UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

STRUCTURE OF FARMER BASED ORGANISATIONS IN AGRICULTURAL DEVELOPMENT IN PERI-URBAN TAMALE IN THE NORTHERN REGION OF GHANA

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STRUCTURE OF FARMER BASED ORGANISATIONS IN AGRICULTURAL DEVELOPMENT IN PERI-URBAN TAMALE IN THE NORTHERN REGION OF GHANA

BY

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DECLARATION

CANDIDATE'S DECLARATION

I, Bugli Clifford, hereby declare that this thesis is entirely my own work and that it has not been previously published, neither has it been submitted anywhere for the award of any degree. All references cited here are duly acknowledged.

Name of candidate: Bugli Clifford,

Candidate's signature..... Date…….

SUPERVISOR'S SIGNATURE

Name of Supervisor: Prof. David Millar

Supervisor's signature…… Date……

ABSTRACT

The study examined the role of farmer-based organizations (FBOs) in agricultural development in peri-urban Tamale in the Northern Region of Ghana. The study used the mixed method for the research. Both primary and secondary data were collected. It used a questionnaire and an interview guide with a sample size of 125 in the gathering of data and generating tables through analysis of data. The findings revealed that 97.1 percent of FBOs operating in Tamale Metropolis are officially registered as business entities in Ghana. It also found out that eight seven-point six percent of these establishments (FBOs) were initiated by the Ministry of Food and Agriculture (MoFA) or Government. Furthermore, the study revealed that seventy-eight-point one percent of the FBOs members are able to influence the selling price of their produce, eight six-point seven percent of the FBOs members are able to meet the contractual requirements of their customers in terms of quality and quantity demanded. Findings from the study further revealed that sixteen-point two percent of the respondents indicated that they lack training on leadership and management, fourteen-point three percent of the respondents indicated that they lack guaranteed market for their farm produce, thirteen-point three percent of the respondents indicated that they lack improved seed for farming, twelfth point four percent of the respondents indicated that they lack tractor services for farming. The study recommended that MoFA officials should be well resourced, additionally credit institutions need to well nurtured relationship with FBOs provide guaranteed markets for their produce, intensive and frequent training should be provided to FBOs MoFA, input supply centres should be created in the metropolis, and FBOs should be provided with efficient irrigation facilities by the government.

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To all others whose names I have not mentioned, I say a big thank you.

DEDICATION

To my dear wife and children

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ACRONYMS/ABREVIATION

ACDEP	-	Association of Church Development Projects
AFS	-	ACDEP Financial Services
AgSSiP	-	Agricultural Services Sub-Sector Investment Project
AIDs	-	Agricultural Input Dealers
CCSFA	-	Cocoa Coffee and Sheanut Farmers Association
CEPA	-	Centre for Policy Analysis
CIDA	-	Canadian International Development Agency
CDFO	-	Commercial Development of Farmer Organisations
DDCRES	-	Demand-Driven Cost Recovery Extension Services
EAFF	-	East Africa Farmers Federation
ERP	-	Economic Recovery Programme
FAO	-	Food and Agriculture Organisation
FASDEP	-	Food and Agriculture Sector Development Policy
FBO	-	Farmer Based Organisations
FONG	-	Farmers' Organisations Network in Ghana
GDP	-	Gross Domestic Product
GFAP	-	Ghana Federation of Agricultural Producers
GNAFF	-	Ghana National Association of Farmers and Fishermen
GPRS	-	Ghana Poverty Reduction Strategy
GSS	-	Ghana Statistical Service
GTZ	-	German Technical Cooperation
IFAD	-	International Fund for agricultural Development

IFAP	-	International Federation of Agricultural Producers
IFDC	-	International Centre for Soil Fertility and Agricultural Development
IMC	-	Interim Management Committee
ISSER	-	Institute of Statistical, Social and Economic Research
LI	-	Legislative Instrument
LRDP	-	Lowland Rice Development Project
MCA	-	Millennium Challenge Account
MCC	-	Millennium Challenge Corporation
MoFEP	-	Ministry of Finance and Economic Planning
MLS	-	Mutual Labour Support
MMDAs	-	Metropolitan Municipal and District Assemblies
MoFA	-	Ministry of Food and Agriculture
MTADP	-	Medium Term Agricultural Development
NDPC	-	National Development Planning Commission
NGO	-	Non-governmental Organisation
PFAG	-	Peasant Farmers Association of Ghana
PNDC	-	Provisional National Defense Council
POs	-	Producer Organisations
UDS	-	University for Development Studies
UNFA	-	Uganda National Farmers' Association
SAP	-	Structural Adjustment Programme
SFMC	-	Savana Farmers' Marketing Company
SSA	-	Sub- Sahara Africa

TAMA	-	Tamale Metropolitan Assembly
TM	-	Tamale Metropolis
TTH	-	Tamale Teaching Hospital

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Since colonialism, agricultural cooperatives became a means to promote the production and to facilitate the cultivation of cash crops such as coffee, cocoa, cotton, throughout SSA (Hussa et al., 1993). The key objective of the colonial authorities in establishing agricultural cooperatives was to facilitate the implementation of their agricultural policies, to improve agricultural export flow to the European market, and to ensure control of and maintain order in remote rural areas (Wanyama, 2008)

As a result, agricultural cooperatives became dominant in the cocoa sector, serving as key instruments to assist and control farmers in their activities (Johnson, 1958) as well as to channel cocoa more efficiently to the United Kingdom (Miracle & Seidman, 1968). The promotion of agricultural cooperatives continued throughout the 1950s when it was then extended to other production areas such as rice, maize, peanuts, and tomatoes (Miracle & Seidman, 1968).

After Ghana's independence in 1957, the new sovereign government continued to promote agricultural cooperatives and by the 1960s they were reported to have been responsible for the marketing of about 40% of the total cocoa produced in Ghana (Young, Sherman & Tim, 1981). Governments of Ghana in the post-independence era saw cooperatives as key channels for agricultural and rural development. Cooperative development during this time underwent major and frequent changes in this direction (Dadson, 1988).

According to Dadson (1988), in 1984, Ghana began the implementation of the first phase of the Economic Recovery Programme (ERP). As part of the ERP, the government following World Bank principles planned to decrease the role of public sector and to depend more on the private sector for services needed. This was then an obvious disadvantage for subsistence producers with

scarce means and access to private services. But industrial crops such as cocoa, coffee and oil palm seedling grown by smallholders were singled out for assistance. The government attempted to decrease its function in marketing and assistance to farmers in several ways. For instance, the Cocoa Marketing Board steadily relinquished its powers over pricing and marketing (Dadson, 1988).

In order to set up a representative producers' organization, the government, established the Ghana National Association of Farmers' and Fishermen (GNAFF) by a Presidential Commission in 1992, as a new farmers' organisation to replace the Ghana Federation of Agricultural Cooperatives. The new body was to be funded by the farmers themselves to operate as a cooperative venture at the district, regional and national levels (AgSSip, 2007)

This liberal strategy to the development of cooperatives made way for other types of rural and farmer organisations for income-generating activities to be formed, all of which are commonly known as farmer-based organizations (AgSSiP, 2007).

Considerable changes have taken place in the global agricultural economy over the past two decades, with even more dramatic market changes within the same time. Among the pressing problems, poverty remains endemic and persistent, especially among small-scale farmers and for that matter famer-based organizations (FAO, 2008).

Ghana's economy is essentially agrarian; it is therefore not a surprise that agriculture is considered the pillar of the nation (NDPC, 2009). The sector, which is the occupation of the farmer, engaged about 60 percent of the nation's labour force as at 2008 (NDPC, 2009). It is the key contributor to the country's GDP. It also accounts for about 53 percent of the nation's export earnings. Also, it is critical for national food security, and important source of raw materials for local agro-based industries (NDPC, 2009).

Indeed, because majority of the poor rural dwellers and for that matter smallholders are engaged in agriculture, the development of the sector is not only a key strategy for poverty reduction in Ghana but also, a driving force for economic growth. Therefore, agriculture is essential in national development because the economies, especially the less developed ones including Ghana, depend on this sector for growth (George Laryea in the Daily Graphic, 14/10/09, p.12).

The Agricultural sector in Ghana is made up of five major sub-sectors, and these are: Irrigation, Livestock, Crop, Fisheries and support services which include extension, marketing, storage and intersectoral link in processing and feeder roads (MoFA, 2000). Key activities in the sector are livestock and food cropping, cocoa production and marketing, forestry and logging, and fishing. Cocoa is the main cash crop cultivated, providing a significant proportion of national revenue. Other foods and industrial crops cultivated include yam, cassava, maize, cocoyam, pineapple, banana, plantain, pepper, cotton-seed, cashew nuts, cola nuts, sugar cane, rubber, oil palm, tobacco and coffee among others (MoFA, 2000). The key objective of the sector is to ensure food security and facilitate the production of agricultural raw materials for industry and agricultural commodities for export (MoFA, 2000).

The sector contributes substantially to government revenue mainly through duties paid on the export of agricultural commodities, especially cocoa; and it has been the key contributor to nations foreign exchange earnings for several years (MoFA, 2000). For instance, in 1990, the GDP grew by only 3.3% because the growth rate of the agricultural sector that year was -2%; but in 1991, when the GDP for agriculture grew by 5.8% the entire economy also grew by 5.3% in GDP. Since that time the GDP growth rate for agriculture has stayed under 5% and the GDP for the entire economy has also been 5% or less (Asuming-Brempong, 2004). Until 1992, the sector accounted for the highest proportion of total foreign exchange earned in the country. This role

has been performed through exports of agricultural commodities and conservation of foreign exchange by producing import-substituting food and raw materials. Between 1999 and 2002. For instance, the agricultural sector contributed 38.5%, 35.4%, 33.9% 35.5% respectively, to foreign exchange earnings in Ghana (Asuming-Brempong, 2004).

This undoubtedly, means that the rate of the country's economic growth is linked with the performance of the agricultural sector. Thus, economic transformation and growth are expected to be propelled by the agricultural sector for the following reasons:

a. Agriculture is the major contributor to GDP

b. The agricultural sector is the highest employer of the labour force in Ghana

c. Majority of the poor, especially women, are engaged in the sector

d. Increased productivity in the agricultural sector will ensure food security

e. Mechanized agriculture will serve as the basis for structural transformation between agriculture and industry

f. The sector provides the avenue for creating youth employment in agriculture related activities (Asuming-Brempong, 2004).

In relation to the above analysis, it is obvious that the importance of agriculture in the economy cannot be underestimated, bringing to fore the need for all to be concerned about the current state of agriculture and farmers for that matter. It is therefore not surprising that over the years successive governments have made frantic efforts to improve the agricultural sector of the economy.

For the last few decades, specifically during most parts of the 1980s and 1990s, government policies under the Economic Recovery programme (ERP) and related Structural Adjustment Programmes (SAP) such as removal of subsidies on agricultural inputs; privatization of the

distribution of agricultural inputs and de-regulation of the exchange rate among others, have focused mainly on food security. Since 2001, this has been further buttressed by the emphasis on self-sufficiency in food products such as cereals and starchy staples, the production of which the country has comparative advantage. In a related development, import substitution through vigorous domestic production for some emerging staples such as rice has become an important policy issue in the last couple of years (NDPC, 2009). According to TV3 News, imported rice constitute 47% supplemented by local production of 53% in Ghana (22/08/16).

However, over the past three decades, government's budgetary allocation as a percentage of total discretionally budgetary spending has declined steadily to a level of about 2% and the operation of agriculture in Ghana is estimated to be 20%. This undoubtedly is woefully inadequate as Ghana's medium and long-term development strategies emphasize modernization of agriculture as a basis for industrialization and a driver of accelerated economic growth (Boi Ocansey in The Daily Graphic, 21/07/09 p.17).

In Ghana, the cause of rural poverty is as a result of low output especially in the agricultural sector, which employs about 80% of the economically active rural population (ISSER, 2004). The low output levels are attributed to factors including erratic weather pattern, poor farming practices, high cost of inputs, infertile soils and credit as well as poor infrastructural development, markets and storage facilities (ISSER, 2004)

It is made clear by Ostrom (2008), that farmer-based organizations (FBOs) stand as an effective tool for solving problems in rural areas and promoting agricultural development. In order to reduce rural poverty, many African governments have realised the need to increase production in the agricultural sector. Consequently, countries such as Ghana, Cote d'Iviore, and Nigeria have appealed to their international development partners to assist in developing the agricultural

sectors of their economies since agriculture, especially smallholder farming, contributes to poverty reduction by providing employment, food security, and raw materials for a greater proportion of the rural and peri-urban population (ISSER, 2004)

According to Owusu-Ansah (1989), small-holder farmers' and for that matter FBOs have been neglected for far too long. He stressed that it was only in the 1980s that agriculture was given the needed priority, perhaps due to the lessons of famine and drought in 1983;

Thus, to modernize agriculture in Ghana, the GPRS II policies for Agriculture focused on achieving three broad objectives- Sustainable increase in agricultural productivity and output to support industry and provide stable income for farmers; Food security for all and increased access of the poor to adequate food and nutrition; The development and strengthening of the requisite institutional capacity to support increased productivity is in the right direction (NDPC, 2005). An optimal outcome of the modernization and development of agriculture therefore calls for a collaborative effort of all stakeholders including government, private sector, groups or organizations and individuals.

Despite the fact that government is constrained by limited budget, provision of support through infrastructure, credit facilities, technical advice or education from Agricultural Extension Officers etc. are always available to some extent to boost the agricultural sector. However, there are gaps in the development of the agricultural sector, hence the need for government to call for support or create an enabling environment for players such as private sector, Non-Governmental Organizations (NGOs) and Civil Society Groups, including Farmer Based Organizations (FBOs) to be part and parcel of the process of improving agricultural production, processing, distribution and marketing.

This study, therefore, aims at assessing the contributions made by FBOs towards agricultural development in peri-urban Tamale in the Northern Region. On the whole, their specific activities, beneficiaries and impact areas, challenges, and failures, corrective measures among others, will be examined.

1.2 Problem Statement

In most development literature in developing countries, agricultural development is considered one of the best vehicles in reducing rural poverty. This conviction is based on the facts that, majority of the rural poor are engaged in agriculture or agricultural-related activities for their livelihoods (Lele & Agrawal, 1989). Over 90% of agricultural production in Ghana is carried out by peasant, smallholder farmers on plots of one hectare or less in rural areas (World Bank, 2003).

According to the FAO (2004), smallholder agricultural growth often has strong significant and positive effects on poverty reduction than any other economic sector in Africa. In a related development, Irz et al. (2001), analyzed the relationship between agricultural growth and rural poverty in Southern Africa. They concluded that agricultural development has a strong effect on rural poverty reduction. For example, it was observed from this study that, one-third increase in agricultural yield reduced rural poverty by one-quarter or more.

The development of agriculture in Ghana as a nation therefore, calls for collaborative efforts of all stakeholders, including FBOs. However, many people have little or no idea of the kind of activities FBOs are engaged in and their impact, especially, when it comes to agricultural development.

In his work on strengthening FBOs, Opare (2007), established that despite the numerous beneficial roles FBOs play in rural development, a significant proportion of them are virtually

unknown in development circles. Government agencies and donors often assume FBOs exist in rural communities only. Moreover, they have little idea of the kind of activities FBOs are engaged in and their impact on the livelihood of the marginalized and vulnerable persons.

