBOs, the District Directors and representatives of the GES and MoFA, staff of the Ghana School Programme Regional Secretariat and the District Assembly together with SNV’s Programme Advisors and a team from the Local Capacity Building Organization discussed in plenary sessions the constraints around the SFP that actors would need address as well as some existing opportunities that can be tapped for the successful implementation of the programme. The workshop also identified appropriate actions to be taken to address the challenges of the SFP, assigned responsibilities to specific organizations and institutions and set timelines within which action should be taken. Table 7.2.1 below presents the details of this session.

Table 7.2.1 Supply Chain Constraints and Opportunities Analysis and Action Planning

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Constraints/Challenges</th>
<th>Opportunities</th>
<th>Actions/Solutions</th>
<th>Responsibility</th>
<th>Timelines</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food quality improvement(from a nutrition perspective)</td>
<td>• Nutritive content of food in some communities suspect</td>
<td>• Active GHS &amp; GES monitoring</td>
<td>• Intensify monitoring of SF • Encourage community/parents to provide in-kind or cash support</td>
<td>Nutrition Department (GHS), WIAD (MoFA)</td>
<td>Immediately</td>
</tr>
<tr>
<td>2</td>
<td>Food safety improvement(from a health perspective)</td>
<td>• Cooking in some areas done under unhygienic conditions</td>
<td>• Active GHS &amp; GES monitoring</td>
<td>• Intensify monitoring of SF • Encourage communal labour for clean-up of school environment • Partner available WASH in Schools initiatives</td>
<td>Nutrition Department (GHS)</td>
<td>Immediately</td>
</tr>
<tr>
<td>Objectives</td>
<td>Constraints/Challenges</td>
<td>Opportunities</td>
<td>Actions/Solutions</td>
<td>Responsibility</td>
<td>Timelines</td>
<td>Resources</td>
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</tr>
</tbody>
</table>
| 3          | Inclusion of local farmers | • Lack of functional MSHP  
• Inability of caterers to make prompt payments to farmers who are unable to offer long term credit sales | • Emergence of PGHGSF project  
• increased interest of governments and development partners to contribute to:  
  o farmer inclusion in HGSF  
  o availability of lessons from interventions from other countries and regions, etc. | • Facilitate SF MSHP  
• FBO/Caterer matchmaking  
• Facilitate access to credit for actors | • SNV, DA/DIC, MoFA, GSFP, Other NGOs | Immediately | Funds and Technical Expertise |
| 4          | Timely release of funds | • Irregularities/delays in payments to caterers  
• High demand on public funds  
• Lack of dedicated SF fund from public purse | • Donor/NGO interest  
• Advocacy at district and national level for dedicated funds | • Continue advocacy | SNV, GSFP, Caterers Associations, Other NGOs | Immediately | |
<p>| 5          | Improving price | • Limited public funds | • Donor/NGO | Stakeholders to | SNV, GSFP, | Now and | |</p>
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Constraints/Challenges</th>
<th>Opportunities</th>
<th>Actions/Solutions</th>
<th>Responsibility</th>
<th>Timelines</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>per ration</td>
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</tr>
</tbody>
</table>
| 7 | Improve information flow among supply chain actors | **Caterers:**  
- Actors, especially caterers not communicating their concerns with appropriate office & vice versa  
- Commitment of government  
- Supportive MA/DA  
- Presence of district MOFA  
- Linking FBOs up with District Desk Officer and MOFA |  
- Continue to persuade government  
- Link actors through common platforms  
- Design radio programs for FBOs, caterers etc.  
- Use of new mobile networks | Caterers Associations, Other NGOs, GSFP, DIC, NGOs | on-going |           |
|            | **FBOs:**  
- Irregular information flow (e.g. on improved seeds, market access etc.)  
- Irregular visits by Extension Agents  
- District MOFA  
- Linking FBOs up with District Desk Officer and MOFA |  
- Presence of district MOFA  
- Linking FBOs up with District Desk Officer and MOFA |  
- Linking FBOs up with District Desk Officer and MOFA | FBO leaders, MOFA, SNV. | Now and on-going |           |
| 8 | Improve information technology to link up supply chain actors |  
- Poor communication networks in villages  
- Availability of community radio  
- Presence of mobile networks with coverage in the communities  
- Use of new mobile networks |  
- Design radio programs for FBOs, caterers etc.  
- Use of new mobile networks | FBO leaders, MOFA, SNV. | Now and on-going |           |
| 9 | Improve business and management capacity of supply chain actors |  
- Weak business skills of caterers and farmers  
- Weak organizational capacity of caterers  
- Supportive DA/MA  
- Emergence of PGHGSF project |  
- Facilitate organizational strengthening of FBOs and caterers | GSFP, DIC, NGOs | Now and on-going | Funds and Technical Expertise |
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Constraints/Challenges</th>
<th>Opportunities</th>
<th>Actions/Solutions</th>
<th>Responsibility</th>
<th>Timelines</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 10 Improve access to finance by supply chain actors | • Inadequate access to loans  
• High interest rates on commercial loans | • Presence of microfinance NGOs and public microfinance (MASLOC), rural banks | • DA and Caterers Association negotiate with MASLOC for financial assistance  
• Build business skills (including record keeping) of actors to access loans  
• Facilitate access to credit | • FBO & caterer leaders  
• MOFA reaching out  
• SNV facilitation | Now and on-going               |                       |
<p>| 11 Improve                  | • Inadequate storage                                                                 | • Availability of DA                                                          | • Pursue DA for                                                                    | DA, MoFA,                      | Now and                | Funds      |</p>
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Constraints/Challenges</th>
<th>Opportunities</th>
<th>Actions/Solutions</th>
<th>Responsibility</th>
<th>Timelines</th>
<th>Resources</th>
</tr>
</thead>
</table>
| infrastructure to support supply chain actors in terms of storage and haulage of food stuffs and farm inputs | facilities for keeping food stuffs  
• Poor roads to facilitate easy haulage of foodstuffs | Common fund  
• Increased interest of governments and development partners to contribute to:  
  o Financing for improved storage facilities, quality regulation, etc. | use of some of common fund for central storage  
• Lobby DA/MA to rehabilitate roads  
• Provide technical assistance in the construction of storage facilities | NGOs | on-going | |
| Ensure contracts and compliance are established among supply chain actors | • Breech of business contracts on the part of some actors  
• Dishonoring of verbal contracts between suppliers/farmers and caterers | • Emergence of PGHGSF project | • Organize training on use and compliance of business contracts for supply chain actors (traders, farmers, caterers, input dealers)  
• Enforcing the use of written contracts | GSFP, DIC, SNV | Now and on-going | |
<p>| Reduce transaction costs | • High cost of foodstuffs as | • Pre financing by DA/MA using | • Exemption of caterers in rice | | | |</p>
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Constraints/Challenges</th>
<th>Opportunities</th>
<th>Actions/Solutions</th>
<th>Responsibility</th>
<th>Timelines</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>between actors and stages of the chain</td>
<td>caterers purchase from suppliers on credit basis</td>
<td>internally generated funds, were applicable</td>
<td>producing regions from NAFCO supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Many caterers store and prepare food far away from school premises</td>
<td>• Locating foodstuff store and kitchen on school premises to remove transport costs of prepared food</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• NAFCO rice costs very high in rice producing districts as compared to local market prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 8 APPENDICES