In its annual progress report in 2009, the National Development Planning Commission (NDPC) confirmed that MoFA does not receive the needed recognition from key operators in the FBOs. In view of this, less or no importance is attached to their existence and role in the agricultural sector. Interestingly, famer-based organizations (FBOs) have gained increasing attention in recent development debate (Bosc et al., 2001; IFAD, 2003; World Bank, 2007; and Shepherd, 2007). International donors and NGOs have rediscovered the importance of FBOs for rural development in general and for strengthening smallholder farmers' access to markets in particular. The renewed `interest given to agriculture and the role it plays in poverty reduction has also led to a focus on organizational structures to improve the efficiency of agricultural marketing of the world FBOs that have been successful (albeit not always) in strengthening the economic position of their members to providing agricultural inputs, credit, processing and marketing services (Narayanan & Gulati, 2002; Wollni 2007). In the light of the current changes taking place in agricultural markets, and global trade patterns, FBOs are regarded as a tool to solve some of the market access issues faced, especially by small-scale farmers, such as lack of market information, access to credit, and technical assistance (Narayanan & Gulati 2002; Wollni 2007).

However, the contribution of these farmer-based organizations towards agricultural development in Northern Ghana cannot be overemphasized. For instance, in the rice industry, rice is cultivated in four main ecological areas in Ghana. These include rainfed upland (in Northern Ghana), rainfed lowland (Northern Ghana), and Inland swamp-inland valley of Central Ghana and

irrigated – Northern and Southern Ghana. The major challenge faced by local farmers is high cost of production since most of the agricultural inputs are imported (Khor 2006). Other constraints limiting production include lack of access to credit, shortage of water, pests, diseases, unavailability of suitable varieties, low quality of locally processed rice and inefficient markets for inputs and produce (Furuya & Sakurai, 2003; Adolph & Chancellor, 2006). In other to sustain the rice intensive cropping scheme developed under lowland Rice Development Project (LRDP), the capacities of farmer-based organizations was built to fulfill some of the tasks came out by LRDP such as organized access to inputs and tractor services, monitor cropping activities, manage and sustain their collective structure (storage and water), access and manage credit as well as organize marketing of paddy (Khor, 2006).

In spite of the importance of FBOs in agriculture to addressing rural poverty, smallholder farmers and for that matter FBOs in northern Ghana are confronted with many challenges. Among these challenges are limited access to credit, farming inputs such as fertilizer, poor quality seed, inadequate market information, lack of storage facilities, high transport cost, low pricing of produce. These challenges make smallholder farming unattractive and financially unrewarding. Hence the study intends to investigate the under exploration of the potential of FBOs in agricultural development in Tamale Metropolis in the Northern Region.

1.3 Main Research Question

What accounts for the under exploration of the potential of FBOs in agriculture in Tamale Metropolis in the Northern Ghana?

1.3.1 Sub Research Questions

Specifically, the research therefore seeks to find answers to the following questions:

a. What has been the operational structure of FBOs in peri-urban Tamale Metropolis in the Northern Region?

b. What are the key roles FBOs are expected to play in the development of agriculture in Tamale Metropolis in the Northern Region?

c. What are the major constraints to the effective involvement of FBOs in agricultural development in peri-urban Tamale Metropolis in the Northern Region?

1.4 Main Research Objective

To investigate the under exploration of the potential of FBOs in agricultural development in Tamale Metropolis in the Northern Region.

1.4.1 Sub Research Objectives

Specifically, the study hopes to achieve the following:

a. To investigate in the operational structure of FBOs in Tamale Metropolis in the Northern Region

b. To assess the roles of FBOs in the development of agriculture in Tamale Metropolis in the Northern Region

c. To identify the main constraints to the FBOs effectiveness in developing agriculture in Tamale Metropolis in Northern Region

1.5 Scope of the Study

Contextually, the study examined the roles played by farmer-based organizations in the development of the agricultural sector in peri-urban Tamale in Northern Region. The research focused specifically on the operational environment of the FBOs and the challenges they encounter in the cause of their operations.

Geographically, the study was limited to peri-urban Tamale in the Northern region of Ghana, where there is vast land which can be used for agricultural purposes.

1.6 Delimitation of the Research

The research was confined to the Tamale Metropolis and specifically peri-urban Tamale of the Northern Region of Ghana. Except for the purposes of comparison, the study delimits the contribution of FBOs to agricultural development in the northern region of Ghana The study drew very much on local knowledge and experiences. Also, the findings of this study were largely contextual and more specific to Tamale Metropolis based on the ideas, experiences and views of the participants. However, the findings of this study can be transferred to a population of similar characteristics elsewhere in Ghana or even globally

1.7 Relevance of the Study

With respect to the numerous benefits derived from the agricultural sector, it is considered the backbone of Ghana's economy. Ghana's Growth and Poverty Reduction Strategy main objective was for Ghana to become a middle-income country by 2015 and a key component of this strategy is accelerated growth through modernized, vibrant and competitive agricultural industry. Thus, the agricultural sector is expected to reach a growth rate of 14% in order to reduce poverty in Ghana by raising the per capita income to US$ 1000 (NDPC, 2005). To achieve this target, the agricultural sector needs to be improved thoroughly to complement the development of other sectors, especially, the industrial sector, hence the essence of government creating an enabling environment for players such as the private sector, NGOs and FBOs to operate.

a. The results of this study may serve as useful information to policy makers across Africa, development actors as well as the academia and other scholars intending to undertake research on the roles of FBOs in agricultural development

b. Also, the study could add to the body of growing literature on FBOs in the agricultural sector globally

c. Additionally, the study may ensure food security, employment opportunities and sufficient agricultural raw materials for industries. This in the long run may reduce poverty as well as rural-urban migration and its negative impact in the northern region where these problems are very rampant.

d. Besides, the research may help create awareness of the potentials of FBOs in the agricultural sector including the organizations that are into or dependent on agricultural productivities

e. Consequently, the study is therefore relevant in promoting agriculture in Northern region and Ghana as whole, in terms of technology, production, processing, distribution, and marketing.

1.8 Organization of the study

This research was organized into five Chapters. Thus, Chapter one entails the introductory aspect of the work which gives the background of the study, the specific problem of the study, the research objectives and questions, the significance of the study. Chapter two consists of review of relevant literature. Chapter three discusses the methodology and approach of this study. Empirical results obtained from the study was presented and discussed in Chapter four. Chapter five covered the summary, conclusion and recommendations of the study and suggested areas for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of related literature pertaining to Farmer Based Organizations and agricultural development. The chapter also identified various concepts that have shaped the thinking of what FBOs stand for. It also attempts to explore some theories and perspectives that underpin the concept of farmer based organisations and their role in agricultural development in Ghana.

2.2 Definitions and Concepts

2.2.1 Agricultural Development

The agricultural sector development is defined by eminent economists in books of development literature as; what happens over time change, evolution, growth it may be an improvement or not. The main emphasis will remain on what happens to the country's economy and to the entire agricultural sector given to overall economic development, i.e. higher income, more production and increase in consumption with improved living conditions of the whole population and bring about a number of other positive changes in society and economy. The economic and agricultural development addresses the following important basic questions when will we usually be descriptive, asking; what happens over time? Is there accumulation of 'capital' like houses, roads, machines; human capital like education, health; institutional capital? Are people and countries

getting richer? What differs across countries between rich & poor? And sometimes we will be prescriptive, asking what should be done for the material welfare of the people? What they want in their daily business? In answer, all of the above questions are based on accumulation of capital

that makes it more abundant and cheaper. This is more important that accumulation does not happen automatically and speedily; it requires, money saving, time and energy. To build up capital, people must save and invest from one year to the next and in this process. Development also involves innovation, which economists call "technical change" means new physical things as seeds, chemicals, etc, new ideas for crop rotations; new institutions or futures markets for output. Innovation makes it possible to produce more of what people want, from the resources they have.

But innovation does not happen automatically. To innovate, people must be able to change what they do. The concept needs to discuss in detail with reference to various concepts of agric-development in historical and modern's context for a thorough understanding. Eminent Agric-Economist, (Mellor's, 1966) analysis provides a base for agriculture sector development during green revolution period.

According to him, there are three phases of agriculture development. (1) Technologically stagnant because of the non-availability of modern inputs. (2) Technologically dynamic with low capital technology. (3) Technologically dynamics, dynamic high capital farming so the last approach is identified with an increase in the role of high capital farming in agriculture. His emphasis is on action rather than discussion on historical development process. His hypothesis mostly depends on green revolution. The role of state is important as distributors of new inputs, finance and marketing facilities with technology change. He ignores the fact that the mechanisms of institutional changes are different and subject to economic as well as political constraint. The process of modernization and increasing productivity through technological change including physical factors of production and institutional input provision through policy measures are important.

The Lenin (1964) work, the development of Capitalism in Russia can be considered as historically specific and based on empirical grounds. The main feature of his approach is the format of capitalism in the economy? Agriculture itself becomes an industry and the same process of exchange through market modernization and commoditization takes place in agriculture but it spreads slowly. He also concludes three important aspects for the formation of home markets for capitalism without the help of other foreign markets for its production; disintegration of the peasantry; transformation of the agrarian economy to capitalist production; commercialization in agriculture. He argues in the capitalist system of production in agriculture peasantry was in the process of dissolution and in its place new type of inhabitants were emerging. This was accompanied by a owners of industrial establishment.

The process of disintegration expands the home market and purchase and sales begin there, when this process begins the strong bourgeoisie the means of production and the weaker section i.e. proletarians purchase articles of subsistence living, there by stimulating the growth of industries. In this process, he observed same retarding factors such as migration of middle class peasantry to towns, the use of money lending and borrowing the payment to labour in kind. He explains in his second aspects that the previous system of land cultivation (Share Cropping) declines because of the polarization of peasantry on which the middle class of farmers having some tools and implements disappear and are replaced by rich peasants. The third aspect of development or change according to Lenin is the growing commercialization of agriculture. He argued that agriculture pattern is different from industry, farmers specialize in one major crop which spreads on the farmers around, thus commercial agriculture creates demands for the products of industry and also intensifies capitalist contradiction in agriculture and it accelerates the process of change.

Banaji (1976), conclude that Karl Kautsky discovered the mechanism underlying agricultural transformation, based upon the experience of Western Europe. He provides a detailed analysis of process of agrarian change and concludes the laws of agricultural development under capitalism in agriculture. According to him, developed capitalism in industry affects agriculture and means of communication reduces the distance in rural areas to towns, rent farm changed into cash payments instead of barter. The increased role of money and dependence of peasant on markets increase and creates middleman then comes usurer and merchant capital and land becomes private commodity including change in mode of production. He further explains a long process of agriculture development when he says that the use of machinery, tools and equipment put agriculture on new basis in 19th century. New cropping patterns and individual ownership of land and commodity production introduce capitalism in agriculture and capital accumulation process begins. Introduction of capital creates two kinds of farmers, large scale farmers engaged in production for markets and small farmers are technologically backward and use family labour engaged in production for home consumption, he also pays attention to the co-existence and mutual relations between big and small farmers.

2.2.2 The Concept of FBOs in Agricultural Development

In 1904, during the large wine crises in France, several wine growers came together and pulled resources to produce and market wine as a way of livelihood in order to generate income for improved living. This continued until World War I, when agricultural techniques were improved, markets for agricultural products also widened, and the number of cooperatives also increased. The initiation of national associations of cooperatives started in 1945 on the order of the government. After World War II, farmers increased production and agricultural cooperatives also increased in number (Rondot & Collion, 1999)

In Sub-Saharan Africa, agricultural growth and rural development represent likely pathways out of food insecurity and poverty. This widespread thinking is backed by large amounts of evidence indicating that vast majority of the populace in SSA keep residing in remote areas, under subsistence regimes (Salifu, et al., 2010).

Overall, FBOs are key avenues through which smallholders can access markets and credit information as well as other important agricultural information like new agricultural innovations and technologies. They also, serve as key grounds for mobilizing farmers around a common objective especially in the delivery of services and formulation of policies that augment agricultural development. Countries such as Ghana and Tanzania, FBOs are the centre of extension delivery, crop marketing and the poverty reduction strategy, (Uliwa & Fischer 2004; Salifu et al., 2010).

In other less developed nations such as Senegal, FBOs serve as one of the success stories purposely because of the presence of an organized institutional framework with the existence of several federations such as National Council for Rural Dialogue and Cooperation (2001).

Ghana is also one of those countries where farmer groups are extensively used in the development of agricultural under the Ministry of Food and Agriculture. Registration of FBOs is initiated at the grass-root level and these are registered at the local, district and regional levels to a national apex. In addition, there exists the Millennium Development Authority, a public agency that provides education and training to FBOs and facilitates investments in business opportunities with FBOs (Asante et al., 2011).

The consolidation and growth of FBOs in Ghana frequently encouraged by Ghana's decentralization policy as enshrined in the 1992 constitution and Local Government Act 1993 (Act 462) highlights participatory planning as one of the clear changes in focus. Coordination

among varied community associations and institutions involving NGOs, financial institutions, private businesses, FBOs, social group – associations and youth clubs, are now noted to be one of the effective and efficient approaches for promoting development programmes.

2.2.3 FBOs and Agricultural Development in Ghana

Salifu et al., (2010), refer to Farmer based organisations (FBOs) as the grouping of farmers mainly around common interest like the production, processing, storage and marketing of a given agricultural crop or to pool their resources together and facilitate access to credit and farm inputs. In the past, individual farmers formed many kinds of informal organizations to help solve their internal social and economic problems, but in recent times, the trend is to form FBOs to enable farmers to interact effectively with their external environment (Leeuwis, 2004)

Previously, extension and extension theories solely focused on supporting individual farm management and promotion of farm level innovations. Looking at the challenges of today, many of these exceed the level of individual farms or farm households. Issues like the management of collective natural resources, chain management, collective input supply and marketing, organisational building multifunctional agriculture and venturing into new markets typically require new forms of coordinated action and co-operation amongst farmers and between farmers and other stakeholders. (Leeuwis, 2004).

Farmers' Organizations as put by FAO (2007), are essential institutions for the empowerment, poverty alleviation and advancement of farmers and the rural poor. FAO (2007), further indicates that farmer groups can be effective alternatives where private and public provision of agricultural services have failed, in many cases as Leeuwis (2004), states it, innovation involves or depends on the adequate functioning of farmer and community organisations or groups. He again talks of

the ability to make claims as a group. This research shares the analyses made by the FAO, drawing that, FBOs present great opportunities to farmers.

The renewed interest among both public and private organizations to establish farmer-based organizations (FBOs) in Ghana, according to Salifu et al., (2010), is based on the premise that FBOs give farmers bargaining power in the market place, enable cost-effective delivery of extension services, and empower FBO members to influence policies that affect their livelihoods. Bonsu (2012), taking FBOs in the context of Ghana mentions of the government, donors and partner organisations identifying FBOs as having a critical role to play in agricultural development and over all food security in the country. In Ghana, for example, in recent policy strategy documents of the Growth and Poverty Reduction Strategy (GPRS II, 2006, 2009), the current Medium-term National Development Policy Framework in the Ghana Shared Growth and Development Agenda (GSGDA, 2010-2013), and the Food and Agriculture Sector Development Policy (FASDEP II) all place strong importance on the establishment and strengthening of FBOs as one of the key strategies in developing the predominantly smallholder agricultural sector in the country (MoFA, 2010).