**Appendix 1: FBOs and their Membership and Activities**

<table>
<thead>
<tr>
<th>#</th>
<th>FARMER BASED ORGANIZATION</th>
<th>M</th>
<th>F</th>
<th>TOTAL</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suntaa Sunbaala Coop. Farmers/Marketing society</td>
<td>2</td>
<td>22</td>
<td>24</td>
<td>P, S, Ps, SM.</td>
</tr>
<tr>
<td>2</td>
<td>Suntaa Nuntaa Farmers Ass.</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lambuuri -N-Maarong</td>
<td>14</td>
<td>7</td>
<td></td>
<td>P, S, SM, TA</td>
</tr>
<tr>
<td>4</td>
<td>Sagdiibu Farmers</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>P, SM</td>
</tr>
<tr>
<td>5</td>
<td>Nadowli Multi-purpose Farmers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>P, B, S, SM, TA</td>
</tr>
<tr>
<td>6</td>
<td>Numbu Group</td>
<td>11</td>
<td>4</td>
<td>15</td>
<td>P</td>
</tr>
<tr>
<td>7</td>
<td>Kahong Batung Hukundi</td>
<td>17</td>
<td>14</td>
<td>31</td>
<td>P, S, N, SM, TA</td>
</tr>
<tr>
<td>8</td>
<td>Songbaala</td>
<td>18</td>
<td>4</td>
<td>22</td>
<td>P, S, N, SM, TA</td>
</tr>
<tr>
<td>9</td>
<td>Angaanseo</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>P, N, SM, TA</td>
</tr>
<tr>
<td>10</td>
<td>Takpo soyabeans</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>P, S, N, TA</td>
</tr>
<tr>
<td>11</td>
<td>Booduori farmers</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>P, T, SM</td>
</tr>
<tr>
<td>12</td>
<td>Kandanbongbu</td>
<td>-</td>
<td>32</td>
<td>32</td>
<td>Ps</td>
</tr>
<tr>
<td>13</td>
<td>Nyanga-Yiri Langbuuri Agro-forestry</td>
<td>9</td>
<td>12</td>
<td>21</td>
<td>P, S, SM</td>
</tr>
<tr>
<td>14</td>
<td>PULI FARMERS ASS.</td>
<td>21</td>
<td>-</td>
<td>21</td>
<td>P, S, SM, TA</td>
</tr>
<tr>
<td>15</td>
<td>PROGRESSIVE FARMERS</td>
<td>12</td>
<td>4</td>
<td>16</td>
<td>P, S, SM, TA</td>
</tr>
<tr>
<td>16</td>
<td>SEREKPARE FARMERS GROP</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>DATUAYIRI DRY SEASON GARDENERS</td>
<td>5</td>
<td>7</td>
<td>12</td>
<td>P, S, SM, TA</td>
</tr>
<tr>
<td></td>
<td><strong>TOTALS</strong></td>
<td>122</td>
<td>136</td>
<td>310</td>
<td></td>
</tr>
</tbody>
</table>


Source: SAVE-Ghana Survey, 2013
## Appendix 2: LCB Work Plan for the Baseline Study & Supply Chain Analysis

<table>
<thead>
<tr>
<th>No</th>
<th>Activity</th>
<th>Responsibility</th>
<th>Target Group</th>
<th>Outputs</th>
<th>Timeline</th>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SAVE-Ghana team meeting</td>
<td>Kingsley Kanton</td>
<td>5 member implementation team</td>
<td>Tasks properly assigned/shared among team members</td>
<td>13&lt;sup&gt;th&lt;/sup&gt; May, 2013</td>
<td>Alima</td>
</tr>
<tr>
<td>2</td>
<td>Desk study</td>
<td>Boniface Nyewie</td>
<td>1. D/A  2. MoA</td>
<td>Secondary data/information gathered on supply chain and analyzed</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;-10&lt;sup&gt;th&lt;/sup&gt; May 2013</td>
<td>Kingsley</td>
</tr>
<tr>
<td>5</td>
<td>Data collection</td>
<td>Daniel Kanton Ussif Sibor Blay Luri Bawa Peter Siita Kodima Latif</td>
<td>1. FBOs,  2. Caterers,  3. Traders,  4. MOA,  5. NGOs in Agric  6. NAFCO LCBs  7. Financial institutions  8. Agro Input dealers</td>
<td>Data collected for both baseline and supply chain</td>
<td>17&lt;sup&gt;th&lt;/sup&gt;-23&lt;sup&gt;rd&lt;/sup&gt; May, 2013</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>Data entry</td>
<td>Sakina Comfort Tommie</td>
<td>1. DA  2. MOA</td>
<td>Data entered successfully and audited</td>
<td>20&lt;sup&gt;th&lt;/sup&gt; – 25&lt;sup&gt;th&lt;/sup&gt; May 2013</td>
<td>Boniface</td>
</tr>
<tr>
<td>8</td>
<td>Data analysis</td>
<td>Boniface Nyewie Sule Dintie</td>
<td>1. DA  2. MOA</td>
<td>Data analysed for report writing</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; May 2013</td>
<td>Kingsley</td>
</tr>
<tr>
<td>9</td>
<td>Report writing &amp; Submissions</td>
<td>Boniface Nyewie Sule Dintie</td>
<td>N/A</td>
<td>Draft report submitted on</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; – 31&lt;sup&gt;th&lt;/sup&gt; May, 2013</td>
<td>Kingsley &amp; Alima</td>
</tr>
</tbody>
</table>
Boniface Nyewie
Stakeholders make inputs into findings of baseline and supply chain study
4th June, 2013
Alima