Previous, extension and extension theories solely focused on supporting individual farm management and promotion of farm level innovations. Looking at the challenges of today, many of these exceed the level of individual farms or farm households. Issues like the management of collective natural resources, chain management, collective input supply and marketing, organisational building multifunctional agriculture and venturing into new markets typically require new forms of coordinated action and co-operation amongst farmers and between farmers and other stakeholders (Leeuwis, 2004).

Still on the attributes of FBOs, Uphoff & Wijayaratna (2000), mentions of the review of collective action theory being parallels to the social capital literature, highlighting how structural forms of social capital (roles, rules, procedures and social networks) facilitate mutually beneficial collective action and how cognitive forms of social capital (norms, values, attitudes and trust) are conducive for mutually beneficial collective action. Several other studies have similarly shown how human and social capital formation have been pivotal in solving many communities' development problems, particularly in natural resource management (Peterson, 1999).

Private sector organizations, for example, establish FBOs to increase profitability, largely by reducing transaction costs. FBOs enable private entities to deal more effectively and efficiently with smallholder farmers (Okorley, 2007). Through FBOs private investors consider reducing the cost of dealing with farmers, enhancing the volume and quality of farm produce and increasing credit recovery rates in farmer's. Many buyers of farm products prefer to work with FBOs instead of individual farmers because the groups are better able to provide stable supplies of quality products (Van den, 1996)

Many governments (WFP, 2012) also establish FBOs to improve rural service delivery and access to public services, to enhance economic growth and peoples' welfare, and to reduce poverty. Some governments require farmers to organize themselves into FBOs as a condition to gain access to support such as or credit (Salifu et al., 2010).

Since 2000, the Ghana government and several NGOs have implemented projects for strengthening FBOs in the country. Among these projects, the government has implemented is a World Bank-sponsored Agricultural Services Subsector Investment Program (AgSSIP), implemented from 2000 to 2007.Under the FBO component, AgSSIP provided support for the

development of FBOs to allow them to play a major role in shaping agricultural policy, providing services to farmers, and engaging in export activities (AgSSIP, 2007).

As much as FBOs have phenomenal strengths, its weakness is evidential. An issue about member participation in FBOs involves dealing with different levels of income of farmers. The very poor farmers would generally find it difficult to join FBOs especially if group activities include assembling of assets or money services as they often have nothing to contribute except labour

Upon the report on the interview by (Salifu et al., 2010), most FBOs suggested that their members received more training from agricultural extension agents (AEA) than farmers who do not belong to FBOs because AEAs specifically target FBO. Showing the inclusiveness and exclusiveness associated with of FBOs. Farmers in FBO are therefore of higher priority to extension workers than individual who are not part of any farmer group.

2.2.4 The Role of Farmer Based organization in Agricultural Development:

This section identifies and explains broad areas where FBOs can play critical role in developing the Agricultural sector in terms of production, processing, distribution and marketing. These thematic areas are discussed below:

2.2.4.1 Produce Marketing

Markets cannot be done without in the evacuation of farmers' produce from their sites of production to the final consumer. Majority of FBOs implement their marketing interventions with associations or groups. Not only are there opportunities to the FBOs for working with groups, there may be advantages to farmers themselves for marketing collectively.

This is echoed by Kohls (1986), that because no product should ever be produced unless it has a market, marketing begins with production on the farm. This therefore emphasized Economists ideology that production never stops until it gets to the final consumer. It is established that

farmers require an efficient and effective market system which Abbott et al. postulate as the one that yields the highest price for the sale of produce/product for farmers (Abbott, 1990).

FBOs have concentrated on the promotion of marketing to encourage more participation in the commercial sector, as a route to higher incomes, employment generation and growth. Stringfellow et al., (1997), points out that group enterprises are more likely to progress or succeed when based on joint marketing instead of joint management/ownership of assets, because the latter demands more complex experience and skills. It is evident in Northern Mozambique that farmer association, an apex known as Fora working through their own structured network of extension groups and farmers, are able to obtain commercial contracts for their produce, selling at higher prices than possible individually. The margin generated is then recycled to pay for inputs for subsequent crops, provision of community infrastructure and other services (CARE International, 2000).

Depending on the situations, the use of subsidies can lead to successful and sustainable marketing initiatives. The CARE Egypt Agricultural Reform Programme has shown this. The programme provides information services to peasant farmers and facilitates linkages so as to help increase farmer income. The service is highly subsidized but has been successful simply because the smallholders pay fees for the services rendered; Farmers call for the services and with the support of the project staff they identify marketing and production opportunities themselves; and farmers are always abreast with all information within their field of operation and this leads to long term networks and sustainability of relationships (McVay, 1999)

Jeans in Offei-Aboagye, (1998) confirms a similar approach used by Intermediate Technology in Zimbabwe. This institution is ever prepared to offer support in product development to any existing business entity that demands it and prepared also, to contribute to the cost of product

development- that is in the form of materials, labour, workshop facilities, etc. Creating an effective and efficient market system for farmers' produce is therefore very vital and the need for FBOs to contribute to this area too is crucial.

2.2.4.2 Facilitating Agricultural Development

Development practitioners specifically have a key function to play in facilitating farmer-based groups to enhance their capability to involve in socio-economic transformation, collective social action, and other developmental activities critical in those remote communities with higher development requirements (Kaplan, 1996).

FBOs play a key facilitative role. They help individual groups and communities to create market for themselves. This includes both improving access to, and profits generated from existing products and markets and creating new products and new markets for instance through technology development and processing.

There exist numerous ways in which organizations can facilitate or promote agricultural development. This include: strengthening the capacity of individuals, groups or communities through group training and strengthening; developing linkages with traders and other partners and stakeholder in the marketing chain for instance input suppliers, credit sources and transport agents educating and training smallholders to equip themselves with the modern technology in production and linking farmers to relevant market information and good price

2.2.4.3 Fund Mobilization

The process by which farmer organisations members resources for instance capital and land are made available for collective activities, is referred to as fund mobilization. To raise and increase resources available for development is to ensure proper management of resources by keeping track of funds through genuine accountability and proper record keeping. Esman & Uphoff

(1984), established that local institution capability of resource mobilization is highly correlated with their performance. FBOs' ability to mobilize and manage properly local resources is associated directly with their capability to raise and attract foreign resources for their collective activities.

2.2.4.4 Networking and Collaboration

The most relevant aspect of any entity is its ability to network or collaborate with other institutions to achieve a common objective. Collaboration and networking both internally and externally and are therefore more effective and efficient modes of operation among FBOs than competition and conflict. Esman & Uphoff (1984), postulate that if a smaller base of effective operation is possible, then vertical structural linkages at regional and national levels are desirable feature. Therefore, these linkages, facilitate both horizontal and vertical flow of resources, aids and information.

2.2.4.5 The Role of Forum

Farmer groups often serve as forum where participants converge to discuss what they have in common. Some forums are formal and are scheduled at pre-determined intervals for instance annual general meetings, while others may be organized as emergency meetings to discuss a subject of particular interest. Whether informal or formal these meetings present the opportunity for member to discuss membership-related matters or issues of general or of peripheral interest to the group. The forum is often convened at various levels of the organization it could be local, district, regional, national, or even international and may also represent an ideal chance for developing technical and managerial skills of members (Kofi & Suzanne, 2002).

2.2.4.6 Representation and Liaison

In this role, the organization often stands for the group and functions as its voice. It articulates the views came out by the group to those outside the organization and vice versa. Often, the groups are key sources of information from the farmers to the government, to research and development, and financial institutions, and the other way around to the farmers. The role of representation and liaison is an ideal means for advocacy, lobbying and negotiations between farmers and other stakeholders or partners. According to Kofi & Suzanne, (2002), several examples exist in Zimbabwe for instance, a memorandum of understanding was signed between the Zimbabwe National Farmers Union and the National Agricultural Research System, whereby smallholders through their union discuss and finalize their research needs and negotiate with the research system to obtain the services they need. Also, in Mali, farmers have initiated research product user committees from the grassroots to the national level to serve as advocacy groups for research products or technologies emanating from the national agricultural research system. During the annual research planning meetings of the research institute, the user committees are called upon to participate in the discussion and thus influence the direction of future agricultural research. In Burkina Faso and Mali, the cotton producer's unions represent the voice of cotton farmers at the management level and have been able to actively participate in price fixing for inputs and the product and other issues concerning the industry (Kofi & Suzanne, 2002).

2.2.4.7 Group Activities and Service Provision

In this role, Farmer Base groups mobilize their own physical, financial and intellectual resources to promote and improve their situations. One common group activity is the formation of farmer groups within the organization to work collectively on members fields during periods of peak labour. In addition to working jointly in the fields, the formation of savings and credit schemes to

cater for the financial needs of its members is of vital importance. In northwest Cameroon, some women's groups have initiated savings associations in the form of "tontines" where women contribute a fixed amount weekly or monthly, and the total sum is then paid out to one group member at a time (Hartwig, 2000). The women's organizations have also instituted insurance schemes in the form of "trouble funds" to provide financial resources for members in difficult situations such as sickness or death in the family.

The potatoes onion, and tomato producer's union of the Fouta Djallon in Guinea provide input supply, credit services as well as market outlets to their members. Farmer Based groups are also providing extension services and advice to their members in connection with the traditional system. In Uganda, the Uganda National Farmers' Association (UNFA) has been expanding its Demand-Driven Cost Recovery Extension Service (DDCRES) into various districts. The system is unique in that group members have to pay for the services they need so that the system would both be demand-driven and financially sustainable. At the moment it is operating on a cost-sharing basis, which would move to full cost recovery in the near future (Kofi & Suzanne, 2002)

2.2.5 Areas of Intervention for FBOs Performance:

Varied factors impede the effective and efficient performance of FBOs in the development of agriculture, and these challenges are, of course interrelated. Areas of intervention where FBOs can be strengthened for effective and efficient performance in their respective activities are discussed below:

2.2.5.1 Accountability

Proper and frequent accountability by heads of organizations leads to successful development of all programmes and projects in any given area. Leaders therefore owe it as a responsibility to be

accountable to their members in all spheres of their organizations in order to ensure smooth performance.

Accountability and transparency should be built into the management styles of FBO executives. Based on the experience of farmers' groups in rural communities in GalOyaarea in Sri Lanka, Norman Uphoff (1994), proposes the selection of community leadership by consensus and the preparation of specific terms of reference for them as measures for making them accountable (Uphoff, 1994).

The failure by FBO leadership to be accountable can result to withdrawal of loyalty, low level of commitment by group members to organizational goals and general suspicions that can affect the development of any group or organization. Conversely, those organizations where there is member and community accountability generally score high marks on issues of legitimacy (Grady, 2005).

Transparency and accountability both receive substantial boost if various formal records are maintained. Despite being small and relying on informal operational methods, FBOs do have some basic record-keeping requirements.

2.2.5.2 Networking and Linkages

FDOs generally have weak links with external development partners or organizations, such as NGOs, except where the latter are involved in development related activities in the rural communities where FBOs are located (Rodda, 1994).

Johnston & Clark (1982), established that vertical linkages are preferable for effective provision of certain services including health, education and agricultural extension services. For effective vertical flow of information, therefore, resources and support leading to efficient and effective

performance of FBOs do not exist in isolation from their higher organs and the government. Rather, they are inextricably intertwined.

FBOs need to remain open to working with groups where appropriate, recognize the potential to build capacity, reduce transaction costs, and introduce activities with a higher investment threshold. This means that FBOs, though located at the grassroot level, should be connected to the national level through their district and regional heads.

2.2.5.3 Institutional Framework

This relates to the presence of key institutions with given functions and the required capacity to assist the FBOs. According to Offei-Aboagye, (1998), the essence of community development is the ability of community-based organizations to further the development efforts of remote communities so that their being transformed into effective change agents through a number of essential capacity-building schemes.

FBOs are occasional avenues for self-seeking promoters since the policy framework to ensure that clear guidelines are put in place to support FBOs is inadequate. Presently MoFA does not receive the needed recognition from the operators in the FBOs, and there are numerous FBOs all over without coordination (NDPC, 2008).

Process related issues are other factors that affect the internal operations of FBOs, directly. Among these factors are: inadequate structures and process for the coordination of the activities of the FBOs which eventually leads to lack of commitment from members and inadequate documentation which also results in the inability of FBOs to monitor the progress made over the years and be in a position to seek relevant support.

Owens noted that despite the traditionally strong and cohesive nature of the Gambian village women's group, the kafos, they lack the skills to effectively mobilize and manage community

level resources for development (Owens, 1993). Inadequate managerial skills among the members, especially the executive affect the effective and efficient performance of FBOs.

This therefore, implies that if members of FBOs are supported to build their requisite capacity in management, they can explore and manage community level resources to support increase productivity for agricultural modernization and development which is one of the broad objectives of the GPRS II Agricultural Sector policies.

2.2.5.4 Human Resource and Organizational Capacity

Generally, FBOs have low revenues because individual members have been the main source of capital and other resources (Arrossi, 1994). As rural communities tend to have low incomes, it presupposes that FBOs' revenue generated by membership dues or fines will be inadequate relative to the range of relevant key activities they would want to engage in. In situations where help is given on condition of counterpart contribution, most FBOs are unable to meet their commitment. This weak financial base and sustainability result in the inability of FBOs to implement their objectives to the fullest and this normally leads to the collapse of organizations in a short time (Arrossi, 1994)

In his work, Owens concludes that "indigenous organizations have the best potential to implement participatory development initiatives that respond to genuine local needs" (Owens, 1993). This can be achieved only when there is sound financial base of the organizations that is the FBOs. Narayan therefore stressed the need for government and partners to "invest in local organization capacity" as "viable community groups are key to community driven development" (Narayan, 1998). This means that FBOs are on the look for external assistance as they are formed with the unfortunate expectation that some institutions will come to offer help.

2.2.5.5 Education and Training

Through education and training, the requisite knowledge and skills needed to perform specific functions are acquired. “Knowledge is critical for development because, everything we do rests on knowledge” (World Bank, 1998). Good leadership has long been recognized as one of the critical elements in the effective functioning of community organization (Kaplan, 1996). Their organizing capabilities and ability to propose new initiatives that ultimately are embraced by the whole community and transformed into community self-help projects are essential elements for promoting rural infrastructural development. Narayan noted that effective leadership could propel FBOs into initiating local action but reechoed managerial leadership as being critical for the transformation of FBOs into “self-managing organizations” (Narayan, 1998).

Leadership capacity and skills can be built up in a number of ways by external agencies. One of them is training. Development-oriented agencies that work in rural communities must endeavour to involve FBOs executive in various training programmes organized for government officials and NGO staff. Friedman & Ammassari noted that knowledge transfer is one of the key approaches for the strengthening of farmer producer groups. (Friedman & Ammassari, 1999)

Training FBO executives in project management, basic planning skills, gender sensitive planning and relevant subject areas would expand their appreciation of the challenges of rural development. Practical opportunities for building leadership, such as exchange schemes, field visits could offer leaders with field exposure and strategies used by better performing farmer-based groups to improve upon their operations. Owens noted that despite the traditionally strong and cohesive state of the Gambian village women’s group, the kafos, “The lack the skills to effectively mobilize and manage community level resources for development” (Owens, 1993: 241).