Boniface Nyewie
N/A
Comprehensive report submitted on baseline and supply chain
5th June, 2013
Kingsley and Alima

---

**Appendix 2: Terms of Reference (TOR) for the Assignment**

**TERMS OF REFERENCE**

**LOCAL CAPACITY BUILDERS SUPPORTING THE DISTRICT BASELINE DEVELOPMENT & SUPPLY CHAIN STUDY & ANALYSIS**

**FOR PROCUREMENT GOVERNANCE FOR HOME GROWN SCHOOL FEEDING PROJECT IN GHANA**

**MARCH 2013**

1. **Background**

The Procurement Governance for Home Grown School Feeding (PGHGSF) project is a four-year initiative funded by the Bill and Melinda Gates foundation (BMGF) that is aimed at securing smallholder participation in Home Grown School Feeding programs in Mali, Kenya, and Ghana. In Ghana, the project team is working in close collaboration with the Ministry of Local Government and Rural Development (MLGRD), the Ghana School Feeding Program National/Regional secretariats, implementers of farmer-to-market access programs, local partners, farmer based organizations, District Assemblies and the private sector, with the ultimate goal of enhancing smallholder farmers (SHF) access to the Ghana School Feeding Program as a structured market.

It is expected that the project will enable 10,000 smallholder farmers (made up of at least 30% women) in 20 districts to directly derive increased and stable incomes through effective participation in Home Grown School Feeding programs that use open, transparent, and accountable procurement practices in their implementation, hence affecting all stakeholders along the supply chain.

Districts are being introduced in a phased approach, starting with 5 in the first year as follows—Ga West in Greater Accra Region, Karaga and East Gonja in the Northern Region and Sissala East and Wa East in the Upper West Region. In the second year (2013), 10 additional districts (which constitute the coverage for this ToR) are participating and include:

- Ga East and Ada East in Greater Accra Region;
- Bunkpurugu Yunyoo, Kpandai, Tamale Metro and Tolon in the Northern Region;
Nadowli-Kaleo and Wa Municipal in the Upper West Region and
· Kassena Nankana and Builsa North in the Upper East Region

The project aims at the following main objectives:
1. To improve the HGSF procurement process and strengthen the capacity of all actors to ensure that smallholder farmers have access to HGSF program structured market opportunities.
2. To enhance the supply chain governance of HGSF programs to ensure effective, transparent and accountable delivery of products across the supply chain.
3. To develop effective and participatory mechanisms for increased accountability by and for the program’s stakeholders
4. To ensure effective monitoring and documentation of lessons learned for broad dissemination to increase the likelihood of replication/scaling up of best practices

To achieve the above objectives, especially objectives 1 and 2, the services of Local Capacity Builders (LCBs) are requested to develop a comprehensive Baseline and Supply Chain Analysis for school feeding in each of the 10 additional districts.