Exposure to various strategies and sources for mobilizing funds and other resources locally and from external sources would therefore be beneficial. Education and training can also be used to build the institutional capacity of FBOs for effective performance in their fields of operation, specifically in production, processing, marketing and financing.

2.2.6 Defining Farmer Based Organizations

Classifications and typologies of producer organizations (POs) are scarce. The term "producer organization" is mostly in the development literature, where it refers to a broad range of rather different organizations of agricultural producers. (Bijman, & Hanisch (2012).

Farmers are producers, i.e. producers of agricultural products. Producer organizations (POs) are organizations formed for and by farmers. Varied names are used for the same or similar types of organization such as Farmer Based Organization (Stockbridge et al., 2003), rural producer organization (Bosc et at., 2001), agricultural producer set-ups (Rodot & Collion, 2001), agricultural cooperatives (Hussi et al., 1993), farmer groups (Shen et al., 2005), farmer organization (Wennink et al., 2007), producer initiatives (Banaszak 2008), producer association (Fulton, 2005), producer organization (World Bank, 2997; Ton et al., 2007) and collaborative marketing set-ups (King & DiGiacomo, n.d.).

In a related development, (MoFA, 2009) defines FBOs as a group of farmers who come together voluntarily to associate among themselves to work to achieve a common objective which they will otherwise find difficult to achieve individually.

One of most extensive overviews of different types of producer organizations (POs) in least developed countries is presented by Onumah et al., (2007). Besides giving a short history of POs in less developed countries, the authors present six types of what they term post liberalization POs. They have adopted the definition of POs as developed by the former International

Federation of Agricultural Producers (IFAP) as involving cooperatives, producer associations and various forms of economic structures. The key distinguishing feature in this typology seems to be the main functions of the organization as well as the initiators of the organization. They are presented as below;

a. Commodity or extension FBOs (out-growers)- they are self-selected groups of farmers producing similar crops, in the same geographic location, who joint together to share labour or receive extension services., These groups typically are not formally organized or registered, but may have a leadership structure. 10 to 30 members is a typical size, but this varies depending on the crop. Some extension associations are linked to a specific company or commodity, in what is called an out-grower scheme (Bijman, & Hanisch, 2012).

b. Farmers' association – this is a self-selected group of farmers, who involve in collective business activities. Most commonly, the business involves collective marketing, where larger volumes of a given crop are easier to sell and attract higher prices. Typically, farmers' associations have ten to thirty members, usually from the same village. They may be registered or not and usually have a constitution and leadership structure

c. NGO and Donor promoted FBOs. Many FBOs operating at the grassroots level with the objective of improving farmers' welfare are formed or least substantially funded by NGOs and donors. These groups tend to be registered as associations. FBOs promoted by donor-funded and NGOs projects tend to be acutely dependent on the promoters and therefore, their viability is often a major concern (Bijman, & Hanisch, 2012).

d. Market relations and embedded services for FBOs. These are private-sector-promoted FBOs with roles that include input delivery, extension services and bulking for delivery to private promoter organizations and companies. With this typology, fall out grower groups established by

the purchasing company. The difference with the first type is that the formation here lies with the company and not the farmers (Bijman, & Hanisch, 2012).

e. Remnants of the cooperatives- Some of the old primary cooperatives have managed to survive in countries partly through entering into long term marketing relations with agribusiness or securing access to profitable markets for members. Thus, their role has become direct marketing rather than trading produce through the cooperative union as occurred in the past (Bijman, & Hanisch, 2012).

f. National and regional federations of producer organizations- they are umbrella organizations of local and regional FBOs, engaged typically in lobbying and advocacy. Examples given by Onumah et al. (2007:18), are the Ugandan Cooperative Alliance, the Zambian National Farmers Union and the Kenya National Federation of Agricultural Producers. These FBOs often receive more support from donors and tend to operate closely with government.

Penrose-Buckley, (2007), presents a definition of Farmer Based Organizations with a clear demarcation to economic roles: according to him a producer organization is a rural business, owned and controlled by producers, and engaged in collective marketing activities.

The focus in Penrose-Buckle's definition is on marketing as the main function of the producer organization is in line with most of the recent development literature that is analyzing the role of producer organizations in value chains or supply chains. Accordingly, he added that agricultural producer organizations can also be engaged in collective purchasing, production, processing, farm inputs, providing technical assistance, obtaining subsidies and lobbying policy makers (Penrose-Buckley, 2007).

By this definition, it means that community-based or village organizations are not producer organizations. Village and community organizations are mainly a means to channel resources to

a community or to mobilize community activities. Also, producer organizations pursue social objectives through the provision of social services to their members and the wider community. However, the bottom line is that producer organizations cannot be led by social objectives. If social objectives are placed first before business priorities, the business is likely to fail and no one will receive either economic or social rewards (Penrose-Buckley, 2007).

2.2.7 Background of Farmer Based Organizations

A farmer is always "small" in comparison with his trading partners. Moved by this economic force for survival, by coming together, smallholders tend to obtain a greater bargaining power which is indeed one of the key reasons why the form groups or cooperatives.

For practical reasons cooperation has been one of the crucial channels by which farmers managed to survive. With the issue of capitalism, where bigger trading companies were selling inputs to rural farmers and buying produce from them, smallholders have been compelled to protect themselves from being cheated one by one, and generally exploited, they have pooled together their buying strength in other to attract lower prices from suppliers and pooled their selling power so that farmers will not be exploited at the market (Christensen, 1983).

In Switzerland and France where milk producers of Gruyere and Emmenthal formed cooperatives with specific economic targets: to pool milk from several herds in order to accumulate sufficient liquid milk to make cheese. The profits of big enterprises were appropriated among the members of the group in proportion to their use of its services.

Contemporary cooperatives trace their heritage to the Industrial Revolution. For instance, in the UK, the first attempt to form cooperatives dates from the late eighteenth century. They were workers' consumer cooperatives and some were able to have organizational structures for members' meetings, elected management committees, and distribution of proceeds among

members. Nevertheless, their health was short lived, because of structural challenges that they encounter. They ran up debts due to lack of capital, they also lacked management capabilities, and they were opposed by class and other economic interests.

Also, the Equitable Pioneers of 'Rochdale' was the first true cooperative initiated in 1844 in the northern UK town of Rochdale. A group of rural cotton weavers pooled resources and started a shop selling staple foods. Later the group membership was opened to customers who became shareholders with democratic decision-making rights. The rules put in place by the Rochdale Society has influenced the approach in which cooperatives have been managed in the world ever since. Frederick Raiffeisen initiated the first agricultural cooperative in conformity with the "Rochdale Principles" in Germany in 1849. He mentioned the role of the loan and savings function stating how the cooperative can achieve financial independence from usurious moneylenders and included a law of collective financial responsibility.

In Ghana FBOs have always existed in one way or another and have been promoted by various non-governmental and governmental institutions as well as private organizations (Kwateng, 2010). Indeed, the idea of cooperatives dates back to the period of sedentary farming in various forms referred to as "Nnoboa" within Akan communities in which peasants pool up labour to take up collective land preparations and sometimes, joint harvesting in each team member's farm (Kayenwee 2001; and Department of Cooperatives, 1990)

In addition to the existence of informal labour exchange groups, Adjetey (1978 cited by Salifu, et al., 2010) noted the longstanding existence of local credit system in the country, which are popularly called susu groups.

Formal cooperative drive started in Ghana in the 1920s when the colonial administration organized producer groups to improve the quality of cocoa for export. Cooperatives then became

channels to promote the production and to enhance the cultivation of cash crops such as coffee, cocoa, cotton (Hussi et al., 1993). The key objective of the colonial administration in forming agricultural cooperatives was to enhance the implementation of their agricultural policies, to improve agricultural export towards the European market, hence to ensure control and maintain order in the rural areas.

In 1929, the colonial authority put in place the Registrar of Cooperative Societies within the Department of Agriculture to offer cooperatives statutory recognition. With reference to the cooperative model in other British colonies in Africa and Asia, subsequent legislation in 1931, 1937 and 1968 widened the powers of the Registrar of Cooperative. The Department of Cooperatives was initiated in 1944 purposefully for managing cooperative development in the country (Dadson 1988 cited by Salifu, et al., 2010). In early 1950s, a first national organization was formed, the Alliance of Ghana Cooperative. In this period, the cooperative movement obtained real economic power built around a strong association of cocoa cooperatives (Porvali, 1993).

After Ghana's independence, the new sovereign administration continued to facilitate agricultural cooperatives, and by 1960 they were noted to have been responsible for the marketing of about 40% of total cocoa production in the country.

Cooperative drive was becoming not only an economic force but also a political force in remote areas. It is recorded that the first head of state developed distrust in agricultural cooperatives, which were later dissolved in 1961 and their assets taken over in favour of an organ of the Convention People's Party (Young, Sherman, & Tim 1981; Taylor, 2003, cited in Tsekpo, 2008).

When Nkruma's regime was overthrown in 1966, the remains of Ghana's agricultural cooperatives got restored from their ashes later under the administration led by the Provisional National Defense Council (PNDC) (Young, et al., Tim, 1981)

Though various administrations in the country in the post-independence period saw cooperatives as major vehicles for agricultural and rural development, cooperative promotion during this time underwent frequent changes in direction (Dadson, 1988)

In a related development, there has been a reawaken interest among both public and private institutions to establish farmer based organizatios in Ghana (Salifu et al., 2010). This drive is based on the principle that, FBOs give smallholders strong bargaining power in the market place, facilitates cost-effective delivery of extension services, and empower FBO members to influence policies decisions that affect their livelihoods.

2.2.8 Historical Background of FBOs in Ghana

Fundamentally cooperation has always been in human society and plays a key role in rural development. Peasants' in Ghana involve in collective activities long before the initiation of formal farmer groups and cooperatives. Collective activities among smallholders are traced back to the pre-colonial period in which neighbouring farmers (usually relatives and friends) provided each other with reciprocal labour support on their fields, usually weeding (deGraft-Johnson, 1958; Onuma et al., 2007). In the late 1920s, the colonial administration in the country introduced formal FBOs in the form of cooperatives to promote the quality and marketing of cocoa as well as provide credit facilities to farmers (deGraft-Johnson, 1958; Wanyama et al., 2008). The success in cooperative development stimulated a quick expansion of cooperatives first in the cocoa sector which expanded to other crops (Dadson, 1988).

Various governments of Ghana after independence viewed cooperatives as key channels for agricultural and rural development, though cooperative promotion during this period underwent frequent changes in direction (Dadson, 1988). In the late 1980s, state-controlled cooperatives began to dissolve due to increasing global pressure for structural reforms towards market liberalization. Various governments in Ghana therefore adopted a liberal strategy to the development of cooperatives, thus bringing in other types of rural and farmers' self-help groups for income-generating activities to be initiated, all of which are popularly referred to as farmer-based organizations (FBOs).

For a couple of decades past, Ghana has witnessed various nongovernmental and governmental projects (Salifuet al., 2010) wanting to promote FBO development. Especially, between 2000 and 2007, the World Bank alone expended more than US$9 million for the development and promotion of FBOs as part of Agricultural Services Sub-Sector Investment Project (AgSSIP, 2007). AgSSIP (2007), in the year 2007, the Millennium Challenge Corporation (MCC)) also approved a five-year US$ 547 million anti-poverty agreement with the government of Ghana and a substantial proportion of this funds has been used in the development of FBOs. Salifu et al., (2010), noted that the quick rise of FBOs in Ghana is partly due to government agencies, NGOs, and private investors who increasingly view rural collective action as one important channel to achieve agri-business development objectives.

2.2.9 Situation of FBO in Ghana

Indeed, Ghana has developed a range of policy documents as well as action plans to guide its agricultural development an example of which is the Food and Agriculture Sector Development Policy (FASDEP I and II)- FASDEP II) being one the policy document for the development of the agricultural sector (Zaney in The Daily Graphic, 26/05/13, p. 44).

These notwithstanding challenges still exist especially for smallholder in the country who record low productivity, rely on the rains and simple tools for farming and have less access to extension services, credit and markets (Zaney in The Daily Graphic, 26/05/13, p. 44).

Peasant farmers make up an estimated 60% of the Ghanaian farming population (CEPA, 1999). However, they remain unorganized and are generally isolated from market information and better earning market opportunities. Generally, the practice of grouping farmers into farmers' organizations in the country seems much less developed as compared to the French speaking countries where many FBOs exist. However, several farmers grouped: traditional, NGO, or state created FBOs are found in Ghana today (IFDC, 2002).

GNAFF, considered to be "created" by the government in 1992, is one of the legally recognized national farmers' and fishermen's organization in Ghana. GNAFF's objective is to help farmers and fishermen adapt to a changing economic situation and to champion farmers' and fishermen's interests to the government and the other way round. However, the organization does not appear to sufficiently lead those they claim to represent because contacts with the grassroots have not yet been initiated properly. Independently from GNAFF, some outfits have created networks for example, Association of Church Development Projects (ACDEP) in the three northern regions caters for the needs of rural farmers. Other bodies created to cater for special interests of the farmers are those initiated along the community lines-coffee, cocoa, cotton, rubber, tobacco, and rice.

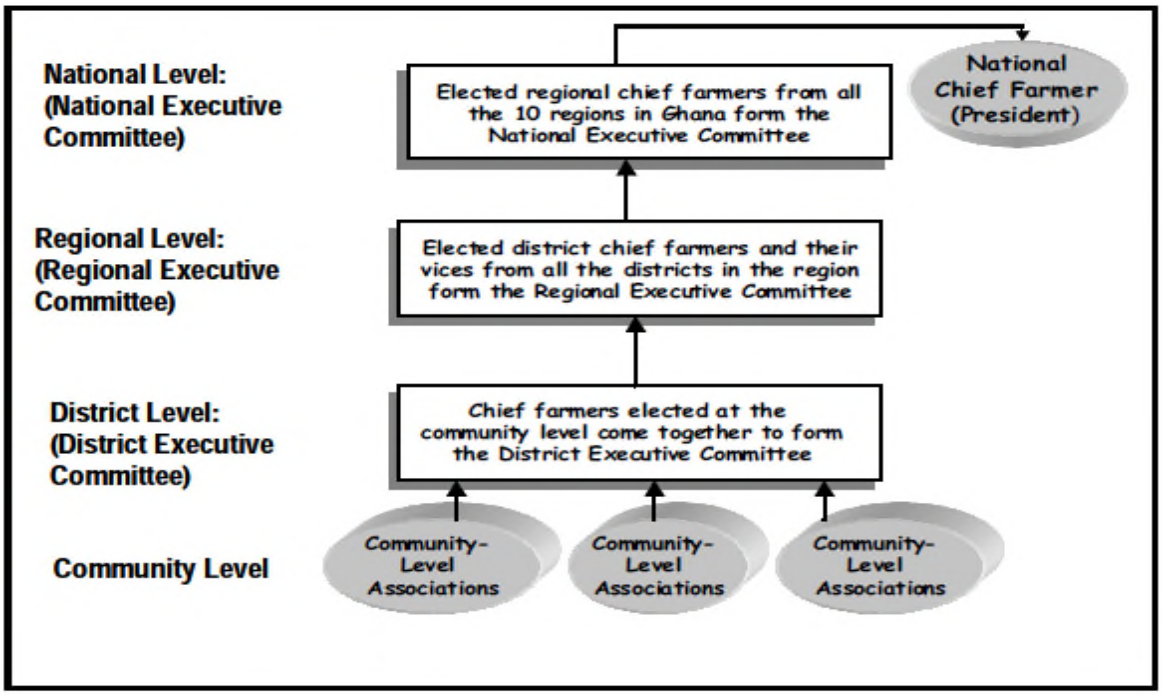
Farmers also formed an association to preserve their status and to serve as a source of counsel, inspiration, and a "think tank" for peasants and other stakeholders in Ghana.

Diverse producer organisations are formed around specific commodities or activities of which the known ones are the coffee, cocoa, sheanut, cotton and rice producer associations. These

producer organisations are initiated at the various levels (community, district, regional and national), however their capacities vary. Each of the community-specific FBOs have a common interest in spearheading the interest of the smallholders in the production and marketing chain of the products they represent.

Figure 2. 1: Illustrates a sample FBO structure at various levels in Ghana: organizational structure of cocoa, coffee and sheanut farmers' association (CCSFA)

FBO STRUCT



Source: IFDC Africa Division Policy and Market Programme Report (April 2002)

2.2.11 History of collective action in Ghana

Collective action comes about when more than one person is required to contribute to an effort in order to accomplish an outcome (Ostrom, 2004). With collective action, members can act directly on their own or through an association, they may independently or with the support of external agents from governmental outfits, non-governmental organizations or development projects (Meizen-Dick & Di Gregorio 2004). Smallholders in most African countries have a long

tradition of executing certain agricultural productive activities as a group rather as individuals (Onuma et al., 2007). There have long existed informal labour grouping and customary arrangements that gave reciprocal labour exchange for farm work in Ghana. This form of arrangement is called 'nnoboa' among the Akan speaking communities in southern Ghana.

Dadson (1998), explained the nnoboa as a traditional form of cooperation in Ghana involving group action and mutual support based on family, ethnic and social factors in the area. This system according to Dadson, is not only voluntary and informal but also it is temporary with the group dissolving on completion of the task. According to Dadson, the nnoboa system was commonly used in traditional farming as well as social project, such as construction of wells, feeder roads, and health centres (Dadson, 1998).

In addition to the existence of informal labour exchange groups, Adjetey, (1978), noted the long-standing existence of local credit schemes in Ghana, which are usually known as "susu groups" (Adjetey 1978, cited in Aryeetey, 2004). Susu is a system in which a group of people may agree among themselves to contribute individual sums of money frequently into a pool, which are then handed to a member at an appointed time. Under this system, members in effect repay their loans by continuing to make their regular payments to the group (Aryeetey, 2004). He indicated that such groups were widespread throughout the country, especially in towns, and that they were popular among small traders and market women.

These practices are still carried out by agricultural cooperatives and FBOs in the country (Salifu et al., 2010). Today, FBOs are engaged in an increasingly varied range of collective activities.

They have attracted interest as instruments for providing an array of collective services including common property management, financing and management of rural infrastructure, and marketing of major production inputs or farm outputs (Tinsley, 2004). The reason for many projects

assisting the development of FBOs in Africa, is to facilitate access to credit, inputs for farming, extension services and better earning markets for their produce, considering smaller nature of agriculture in the continent (Bernard et al. 2008; Bernard & Spielman 2009; and Barham & Chitemi, 2009).

2.2.11.1 Steps in forming Sustainable Farmer Based Organisations

It is necessary to note that whether or not an FBO will be viable and sustainable will depend in part, on how it is initiated (MoFA, 2009). According to the manual, it is wrong to force or deceive people into joining farmers' groups or associations with promises of support that are either not true, exaggerated, or that cannot be sustained (MoFA, 2009). The manual came out with the following steps that will help form likely viable or sustainable FBOs.

1. Awareness Creation

Awareness creation according to the manual, will involve using the existing channels of communication to create awareness among potential members of the benefits of associating. To achieve this, it is good to identify existing cooperation links/nucleus groups that have potential to develop into FBOs to assure ownership from the very beginning (MoFA, 2009) Relatively, it is appropriate to identify and communicate realistic, concrete and achievable rewards of associating which can create interest and motivate potential members to want to join and commit resources (MoFA, 2009).

2. *Hold a Sensitization Meeting*

This second step calls for the convening of a meeting. At this level the facilitator supports interested persons to announce and arrange a meeting with farmers who may have an interest in the FBO. The meeting should be well published and should be arranged with the involvement of

actors or players who have a stake in and are therefore interested in the development of the FBO (MoFA, 2009). The meeting should discuss the following among others:

- Problems facing farmers as well as their needs
- Available alternatives for solving problems or taking advantage of existing opportunities
- Contributions an FBO can make towards meeting the needs of members
- Benefits of membership in an FBO
- Contributions expected from those who belong to the FBO. Monetary contributions, effort, time and commitment (MoFA, 2009)

3. List Compilation of members

After holding an effective sensitisation meting according to MoFA, (2009), the next step in the process is the compilation of the list of farmers. Thus, it is necessary to register farmers who voluntarily decide to join the FBO after understanding the objectives of the group and the commitments that would be expected from members. It is necessary members engage themselves by signing a commitment to indicate their willingness to contribute to the success of the group.

***4.* Identification of the Association by naming**

To avert misunderstanding in the future in relation to the naming process, the interim members of the FBO should be facilitated properly to come up with a name for the FBO. This can be done by allowing members to suggest several names and voting on the names. If too many names are suggested, members can first build a consensus and agree on two or three which can then be put to the vote to determine a name for the FBO (MoFA, 2009).

5. Formation of an Interim Management Committee (IMC)

As an entity cannot function without leadership, the formation of an IMC will begin running the FBO as and when a proper structure is put in place. To do this, it is good to use a participatory

method to form a consensus on who should be on the IMC. According to the MoFA (2009), it is equally necessary to remember that the IMC will be drafting a constitution for the FBO so it is important to have some of the members being literate, while assuring equal participation of illiterate members as well

6. Preparation of a Constitution for members

The IMC should be mandated to come up with a constitution for the FBO. The drafting of the constitution may be supported by a facilitator. If a successful farmer groups exist, their constitution may be consulted for guidance (MoFA, 2009).

7. Membership List Finalisation

At this stage a comprehensive final list of the group members is necessary. By this time members would have had enough time to think through issues concerning the FBO and made up their minds whether to join or not. The compilation of a final list of members should be made known ahead of time and members should be encouraged to pay their registration dues as well especially the first membership dues at the time the list is being compiled (MoFA, 2009).

8. Ratification of Constitution

Readiness of the final list of the FBO members calls for the draft constitution to be presented to paid-up members of the association for discussions and ratification. It is necessary to go through the constitution page by page to make sure that members understand all that is contained in the constitution. To save time and also make things easy, advance copies of the document can be made available to members to go through before the meeting. This is especially useful where members are literate. Illiterate members may still have people explain the constitution to them.

9. Election of leadership

On the issue of leadership, it is made clear by the training of MoFA, (2009), that FBOs should be facilitated to hold democratic elections to elect leaders to fill the positions outlined under the constitution. The manual also made it clear that people should be encouraged especially females to offer themselves to be voted for as leaders of the association.

10. Registration of the Association

The FBO should first be registered as a legal entity. This will give way for the FBO to operate legally and to sue and be sued if the need arises.

11. Functioning as a registered association

After registration, the group begins to function by appointing leaders. For these FBOs to be able to function well, measures should be taken to ensure that a good leadership structure exist in every farmer association.

2.2.12 Guiding Principles for sustaining FBOs development

Farmer based organisations principles are the guidelines by which groups will put their values into practice. MoAI, (2013), in India came up with and explained seven guiding principles concerning FBOs as follow.

a. *voluntary and open membership* - this principle is based on the assumption that FBOs are voluntary organizations open to all persons, able to use their services and willing to accept the responsibilities of membership, without social gender, political or religious discrimination (MoAI, 2013).

b. *democratic famer member control*–the second guiding principle stresses the point that FBOs are democratic organizations managed by their farmer-members who actively participate in

setting their plans and making decisions. Thus, men and women serving as elected representatives are accountable to the collective body of members

c. *famer-member economic participation* – this principle states that farmer-members contribute equitably to, and democratically control the capital of their FBO (MoAI, 2013).

d. *autonomy and independence* - FBOs are autonomous, self-help organizations controlled by members of the group. For instance, if they enter into contracts with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their group members and maintain their FBO autonomy.

e. *education, training and information* - FBOs give training, education for their group members, choose leaders so that they can contribute effectively to the development of their FBOs (MoAI, 2013)

f. the sixth guiding principle is *cooperation among FBOs*–FBOs serve their members effectively and strengthen the movement of the group by working together through local, national, regional, and international structures.

g. *concern for the community* - FBOs operate for the sustainable development of their communities through policies approved by their members (Ministry of Agriculture, India, 2013)

2.2.13 Reasons for the Formation of Farmer Based Organizations

The reasons for which FBOs are initiated are as varied as the groups themselves (Asibey-Bonsu, & Peter, 2012).

A core role for FBOs in food production is the purchasing and supply of inputs. Some of the services they undertake include land preparation, procurement of seed and distribution, harvesting of produce, processing and marketing of produce, sourcing of credit and agricultural machinery and training of farmers (Asibey-Bonsu, & Peter, 2012).

FBOs usually are engaged in one or more of the activities enumerated above and involve in at the same time in livelihood protection activities (such as community work, external fund-raising, or mutual support in case of illnesses, funerals, weddings, and so on).

Salifu et al., (2010), clarifies the main activities of 501 FBOs from 40 districts drawn from 6 regions in Ghana. It shows that many FBOs could best be described as multipurpose groups. These activities are described below

a. production

Production here refers to a situation where members of the group collectively involve in animal and/or crop production, beekeeping, nursery farming, food crops and horticultural production as well as animal production. Typically, with food crop production, there is a common field (usually ranging from 1 to 3 acres) on which all members of the group are expected to contribute effort (from land preparation to harvesting). In most instances, members also acquire inputs collectively for the group farm.

In most instances, a single crop is cultivated on the group field. Produce from collective production, as one would expect, are often sold collectively and the funds then appropriated among members or deposited in the group's account. In a few cases, the produce is shared among the members for consumption (Salifu et al., 2010)

b. Agro-processing

Agro-processing, according to Salifu et al., (2010), means transforming raw agricultural products into other forms for the market. Unlike production, not many FBOs are involved in agro-processing. According to Salifu et al., (2010), only 17% of the surveyed 501 FBOs were involved in agro-processing. One possible reason is that agro-processing is capital intensive and requires equipment and other processing machinery.

c. Marketing

Salifu et al., (2010), explained marketing as the collective sale of farm produce. With this form of marketing, members of an FBO do not necessarily engage in collective production or agro-processing but only decide to use a common means to transport their produce to marketing centres. In some instances, one or two members accompany the product to sell on behalf of the group. Marketing is also used to embrace FBOs that have some sort of certification to sell their product on the international market. Thus, FBOs that have a certification of some sort often do not engage in collective production but only sell their produce collectively to a certified dealer.

d. Internal Credit Scheme

Salifu et al., (2010), defined internal credit scheme to either refer to situations where members of an FBO borrow funds available in the group's account often with no interest or where members contribute equal amount of money at regular intervals (for example monthly) and the total amount is given to one member at every contribution until each and every member receives his or her share of the contribution.

e. Input procurement

Members of some FBOs procure inputs such as insecticides, fertiliser, implements, herbicides and equipment as well as raw materials for agro-processing. Most FBOs acquire the services of tractors for their members. All these mentioned above are what Salifu et al., (2010), referred to as "input procurement"

f. community development

Community development as used by Salifu et al., (2010), refers to social services that groups render to their communities, which are often an attempt to solve a particular social problem. The most common services that FBOs render to their communities include weeding and sweeping

around their environment, planting trees in and around the community, lobbying and contributing funds or effort for the construction of schools, boreholes, wells and electricity.

g. welfare services

"Welfare services" refers to kind or monetary contributions made by FBO member to other members who are confronted with particular problems (Salifu et al., 2010). While "community development" is to the benefit of the whole community, "welfare services" are for the benefits of FBO members only. Welfare services embrace a wide range of activities including giving support (usually funds) to group members who are, for instance admitted to a clinic, they may also help a member who is in need of funds to pay his or her ward's school fee, give money or gifts to members who have funerals, weddings, naming ceremonies for newly born babies and so forth. To provide welfare services for members of the group, money is either from the group's account or each member is tasked to contribute money.

h. Mutual labour support

Labour pooling is a very usual activity among FBOs, which is commonly known to as "mutual labour support" (MLS). This according to Salifu et al., (2010), is generally practiced among members of Ghanaian FBOs especially when seasonal labour requirements are at a peak. MLS refers to a situation where FBO members pool labour to work on each member's farm in rotation. Labour support in this sense covers a wide range of farm activities such as clearing the land, land tilling, sowing, transplanting, raising seedlings, weeding, pruning, agro-processing, and harvesting. Often, FBO members will have a timetable in place so that each member of the group benefits from the labour support on his farm (Salifu et al. 2010).

2.2.13 Farmer Based Organization Types

With the prevailing conditions in sub-Saharan Africa, effective and genuine FBOs have important functions to play in providing services to their members and influencing policies on behalf of their members. Depending on the objective, local preferences, and legislative frameworks of a country, FBOs may take the form of groups, associations, unions, cooperatives, federations, syndicates, cooperative partnerships, famer-controlled companies. FBOs mean different things to different people. They can be classified according to their activity type or by their origin (Debrah, et al., 2002).

a. FBOs by type of activity

With this category, two main types are common: namely farmer business organizations and farmer representative organizations.

Farmer business organizations are enterprises that concentrate mostly on economic services and farmer representative organizations focus primarily on representation of interest, communication, and consultation. Many FBOs also have a representational function, likewise, farmer representative organization usually also incorporate economic activities.

b. FBOs by origin

Considering the origin or initiator of FBOs, one can differentiate between FBOs as follow

i). based on social traditions

ii) FBOs. created by the state

iii). by non-governmental organization (NGOs)

FBOs based on social traditions at the local levels exist for as long as one remembers and come in various forms. However, the organization of farmers in modern form, with legal constructs such as cooperatives, was started during colonial times mostly to provide the members with

production and marketing services (Diagne & Pesche, 1995). Just after independence, the emerging African nations institutionalized cooperatives to implement state policies. The states used these groups as instruments to direct and to control the rural population. Today, the lack of spontaneity, independence, and responsibility of FBOs, is often attributed to this history because farmers ultimately see these groups as state institutions instead of their own cooperatives. (IFDC, 2002). In the seventies, NGOs and private agencies concentrated on the rural population that had been abandoned by the state and formed FBOs to cater for farmers in part and for their project objectives. Since the adjustment policies of the eighties an objective to handover, power to local populations, and for this reason also, FBOs were formed by some NGOs. It should be noted that these groups were often initiated without the real participation of farmers (Diagne & Pesche, 1995).

2.2.14 Characteristics of Effective Farmer Based Organizations (FBOs)

Regardless of the type or origin of FBOs, the main feature of an effective farmers' organizations is those that are feely established (with a common vision), have voluntary membership, are owned legally and controlled by persons who benefit from the services provided, and are based on the concept that rewards accrue to members in accordance with their participation in the group (North, 1990).