The purpose of this Terms of Reference (ToR) therefore, is to describe the conditions and responsibilities of the Local Capacity Builder (LCB) to be contracted by SNV to undertake the Baseline development and Supply Chain Analysis. This ToR thus serves as the fundamental guideline for the LCB in the execution of this assignment. 2

. Baseline Development
Information gathering is required to produce relevant baseline information and share lessons learnt from the project. Thus the baseline data collection and analysis are fundamental to inform project implementation and to measure the progress made at the end, in each of the following key thematic areas of the project:
- improvement of the school feeding procurement processes,
- enhancement of the Home Grown School Feeding supply chain and
- promotion of good governance with the development of social audits

The PGHGSF team has started the collection of some data as part of district entry activities and requires the support of local development organizations (Local Capacity Builders) to complement the work done, leading to the development of comprehensive baselines for each of the targeted 10 districts.
Using a set of questionnaires/tools developed by SNV, the LCBs will collect primary baseline data from key actors that include Farmer Based Organizations (FBOs), Caterers under the Ghana School Feeding Program, Traders/suppliers of the caterers, District Assembly represented by the desk officer and District Directorate of MOFA and any relevant NGO.
In each district the questionnaires will be administrated to cover all caterers and traders/suppliers involved in school feeding. In the case of the FBOs an assessment should be done with the district actors to ascertain how many FBOs to interview in each district.

After data collection, the LCB is to enter field data into a data entry tool developed by SNV and carry out data analysis and produce a draft baseline report which shall be subjected to stakeholder validation and action planning, following which a final report shall be produced at the end of the assignment.

3. Supply Chain Analysis

The second objective of the project is to enhance supply chain governance in School Feeding. The improvement of the supply chain should lead to more sustainable and cost effective solutions when combined with clear and effective governance mechanisms. The inclusion of smallholder farmers is an essential part of the expected improvement.

A main activity required to achieve this objective is the analysis of existing supply chains for School Feeding in the intervention districts.

The assignment thus involves undertaking activities captured under the following three phases as shown in the methodology in Appendix I:

- The supply chain study, to obtain data about the real situation of the chain, its actors and their relationships
- The supply chain analysis, based on the data from the study
- The elaboration of an action plan, based on prioritization of constraints and opportunities during the analysis.

In executing this assignment, the LCB shall be expected to collect both primary and secondary data from relevant stakeholders in the target district, including among others (and if available); GSFP Desk Office, the District Directorate of MOFA, World Food Program (WFP), National Buffer Stock Company Limited (NAFCO) and its Licensed Buying Companies (LBCs), local financial institutions, caterers, FBOs, CSOs, local foodstuff contractors, input suppliers and key informants. It is also expected that a technical analysis of the data would be done, presented and discussed for validation with the relevant district stakeholders to determine with them an action plan to improve the supply chains towards improved inclusion of smallholder farmers.

4. General Management and Coordination of the entire assignment

SNV, after holding an orientation meeting with the LCB on the assignment, will support the LCB to take off by organizing an initial stakeholder consultation meeting, informing the district authorities about the assignments to assure their buy-in for a smooth implementation of the assignment. It is also for the purpose of ensuring their orientation, capacity and involvement in the specific steps of this assignment.

The LCB shall work closely with the responsible project team member in the region and is expected to share with her/him on a regular basis (weekly), briefings on progress made. SNV shall support the LCB by sponsoring the workshops and assist in contacting people and organizations to be interviewed/surveyed.
5. General Scope of Work
The LCB may apply to cover at least two of the four districts in the Northern Region, two each in Upper West Region, Upper East Region or Greater Accra region.

Key respondents and data collection tools
As outlined above under Baseline development and Supply Chain Analysis, the respondents shall include (but not limited to):
1) FBOs
2) Caterers
3) Local foodstuff contractors i.e. traders and suppliers
4) the District, represented by the GSFP Desk Office
5) MOFA, represented by the District Agricultural Development Unit (DADU) plus other relevant NGOs operating in the district (e.g. WFP, PCD)
6) Local financial institutions
7) NAFCO LBCs
8) Agro input dealers
9) Any available key informant(s)

In addition to the first five respondents above from whom both baseline and supply chain data is to be collected, it is recommended that the LCB collects mainly supply chain specific data from local financial institutions, NAFCO and its Licensed Buying Companies (LBCs), agro-input dealers and any available key informant(s) [respondents 6-9]. With the application of appropriate sampling methods, the LCBs will collect primary data from these key actors in the district(s). Generally, a mix of data collection methods – individual interviews including key informants and focus group discussions may be used.