To be viable, FBOs need to have clearly defined common objectives that all members endeavour to meet. Viable FBOs are those guided by democratic principles. They need time to function optimally, and those formed from the bottom seem more likely to be viable than organizations initiated from the top. Farmer based organizations need to be equipped by training and collective action to establish a power base through which to effect rural policy making and implementation and specifying the place of farmers' in emerging societies (North, 1990).

2.2.15 The importance of Farmer Based Organisations

The need to improve the competencies of FBOs in all areas of their operations cannot be over emphasised (Kwarteng, 2010). The initiation of vibrant FBOs and the strengthening of existing FBOs are consistent with the national agricultural extension policy objective to build the capacity of FBOs to facilitate the delivery of effective extension services to its members. This is aimed at improving the quality of extension to smallholders and other operators along the value chain to improve production and productivity as well as the quality and safety of produce and products (Kwarteng, 2010).

Kwarteng, (2010), enumerated the importance of farmer-based organizations as follow:

a. FBOs facilitate easy access to information on best farm management practices, best farming practices, improved and new varieties of crops and species of livestock, new methods of processing, as well as improved ways of marketing and storage

b They also provide services at competitive rates for members

c. Facilitate access to credit from credit institutions for members by letting the group serve as a guarantor for the members

d. FBOs also, facilitate access to training in farming as a business for group members

e. They are able to arrange access to better earning markets for produce of members both in local markets and in markets outside Ghana.

f. As a result of their collective nature, they get competitive prices for various goods and services because they buy and sell in bulk as a group

g. Provide an avenue for its members to influence policy decisions to their benefit through advocacy and lobbying.

2.2.16 Explanation and Structure of Farmer Based Organizations

The concept Farmer Based Organization, or simply FBOs, ranges from informal village level groups to groups that are organized. The informal village-level groups form the greater proportion of FBOs. A study conducted on the legal forms of FBOs among 501 groups in 2010 by Salifu Adam revealed that approximately 79% of the FBOs were registered with at least one of the following: The Department of Cooperatives, the District Assembly, Ministry of Food and Agriculture, Registrar General's Department and Farmer Union (Salifu, et al., 2010).

FBOs are not just formed for nothing but rather, they are initiated with a common interest. Bogetoft & Olesen (2000) confirm that in order to secure cooperation, it must be beneficial for all group members to cooperate. In other words, no group members should be able to benefit by leaving the group. In this respect, Fulton (2001), noted that due to their heterogeneous interest, multipurpose agricultural groups are more likely to be trapped in an inefficient state.

According to Gibson et al., (2008), FBOs are usually formed to facilitate access to better agricultural technologies; to facilitate access to better earning markets for their produce (Aliguma et al., 2007); facilitate transport of produce to markets (Mwaura et al., 2012); for financial sustainability and household savings (Mutoro, 1997); to access credit where group members serve as collateral for each other (Loevinsohn et al., 1994); to invest in agricultural value addition and milk processing plants (Mbowa et al., 2012); facilitate infrastructure development for instance rural roads, schools and health centres (UN, 2010) also, in natural resource conservation and management (Nyakaana & Edroma, 2008).

FBOs take different forms, varying in both size (membership composition) and the services they render. According to the definition used by the International Federation of Agricultural producers (IFAP 1992), Farmer Based Organizations involve any of the following: "Farmer

Groups and Farmers' Associations, Unions and Federations, Agricultural Cooperatives owned and managed by their members, Chambers of agriculture having a general assembly elected by farmers."

Many explanations on FBOs stress the relevance of membership, with the role of an FBO being to render services to its members. Access to these services is the key incentive for becoming a member. An important difference is therefore made between FBOs and NGOs the latter may also render services to rural producers, but they are not membership organizations (Collion & Rondot 2001). Collion & Rondot (2001), also, distinguish between FBOs and traditional group with FBOs having a defined membership and generally existing to organize members' relations with the outside world. Traditional organizations, on the other hand, tend to be concerned with the responsibility of managing relations amongst the de facto members of the organization (such as a kinship group, a religious grouping or a village).

An FBO is an organization that demands its members to meet certain formal criteria, such as payment of membership fees and participation in some key activities. For example, a cotton farmers group may limit its membership to farmers whose annual cotton production passes a minimum level. There may also, be informal membership criteria, such as those based on gender, religion and ethnicity.

FBOs functions at various levels, such as the community level, local associations comprising representatives at the community level, and higher level such as regional and national associations as depicted on *figure 1* above. The opportunities and challenges encountered at different levels of organization also vary.

FBOs render varied range of services including: marketing such as (input supply, output marketing and market information and processing)

In rural context, FBOs do not engage professional staff, to carry out their activities. The rather depend on voluntary and committed members to carry out their duties and implementation of essential services (Green & Matthias, 1997). Caldecott & Lutz (1998), confirmed this in their assertion that rural people may become better organized, educated and better aware of their economic and ecological situations

For the purpose of this study, FBOs will mean membership organizations serving particular interest groups mostly in rural communities, whose main focus may be broad or narrow, but with the primary objective of developing agriculture. They may be formally structured or quite informal without an agency or branch

The failure or success of an FBO needs to be measured in connection to certain goals and objectives. Members of an FBO represent the most important aspect of stakeholders, but others include donor's government, NGOs and elements of the private sector wishing to do business with FBOs (Rondot & Collion, 1999).

2.3 Thermotical Concepts

2.3.1 Agricultural Development Models

Agricultural development models offer various strategies for further development of this primary but key sector of the economy. Therefore, we analyze three important models here to understand the concept of agricultural development

- The Frontier Model
- The Conservation Agricultural Model
- A Science–Based Agricultural Model

The Frontier Model for Agricultural Development:

The frontier model presents a main development strategy through historical experience. This a simple model that suggests that the increased agricultural production totally depends on opening up and use of new and fertile tracts of land with little change in the existing technologies of the day. It further suggests that the increasing population pressure on the present agricultural lands stresses the need for more land is brought into cultivation around the village or part of the population move to virgin lands.

2.3.1.1 Conservation Model for Agricultural Development

The conservational model for agricultural development is an experience of European intensification of crop and livestock with land resources virtually fixed. Another important element of this model is that increasing soil fertility through the use of green manure, crops and animal manure increase the agricultural output per unit of land. It also facilitated by better use of water resources and labour, the use of animal power and the use of equipment. Most of above inputs were produced within agricultural sector and individual farm by itself. The frontier and conservation models are the oldest models and both can be considered as classical and natural resources based on agricultural development models. And these could increase only one percent rate of growth; so minimal attention has been given to above two models in the development of the sector.

2.3.2. A Science-Based Agricultural Development Model

A Science based agricultural development model was followed by all developed countries and is now being followed by most developing countries. The concept of science based agricultural development models were drawn from various famous models of development like The Urban impact model; The Diffusion Model; The high pay off model; Induced innovation mode. A

science based agricultural development model can be considered here as a new, important and multi-dimensional model for today's crisis in agriculture sector of developing world. This model focuses on three main areas: First the uses of high pay off inputs; the development of efficient technologies consistent with countries' resource endowment; and Institutional Development that facilitates the above two. The use of high-pay off inputs is classified further in three categories; this concept was drawn by Rutton from Model of Schultz (1964).

The capacity of public and private research institutions to produce new technical knowledge, the capacity of the industry sector to develop, produce and market new technical inputs, the capacity of farmers to acquire new knowledge and to use new inputs effectively. Second has been defined as the development of efficient technologies consistent with country's resource endowment. It means that technologies be developed with a country's particular resource price ratio in mind. Cheap labour of developing countries is relative to other inputs; the agricultural education, research and extension system must produce technologies to exploit the use of this relatively cheaper input.

Attention resource price ratio will also ensure that an appropriate path to technological development is followed that will permit an optimum agricultural output response. Third Institutional development in the science based agricultural model suggested by (Nagy, 1984) encompasses the development of those institutions that directly influence agricultural output and productivity. These are all input institutions along with agricultural education, research and extension component and product market institutions. Most of the inputs required by this model come from non-agricultural model, land tenure system, irrigation, labour; high yielding varieties, fertilizer, pesticides, mechanical power and credit, all have to be purchased from the non-agricultural sector. Institutional developments also take place in the production market as the

demand for marketing services increases with a rural to urban population shift and more product move through wholesale and retail channels. In the sense of social sciences, especially economics offers guidelines for the development of the structure of the input and product-marketing institutions that are consistent with increased agricultural output and productivity growth. The basic units of the agricultural education, research and extension component are the universe system and agricultural technical schools, research stations and research institutions and the extension departments. Institutional development here refers also to the organization of each of the units along the lines dictated by the management sciences so that resources and manpower are used effectively and efficiently. This includes proper incentive mechanism for scientists, educators, extension, specialists and administrator and a system of financial support with the control timing and allocation of funds. The science based agricultural model relies on the physical and biological sciences, management sciences and social sciences to produce and disseminate new technologies and guide institutional development that will provide the proper environment for optimum agricultural output and productivity growth. Evidence exists that productivity growth and rate of return from employing a science based agricultural model are high. Nagy (1984)

emphasis that the experience of United States and other developed nations and high rates of return to investment in science-based agriculture indicate that this model of agriculture development has the potential to attain agricultural output growth rates required by developing nations including Pakistan for their sustainable economic development and social prosperity.

2.3.4 Applicable Approaches/Models for the FBOs Operations:

A study of this type requires specific approaches or models to help facilitate the understanding of the issues on the ground. This section presents and explains models or approaches that best relate

to the operations of FBOs in developing the agricultural sector. After reviewing some of the models or approaches, two appeared to be relevant for the development and promotion of FBOs. The student therefore adopted and merged them for this study. These two models are discussed below:

2.3.5 The Efficacy – Outcome Expectancy Model

This model is based on the assumption that organizational behaviour and change are inspired in the direction of obtaining valued reward (March & Simons, 1989)

Additionally, the model or approach proposes that organizational or group pressure amounts to a source of inspiration for behaviour and change. According to Katz and Kahn (1978), there are various sources of motivation and two of them are: Outcome Expectancy (they believe that behaving in a certain way or manner will produce anticipated benefits); and Efficacy Expectancy (the conviction that one can successfully execute the behaviour required to produce those outcomes).

Thus, applying this model or approach to the study, one may say that the low output in the Agricultural Sector for instance is probably due to the individual and organizational behaviour and attitudes towards the sector. If these assertions were right, it may be related to the lack of incentives package thus motivation, both immediate and long run, to induce huge number of individuals and organizations or groups' active participation in the agricultural sector.

Even though this model contextually, seems too slim in its assumption, by only highlighting the need for incentives which may be only one aspect of the factors affecting the efficiency of the Agricultural sector in Ghana, it is still relevant for the study especially when it combines with the other model as shown in figure 2.3. In this case, incentive packages such as Frequent Extension Services, sustainable credit facilities and "Best FBOs' Awards" could be put in place to create

favourable competition among FBOs and to stimulate other groups and individual's s to form effective and efficient FBOs towards agricultural development in the country.

2.3.6 The Spiral of Silence Theory of Opinion Formulation

This model was propounded by Elizabeth Noelle-Neumann in 1974 to explain the process of public opinion formation. Noelle-Neumann defines the "spiral of silence" as the process an individual experience when "he or she may find that the views he/she holds are not gaining ground; the more this appears to be so, the more uncertain he will become of himself, and the less he will be inclined to express his opinion" (P. 44). Thus, the theory states that people will choose to be silent if they consider that their views or opinions are those of the minority because they fear to be isolated (Kennamer, 1990). If persons perceive that the share their opinions or views with the majority, they may be willing to speak out. Alternatively, if they perceive their opinions to be that of the minority, they will keep silent or conform to the majority view (Liu & Fahmy, 2011).

The spiral of silence approach or model of Noelle Neumann rests on four main principles. These principles are stated as follow:

a. society threatens persons or individuals with isolation, and so cohesion in the social collective perspective must be constantly ensured by a sufficient level of agreement on values and goals (Noelle-Neumann, 1991)

b. persons are afraid becoming "social isolates" (Sanders et al., 1985).

c. people frequently assess the climate of opinion or view through their personal interactions and through the media in order to maintain a high level of awareness concerning the social consensus (Moreno-Riafio, 2002).

d. based on their perception of the climate of opinion, people will be reluctant or willing to speak out.

The model has it that the more frequently the dominant or majority opinion is disseminated by the mass media, the more likely it is that individuals with central opinions will remain silent, thus, accelerating the effects of the mass media and hence the spiraling process. The theory asserts that for a new minority opinion to be adopted, the ideal condition is for the majority opinion to remain silent or suppressed while the minority opinion receives more public awareness through the mass media.

Applying this model therefore to the study, FBOs mainly for agricultural development may be considered as the "minority opinion" and other Community Based Organizations (CBOs) for welfare and fashion as the "majority opinion". In this case, for FBOs in favour of agricultural related activities to win public confidence in agricultural development and thus achieve effective and efficient performance of their roles, there is the need for intensive public education and sensitization particularly through the mass media, informing the general public to withdraw slowly from the over reliance on the community organizations for self-gain and fashion and concentrate diligently on development issues in general and agricultural development specifically

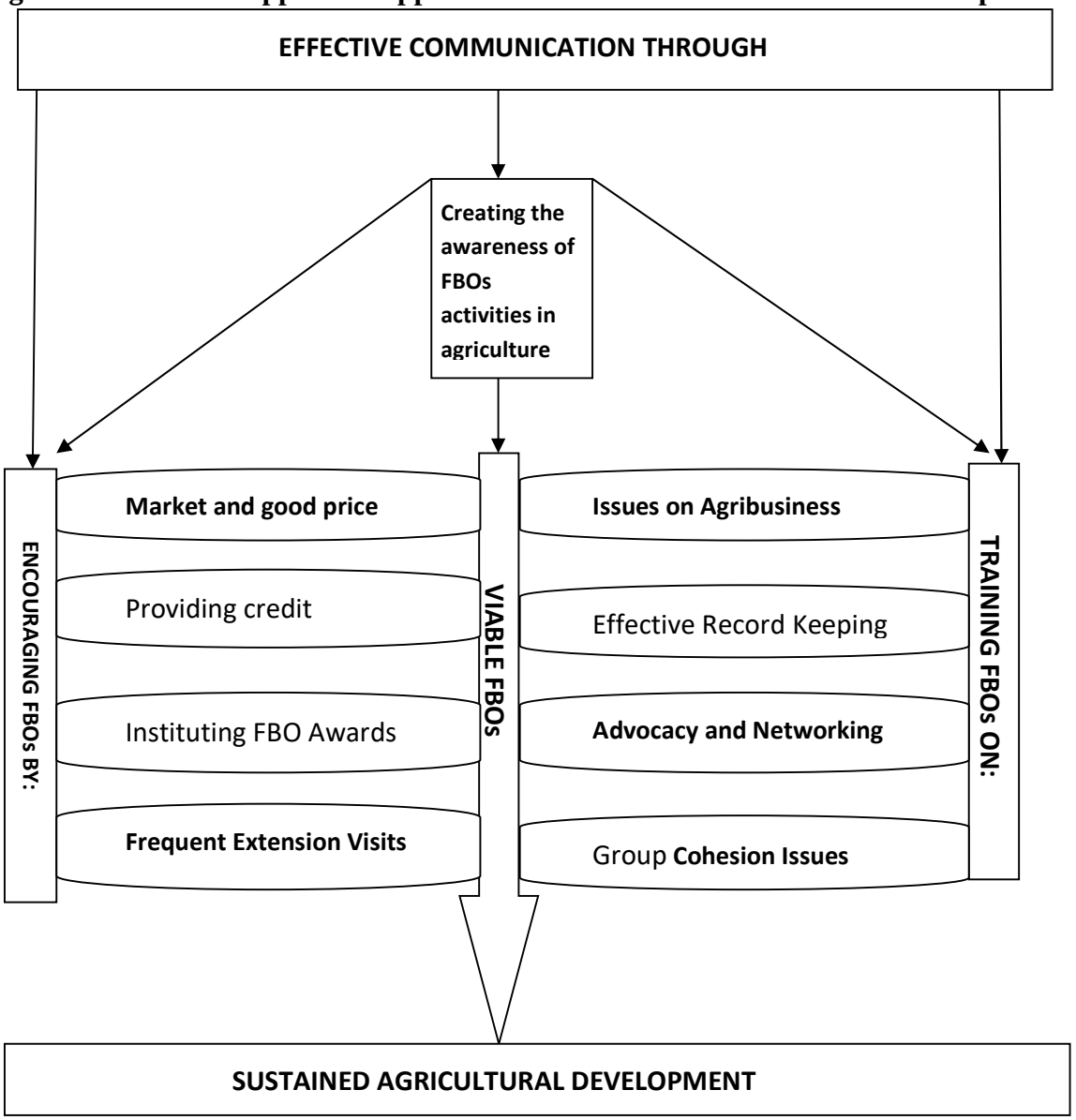
Again, if organizational and group pressure serves to bring about change, then strategies such as intensifying public awareness and educational programmes may help improve the status quo. Additionally, if the members of these FBOs are themselves given the needed education, they will be equipped with many skills to play their respective role in the development of agriculture.