6. Reporting and Key Deliverables
The LCB will report at the regional level to the Project Advisor and all activities will be coordinated at the national level by the Project Country Coordinator.

After selection the LCB will submit an Activity/Work plan with dates for the assignment (within 5 days of confirmation of selection and before contract is signed) and which may include (but not limited to) the following major activities.
1) Desk study
2) Orientation for data collectors
3) Stakeholder consultation
4) Field data collection
5) Data entry and analysis
6) Production of first draft baseline and supply chain reports
7) Review of draft reports
8) Stakeholder validation workshop at the district level
9) Finalization of baseline and supply chain reports

Concerning the reports, the LCB shall deliver as follows:
Baseline Development:
- The first draft report per district that brings out an analysis of the baseline information should be presented and discussed with the SNV team. The report should be as comprehensive as possible and should clearly spell out findings, analysis and recommendations.
- Second draft report incorporating inputs and comments drawn from the SNV Team presented to a District Stakeholders at a Validation workshop to be organized by SNV.
- Final report, which incorporate all inputs, comments and action points agreed on by the project team and stakeholders in the district.

Supply Chain
- The first draft report per district that captures elements under each of the six steps of Phase A (Supply Chain Study) described in the methodology (Appendix III) should be presented and discussed with the SNV team. The report should be as comprehensive as possible and should clearly spell out findings, analysis and recommendations.
- Second draft report incorporating inputs and comments drawn from the SNV Team presented to a District Stakeholders at a Validation workshop to be organized by SNV.
- Final report, which incorporate all inputs, comments and action points agreed on by the project team and stakeholders in the district.

7. Schedule of Deliverables
Upon selection of the LCB, key deliverables shall follow the time frames suggested:
- A work plan with timelines shall be presented within 5 days of confirmation of selection and prior to signing the contract.
- First draft Baseline and Supply Chain reports shall be presented to SNV for comments from the project team within 25 days of the assignment.
- Final draft reports incorporating approved changes and action points by stakeholders shall be submitted within 35 days of the assignment. (It is recommended that the reports shall not exceed 20-25 pages, plus annexes)

The study, which is expected to commence in April 2013, is to be completed in 5 weeks.

9. Days required for the assignment

The recommended billable days for the assignment are 18 days per district as detailed in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Activity</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Desk Study</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Orientation of Data Collectors</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Stakeholder Consultation</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Field Data Collection</td>
<td>5</td>
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<tr>
<td>5</td>
<td>Data Entry and</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Production of first draft baseline and supply chain reports</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Review of draft reports</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Stakeholder validation workshop</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Finalization of baseline and supply chain reports</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

9. **Qualification and experience required**

The assignment will be awarded to the most competent LCB based on its track record, availability and extent of creativity and knowledge of the subject matter and district terrain. Considering the quantum of work to be done on the field, the LCB must assure the availability of at least 2 staff/resource persons fully responsible and constantly available for the assignments to be undertaken. The engagement of interns is strongly recommended.

It is expected that the LCB team shall possess the following competences and skills:

- Familiarity with the Districts being applied for
- Good representation in the district with an office or a contact person with good communication skills
- Knowledge of farm-level organization and organizational development
- Competence in food crop supply chain/value chain development
- Inclusion of a supply chain expert in the team
- Good consulting and coaching skills
- Having an operational team capable to deliver within the time frame required
- Good experience in data collection, entry and analysis
- Good skill in community mobilization and in partnership development with local Authorities
- Excellent written and oral communication skills in English
- Appreciable knowledge about the Ghana School Feeding Program will be an advantage
- Having sufficient number of trained staff with competence in M & E

10. **Pre-selection Requirement**

Interested LCBs may submit brief proposals (not more than 15 pages) to SNV on or before **Friday April 5, 2013**.

The proposal shall indicate the districts being applied for and shall spell out the LCB’s understanding of the assignment, a statement of capacity, a work plan and budget in Ghana Cedis.

The LCB may send the required particulars to the address of this **Terms of Reference** or call the appropriate telephone number for any clarifications.
## Appendix 4: List of Caterers

<table>
<thead>
<tr>
<th>NO</th>
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<th>SCHOOL</th>
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<tr>
<td>1</td>
<td>CELESTINA PUOTIERE</td>
<td>KARIYIRI WAP/KG</td>
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<td>BY CATERING SERVICES</td>
<td>OMOBO L/A PRIM/KG</td>
<td>0244152155</td>
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<tr>
<td>4</td>
<td>SALIA PATIENCE</td>
<td>JANGUASI</td>
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<tr>
<td>5</td>
<td>GRACE BOMANSAAAN</td>
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<td>0246712625</td>
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<td>6</td>
<td>BOOKPIERE VIDA</td>
<td>KALEO R/C PRIMARY</td>
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<tr>
<td>7</td>
<td>CLOTHILDA KANYI</td>
<td>LOHO PRIMARY</td>
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<td>8</td>
<td>HELLEN SUMBAWERA</td>
<td>KAYIRE D/A PRIM/KG</td>
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<tr>
<td>9</td>
<td>FATI SALIFU</td>
<td>JANG D/A PRIMARY</td>
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<td>10</td>
<td>KANDEE REBECCA</td>
<td>KUANG R/C PRIMARY</td>
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<td>AGNES B. BOMANSAAN</td>
<td>NARO D/A PRIM/KG</td>
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<td>ABUBAKARI AYISHETU</td>
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<tr>
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<td>KALEO BAPTIST KG</td>
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<td>AYISHETU HAMIDU</td>
<td>KALEO L/A PRIMARY SCH.</td>
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<tr>
<td>15</td>
<td>MARY SOHA</td>
<td>LOHO TENDAABA</td>
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<tr>
<td>16</td>
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<tr>
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<td>GAANYE GERTRUDE</td>
<td>KONNI PRIM/KG</td>
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<td>TANDUORI PRIMARY</td>
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<td>21</td>
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<td>DAPOPARI PRIMARY/KG</td>
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<td>DIEDONG ASIBI</td>
<td>YIZIRI PRIMARY/KG</td>
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<td>PATRICIA DAKURAH</td>
<td>GBERUNG PRIMARY/KG</td>
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<tr>
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<td>WONGERE JANE</td>
<td>KPAZIE PRIMARY/KG</td>
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<td>PENETOBO KG</td>
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<td>26</td>
<td>ALIMA AHMED</td>
<td>CHANGU R/C PRIM. &amp; KG</td>
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<td>27</td>
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<td>NATOR R/C PRIM. SCH.</td>
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<td>NO</td>
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<td>1</td>
<td>SUNTAA SUNBAALA COOP. FARMERS/MARKETING SOCIETY</td>
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<td>LAMBUURI -N-MAARONG</td>
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<td>SEREKPERE</td>
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<td>BOODUORI FARMERS</td>
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<td>12</td>
<td>KANDANBONGBU</td>
<td>TIBANI</td>
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</table>

Appendix 5: List of FBOs and Contacts
Appendix 6: List of Other Respondents and Contacts

<table>
<thead>
<tr>
<th>No</th>
<th>Individual/Organization/Institution</th>
<th>Contact</th>
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<tbody>
<tr>
<td>1</td>
<td>Mary Galuoni (Trader)</td>
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</tr>
<tr>
<td>2</td>
<td>Florence N (Key Informant)</td>
<td>0208914414</td>
</tr>
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<td>3</td>
<td>Association of Church Development Projects (ACDEP)</td>
<td>0200766497</td>
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<td>4</td>
<td>Professional Network North (ProNet North)</td>
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<td>5</td>
<td>World Vision International</td>
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<td>6</td>
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<td>7</td>
<td>District Assembly (DDO)</td>
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</tbody>
</table>

9 REFERENCES


Nadowli District Assembly (2012) District Profile and Analysis of the Current Situation