Thus, the success of any type of community-based organization depends heavily on developed organizational and communication skills, including the development of human capital through

research, extension, and education programmes aimed at improving the farmers' technical and managerial capacity (Leslie, 2005). Undoubtedly, the effectiveness and efficiency of FBOs' performance in agricultural development depends on the realization of the interventions necessitating the need for the above models to highlight the interventions.

Thus, if effective communication via mass media is provided, it will not only raise the awareness of FBOs activities- specifically in the agricultural sector but will also, intensify better education/training and motivational factors to ensure the sustainability of effective and efficient FBOs and eventually lead to the development of the agricultural sector as displayed in figure 2.3

Figure 2. 2: A mix of applicable approaches for the effective and efficient FBO operations



Source: Author construct, 2016

2.4 Conceptual Frame work

A conceptual model of how one theorises the relationships among the several factors that have been identified as relevant to the problem. Sinclair (2007), explained that a theoretical framework can be thought of as a travel plan or a map. For instance, when planning a journey in

an unfamiliar country, people seek as much knowledge as possible about the best way to travel, using previous experience and the accounts of others who have been on similar trips.

For decades past, policy makers and scholar have been showing renewed interest on how agricultural based organizations engage in collective action such as agricultural producer organisations, can assist to address specific smallholder developmental constraints (Francesconi & Heerink 2010). The Cooperative Live Cycle Theory by Cook (2013), is appropriate for this study. According to Cook (2013), the most relevant indicator for cooperative health is the degree to which members engage themselves in the group by investing resources into it. In one lifecycle Cook (2013), identified five phases in relation to the theory.

a. *economic justification* – according Cook (2013), in the first phase, the purpose why a cooperative should be initiated, and whether there are "viable economic opportunities" for acting collectively, need to be identified. He argues that in order to become sustainable businesses, economic reasons for their formation need to be viable.

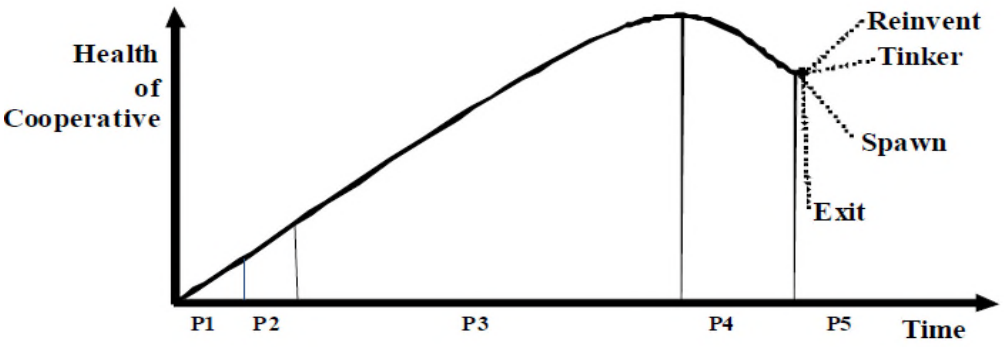
b *organisational design* - this second stage talks about how the rules of the new entity are initiated, including regulations about who can be part the organization under which conditions, how residual claim and control rights are allocated and which sanctions one can expect when violating organizational laws.

c. *growth, glory and heterogeneity*–this third phase is characterized by success of the cooperative. According to Cook (2013), agricultural cooperatives tend to "over celebrate" when more members join the group triggering increased heterogeneity of members' socio-economic preferences. Cook however, added that investment constraints can come up when collectively beneficial investments are not made to a satisfactory degree. This happens for example when some members exploit benefits without contributing to the cost (free-riding).

d *recognition and introspection*- the fourth phase occurs when the problems caused by increased heterogeneity became known via different manifestations of health crisis, such as the formation of factions within members, member apathy, inactiveness, conflict over residual distribution, or a disincentive to invest into the organization.

e. *choice: Tinker, Reinvent or Exit*- the organization acts upon the internal conflicts it is faced with by either "exiting", "tinkering", or "reinventing". This is diagrammatically illustrated as follow:

Figure 2. 3 Cooperative Life Cycle Framework



Phase 1 = Economic Justification
Phase 2 = Organizational Design
Phase 3 = Growth–Glory–Heterogeneity
Phase 4 = Recognition and Introspection
Phase 5 = Choice

Source: Cook (2013)

The potential of collective action to this end can be conceptualised in relation to how different theoretical schools of taught explain the manifestation of smallholder constraints in the first place. In the following, these schools and their assumptions concerning the potential of collective action are briefly outlined.

a. Sustainable Livelihoods perspectives

From sustainable livelihoods perspectives, agricultural intensification is one of the three livelihood approaches which can be a means of obtaining sustainable livelihood outcomes, such as poverty reduction, increasing well-being, and decreasing vulnerability (Scoones, 1998). He argues that the success of a livelihood strategy depends on the individual's access to crucial tangible and intangible livelihood resources. These resources comprise different "capitals" such as natural capital (hydrological cycle soil, air), financial capital, physical capital (production equipment and inputs) human capital (knowledge, heath, skill) and social capital (networks, affiliations, relationships) (Scoones 1998).

b. Inequality and Power perspectives

According to power and inequality sensitive perspectives inherent in Marxist, Political Economy and Dependency Theories, poverty is a consequence of power systems at national and international levels. Inequality is characterised by a secured access to resources by the rich, while the access of the poor to such resources is limited. In that line of thought, economic and political power structures are intertwined and mutually perpetuate the production and reproduction of wealth on one side and poverty on the other (Kay, 2005). On the basis of access to resources, the adoption of modern farming techniques and practices, becomes a privilege of capitalist farmers who become in turn more competitive than peasants, thereby restricting the "survival of the peasant producers and perpetuating rural poverty" (Kay 2005:339).

From this perspective, collective action has the potential to improve peasants farmers bargaining and advocacy power vis-à-vis private and public agents ("countervailing power"), increase their voice, in decision making arenas in order to make policies more responsive to smallholders and "regulate and govern the market for the benefit of the majority" (Kay 2005:339)

c. Markets, Transaction Costs and Economics of Scale

Kristen et.al (2009), states that market participation is associated with risks, and costs in relation to getting information concerning products and market participants as a basis for decision making as well as costs and risks related to transactions with other market participants. Due to scale effects, peasants and for that matter FBOs in the economy face higher transaction costs and risks than larger participants and thus, have competitive disadvantage (Kristen 2009). In a related development Hayami et al., (1992), observe that factors such as infrastructural challenges as well as climatic variations increase risks and costs of small-scale producers

Kristen (2009), again, argues that these constraints can be solved through institutional innovation. Thus, solutions based on collective action, are seen to be promising in integrating smallholders.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The issues considered under this chapter involve the study area, research design, study population as well as the sampling procedure used in the study. The chapter also discussed the research instruments, pre-testing, and data collection procedure, data analysis and ethical considerations of the study.

3.2 Design of the Study

The study adopted the descriptive research design. Descriptive research studies are designed to obtain information, which concerns the current status of phenomenon (Saunders, Lewis & Thornhill, 2007). The design was chosen because the researcher would not manipulate the variable but to describe the phenomenon that existed at the time of the research.

3.3 Profile of the Study Area

Tamale Metropolis (TM)

The Tamale Metropolitan Assembly (TAMA) was established by Legislative Instrument (LI 2068), which elevated the then Municipal Assembly into a metropolitan status in 2004 (GSS, 2010) At the moment it is one of the six Metropolitan Assemblies in the country and the only metropolis in the three northern regions namely: Upper East, Upper West, and Northern regions. It has Tamale as the Metropolitan capital city and at the same time the regional capital of the Northern Region of Ghana (GSS, 2010)

TAMA is one of the 26 districts in the Northern Region. The Metropolis is located in the central part of the Northern Region and shear boundaries with the Sanagnarigu District to the north,

Mion District Assembly to the East, Tolon to the West, Central Gonja to the South as well as West and East Gonja to the South (GSS, 2010)

The Metropolis has a total estimated land size of 550 km2 which is about 12% of the total land area of the northern region (TAMA Fact File 2009). The Metropolis is located about 180 metres above sea level associated with few isolated hills. Additionally, the Metropolis has a single raining season ranging from May to the later part of October each year characterised by dry harmattan winds usually from November to latest by February each year (GSS, 2010)

The Metropolis has a temperature range of 40° to 25° as maximum and minimum temperatures respectively. The city lies within the Savannah Woodland Region of the Country. The main soil types are sandstone, gravel, mudstone and shale that have weathered into different soil types. As a result of seasonal erosion, soil types emanating from this phenomenon are sand, clay, and literite Ochrosols (TAMA Fact File 2009).

The city is a cosmopolitan area of which Dagombas constitute the majority. Other minority ethnic groups are Gonjas, Mamprusis, Akans, Dagaabas, Bimobas and Frafras of the Upper East Region. The metropolis has deep rooted cultural practices such as fire festivals, marriage as well as naming ceremonies (NDPC, 2010).

The Metropolis has about 42% of the working class in agriculture related activities. Majority of the workforce in the Metropolis of 58% are engaged in Sales, Services, Transport and Production (MoFEP, 2013). These vibrant activities are as a result of the increase in Marketing, Banking, and other Non-governmental activities in the area (NDPC, 2010)

According to the 2010, Population and Housing Census, the population of Tamale Metropolis stood at 371, 351 made up of 185,995 males, and 185,356 females. This figure shows an increase of 75 percent over the 1984 population of 167.778 and represents a growth rate of 3.5 percent.

This is higher than the national as well as the regional rates of 2.7 percent and 2.8 percent respectively (GSS, 2020).

The town also has an urban population of 67.1 percent and it is the only district in the region that is predominantly urban. The population density of 318.6 persons per square kilometer for the metropolis is about 12 times higher than the regional average density of 25.9 persons per square kilometer. There exists difference between the densities of the urban and rural areas. This shows the influx of people to urban Tamale (GSS, 2020).

There are 115 communities in the city. Majority of the rural communities have large expanse of land for agricultural activities and serve as the food basket for the Metropolis. However, these communities still lack basic social and economic infrastructure such as good road networks, school blocks, hospitals, markets and recreational centres, thereby hindering socio-economic development, poverty reduction and reducing the general phenomenon of rural-urban migration (GSS, 2010).

Most of the farming and the peri-urban communities are linked to marketing centres by feeder roads. The availability of access roads linking farming communities to marketing centres enables farmers to transport their produce to the urban marketing centres with ease. Consequently, their postharvest losses are likely to be less or reduced (MoFEP, 2013)

The population structure of the city portrays a broad base which gradually tappers off with increasing age due to death. The youthfulness of the population means that the metropolis has an important human resource potential which can be tapped and effectively utilized for sustainable agricultural development in the region and the entire country.

The proportion of the populace aged sixty years and above is about 4.1 percent which is lower than the regional as well as national averages of 4.5 percent and 5.3 percent respectively. This is

an indication of a comparably low life expectancy (GSS, 2000). The major religion in the metropolis is Islam with 84 percent of the population as Muslims and followed by Christians with a proportion of 13.7 percent, whereas the traditionalists constitute 1.6 percent of the population (GSS, 2000). All other religious denominations constitute 0.7 percent of the population in the metropolis.

In terms of education, there are 240 Nurseries, 274 Primary Schools, 89 Junior High Schools, and 11 Senior High Schools in the metropolis. Besides, there are 2 Vocational and Technical Schools, 1 Technical University as well as a Campus of University for Development Studies (Tamale Metro Assembly, 2010)

The main health institutions in the city are the Tamale Teaching Hospital (TTH), Tamale Central Hospital, and Tamale West Hospital. With the exception of this, there are several clinics, health centres in the Metropolis.

Associated with the long dry season in the region and for that matter the metropolis where serious farming activities usually slow down, also encourages a greater proportion of the youth especially young women to migrate down south in search for unavailable job opportunities.

3.4 Population of the Study

The population for the study involved members of FBOs within the Tamale Metropolis. The total number of FBOs in Tamale Metropolis that are into crop farming is 21 with a total membership of 301. These included all the 21 FBOs whose activities were skewed towards agriculture and food security.

3.5 Sample Size and Sampling Techniques

Polit et al (2001) postulate that sample in studies of this nature tends to be small because the strategies as well as methods for data collection and analysis are very time consuming, and the

amount of data collection can be considerable. Minerva (1994) also, argues that to ensure the representativeness of a homogeneous population in a research, a sample size of fifty percent (50%) is desirous

Based on this, the sample size was carefully selected because the researcher believed that by observing the characteristics of the FBOs, inferences could be made to represent the behaviour and characteristics of the total population of the study area.

The sample size for the study was 125. This was based on non-probability sample determination where there the researcher uses his judgement and duty availability of resource and purpose of the research. To also compare the responses given by FBO respondents, the district directors of MoFA and NGOs/input dealers, extension officers from the metropolis were considered for this study.

The study used both probability and non-probability sampling techniques. With probability sampling each member of the population has an equal chance of being selected to respond to the research questions. Probability sampling is often associated with surveys (Saunders et al. 1999).

Procedure for Sampling

In the case of the FBO members, simple random sampling technique (through the lottery approach) was employed for the study. For each FBO, the members' initials were labeled on pieces of paper rubbed and put in a container and then mixed together. The researcher then selected 5 pieces of the rubbed papers in the container one after the other without looking in the container. This exercise was carried out repeatedly for all the FBOs

To ascertain the credibility of the study, an hour focus group discussion involving 5 FBO executives from each FBO were purposively selected for the study. In all, 21 different focus

group discussions were held to cross-check the validity and reliability of the responses given by respondents to the interview guide.

In a related development, purposive sampling technique was used to select the directors of MoFA and NGOs Directors and the MoFA extension staff who responded to the questionnaire designed purposively for them.

The decision to integrate the sampling techniques was precipitated by the unique feature of each technique. Simple random sampling by nature is free from bias. Its adoption therefore, helped to obtain a more representative sample for the study.

Purposive sampling was deemed essential for the study because, it allowed for the selection into the sample, subjects that generally possessed most of the desired features such as experiences and knowledge, for instance the district directors of agriculture and FBO leaders.

3.6 Research Instruments

In this study, questionnaire, key informant interviews and focused group discussions were used for the data collection. The questionnaire was designed for the study as a survey instrument sought to elicit respondent's opinions as well as their views on the role of FBOs in agricultural development in peri-urban Tamale in the northern region of Ghana. The use of these instruments was necessitated by the sampling procedures that were employed and by their perceived applicability. Polit et al. (2001), for instance established that interviews, especially face-to-face aspect of interview appears to have much influence and strength in collecting data since the rate of response usually tends to be high.

Also, it was postulated by May & Pope (1996), that most people for instance the blind and the elderly find it difficult to fill out a questionnaire. Therefore, interviews were the best instrument because it provided opportunities for deep probing, explaining complex statements as well as the

clarification of questions and responses, especially during sessions of focus group discussions since the literacy level of FBO members was relatively low.

3.7 The questionnaire

Part I of the questionnaire was used to collect biographical data about respondents. Part II was made up of four sections, namely: A, B, C, and D. Section A looked at the organizational structure of the FBOs. Section B focused on the assessment of the FBOs role in agricultural development. Section C concentrated on the challenges or constraints that confront the FBOs in their agricultural operations whilst section D sought for possible recommendations that will improve the FBOs capacity to develop the agricultural sector.

3.8 Data Collection Procedure

Primary and secondary data were used for the research. From the primary source, data were obtained from the responses that interviewees provided to the questionnaire as well as the interviews conducted. With the secondary data, information was sourced from published documents on famer-based organizations in Ghana and elsewhere. Other sources included: directorate of NGOs and FBOs of MoFA, the Daily Graphic, Periodicals on farmer-based organizations etc.

Data were collected from leaders of FBOs, sample members of the FBOs and key informants. Additionally, Chairmen and Magazias of these FBOs were interviewed on other key issues concerning their groups in particular.

At the institutional level District Directors of MoFA, NGOs into agriculture and working closely with these FBOs, Agricultural Input Dealers, Savannah Farmers Marketing Company and some Civil Society Organisations were also interviewed;

Administration of questionnaire, focus group discussion as well as interviews stated on January 4 2016 and ended on April 9, 2016. This period of the field work was devoted to interviewing of the respondents and general coordination of the research activities as well as providing the needed logistical support.

3.9 Methods for Data Analysis

Data were collected for the research using questionnaire, interviews, focus group discussion. The data from the interviews conducted was analysed manually by making summaries of the opinions and views of the respondents. With the aspects of the quantitative data collected, the questionnaires were coded, and entered into a template created using SPSS Version 20. The entered data were then analyse to generate tables and charts for further illustration of the report from the field.

3.10 Pre-test

According to Sarantakos (1998), pre-test offers researchers, the opportunity to practice research in real situation and familiarise themselves with the research instruments prior to the main study. The student conducted a pre-test at Dakpemyili & Wulanyili following the development of the questionnaire as well as interview schedules. These two communities in Central Gonja District were selected for the survey based on the similarities they share with communities in the Tamale Metropolis;

The pre-test was carried out to find out the suitability of the questions and the instructions provided. It also, tested the adequacy and completeness of the responses and how respondents understood the questions provided. According to Sarantakos, (1998), this is to ensure the reliability and validity of the research instruments and methods employed for the work

The preliminary study enabled the researcher to identifies misleading question, similarities in wording and restricted statements. With the support of the supervisor all the necessary corrections to the errors and distortions identified in the questionnaire were corrected. Thus, the final schedule was revised based on the findings of the pre-test; the revised version helped a lot to ensure the validity as well as the reliability of the data collection instruments.

3.11 Questionnaire Administration and Procedure for Collecting Data for the Study

During the administration of the questionnaire and interview schedules, the researcher established a rapport with the respondents, and assured them of the confidentiality in terms of information handling and explained to them the purpose of the study. This approach enabled the researcher to get the maximum cooperation and support of the respondents.

Questionnaires and interviews were administered by the researcher at the locations of the respondents. At the focus group discussions, the researcher carefully read and explained the content of the interview items to the respondents.

3.12 Validity and Reliability

Validity according to (Seidu Al-assan, 2015), generally considers whether the measurement actually measures what is supposed to measure. Thus, the term validity implies how well the measuring instruments in the study are able to measure what is to be measured. Poor memory of a researcher can affect the validity of the study. To avoid this challenge as much as possible, the researcher made summary on key findings identified in his field notebook.

Reliability on the other hand describes the stability of your measurement technique (Al-hassan, 2015). Thus, reliability addresses the important issues of how the same thing can be measured in the same way in repeated tests (Al-hassan, 2015). For example, registers, stopwatches, and birth

weights are reliable tools for measuring school attendance, speed and newborn infants, respectively.

3.13 Ethical Considerations

For every research or study to go on well, ethical issues are very critical (Scheyvens & Storey 2003). At the beginning of each interview, the researcher presented his background as well as the purpose and scope of the study. Based on this, respondents were assured of confidentiality as their consent was appropriately sought with respect to the information they provided. To further assure them, recording devices were not used during the data collection process. This further gave them confidence to participate and speak well on issues without fear and suspicion.

In a related development, respondents were made to understand that, the study is purely an academic exercise and so should not fear when responding to the questions posed by the researcher. Additionally, all sites visited, documents used have all been referenced.

CHAPTER FOUR

DATA PRESENTATION

4.1 Introduction

The main objective of this research is to investigate the under exploration of the potential of FBOs in agricultural development in peri-urban Tamale in Northern region, Section one looked at the personal information of the respondents, Section two investigate into the operational structure of FBOs, Section three assesses the roles of FBOs in the development of agriculture, and Section four identifies the main constraints to the FBOs effectiveness in developing agriculture.

4.2 Demographics of the Respondents

This part of the work presents the demographic characteristics of respondents who participated in the research work, in terms of age and other relevant socio-cultural data pertinent to the study. This demographic information is very important; it highlighted detailed interpretation of results emanating from the analysis made regarding the potential of FBOs in agricultural development in Tamale metropolis.

4.2.1 Age Distribution of Respondents

Data on age distribution revealed that 18.1 percent of the FBOs members were 22 and below years, 59.0 percent of the FBOs members were between the ages of 23 and 33 years, 21.0 percent of the FBOs member were between the ages of 34 and 44 years, 1.9 percent of the FBOs member were between 45 and 54 years of age. (See table 4.1 below). This data shows that there are young men and women who are engaged in the FBOs business. This implies there is future for FBOs farming activities in the Tamale metropolis since majority of the FBOs member are young and still have some number of years to still engage in the business of farming.

Table 4. 1: Age Distribution of Respondents

Age	FBOs Members	Valid percent
22 and below	19	18.1
23 - 33 years	62	59
34 - 43 years	22	21
44 - 53 years	2	1.9
54+ years	0	0
Total	105	100

Field Survey, 2016

4.2.2 Respondents Level of Education

The level of education of the FBOs members, MoFA Officers and Inputs Dealers chosen for the study reveals that, those with first degree constitute 1.9 percent of the FBOs members, HND constitute 1.0 percent of the FBOs members, SSS/SHS constitute 9.5 percent of the FBOs members, JSS/JHS constitute 5.7 percent of FBOs members while No formal education of the FBOs constitute 81.9 percent of the respondents. This means that those FBOs members with no formal education would not have an in-depth knowledge with regards to the effective farming methods and prudent leadership in the management of FBOs in the Tamale metropolis.

Table 4. 2: Level of Education of Respondents

Education	FBOs Members	Valid percent
First Degree	2	1.9
HND	1	1
SSS/SHS	10	9.5
JSS/JHS	6	5.7
No formal Education	86	81.9
Total	105	100

Field Survey, 2016

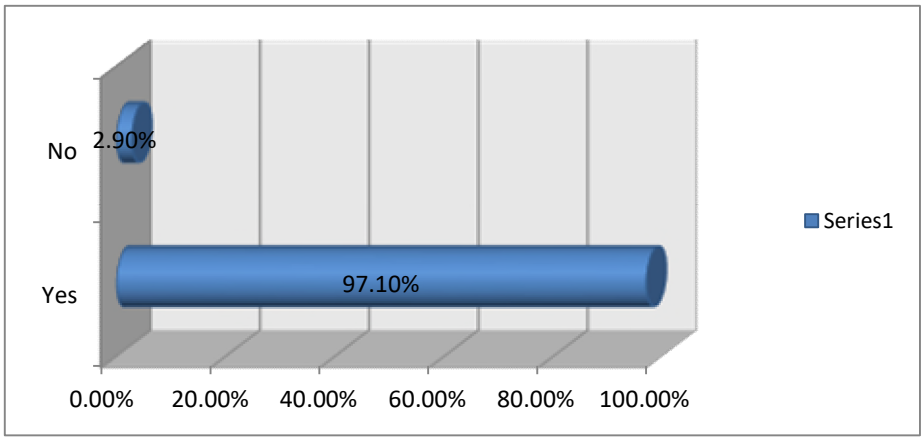
4.3 Operational Structure of FBOs in Tamale Metropolis

Every organization or institution is supposed to have a set out structure with direction as to how power and information is following to its employees or staff. This structure shows how the organization is managed and operated. The structure of the organization, also portrays how funds are utilized.

As part of investigating the operational structure of FBOs in the Tamale Metropolis, the study reveals that, 97.10 percent of FBOs in operation are officially registered while the remaining 2.90 percent are not registered as illustrated in the diagram below (See figure 4.1 below). This means that almost all FBOs in Tamale Metropolis are known to their stakeholders as to their operations since almost all of them are registered. This will inform the authorities as to the various types of FBOs in Tamale metropolis, the types of businesses they are involved in, the total number of people involved in the running of the FBOs, and also the needed marketing information they will require to help them sell their produce. This implies that FBOs possibly will have the chance of accessing funds from financial institution since their location can be located for easy identification.

Focused group discussion also confirms that almost all the FBOs in the Tamale metropolis are officially registered as organizations that engage in farming activities and also portraying their legal status. In the same vain an interview conducted by the researcher shows that not all the FBOs in the Tamale Metropolis are officially registered, but still operate in the Tamale metropolis.

Figure 4. 1: Official Registration of Groups



Field Survey, 2016

In the case of the 97.1 percent of the registered FBOs in the metropolis, ten (10) of them were registered before the year 2001, 16 were registered between the years 2001 to 2003, 77 were registered between the years 2004 to 2006, and 1 registered between the years 2007 to 2009 representing 9.6 percent, 15.4 percent, 74.0 percent and 1.0 percent respectively (See table 4.3 below).

Table 4. 3: Year FBO/Group Registered

	Frequency	Valid Percent
Before 2001	10	9.6
2001-2003	16	15.4
2004-2006	77	74.0
2007-2009	1	1.0
Total	104	100.0

Field Survey, 2016

On the establishment of these groups, ninety-two (92) responses indicate that these establishments were initiated by the Ministry of Food and Agriculture or Government, seven (7) by Non-Governmental Organizations, Four (4) by a group of people within the community, and

Three (3) by Department of cooperatives. These represent 87.6 percent, 6.7 percent, 3.8 percent, and 1.9 percent respectively (See table 4.4 below). This means that government has more influence on the establishment of almost all the FBOs in the Tamale metropolis.

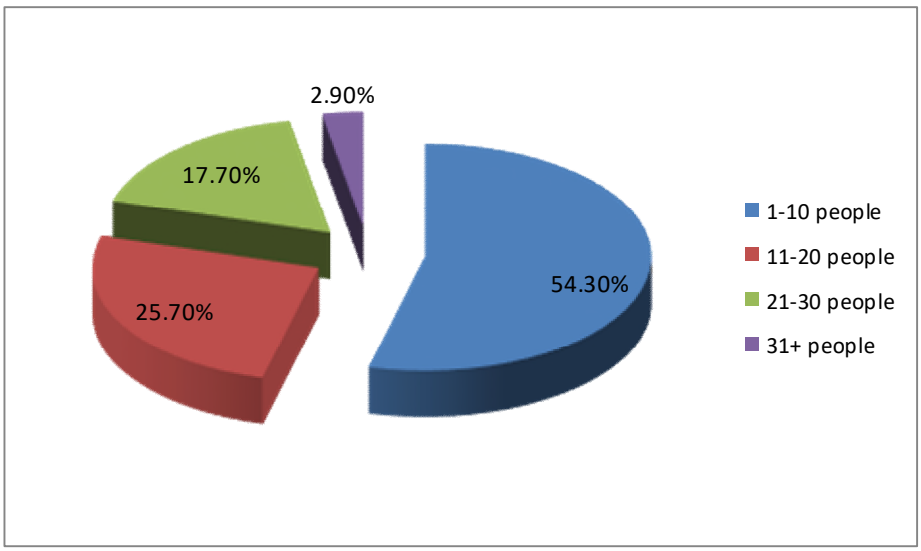
Table 4. 4: Initiation of the Establishment of FBO/Group

	Frequency	Valid Percent
MoFA/Government	92	87.6
NGO	7	6.7
A group of people within the community	4	3.8
Department of cooperatives	2	1.9
Total	105	100.0

Field Survey, 2016

Membership of FBOs shows how strong the FBO is and how it can influence other people to join its course. It also offers financial companies the opportunity to assess FBOs based on the number of people as compared to its farm produce per year. This confirms what Cook (2013), idea that agricultural cooperative tend to "over celebrate" when more members come into the group On the issue of membership of the organizations, the study established that, 54.3 percent of the organizations has its membership ranging between 1-10 people, 25.7 percent of the organizations has a membership range of 11-20 people, 17.7 percent of the organizations has a membership range of 21-30 people while the remaining 2.9 percent of the organizations has a minimum membership of 31 people as illustrated in the diagram below. The least group of people who formed an FBO is 1-10 people which are a dominant form of FBOs in the Tamale Metropolis (See figure 4.2 below). This means that a sizable number of people form the FBOs membership and this could be attributable to decision making in the groups. This form of groups is also good for easy profiling of members in case of the groups accessing help from NGOs or financial institutions.

Figure 4. 2: Memberships of the Organizations



Field Survey, 2016

Another area of the study was gender composition of the organizations. It was found out that, 18 0f these groups have a membership composition of more males than females representing 87.6 percent of the organizations, one group has a membership composition of more females than males which represent 3.8 percent of the organizations while the remaining 8.6 percent (2 groups) have equal gender representation (See the table 4.5 below). Male dominance in the composition of the FBOs is a reflection of the culture of the people in the Tamale Metropolis which does not allow women to be part of decision making process or engage in any venture without the husband acceptance, though not at all cases and also Tamale Metropolis according to the 2010 census 90.5 percent of the populations are Muslims and the religion actually does not permit married women to engage in other activities where men are dominating especially where there is too much body contact. Despite all this cultural and religious challenges there is still a few FBOs with equal representation of both sex in the Tamale metropolis, which implies that some women are really doing well to keep up with their male counterparts in doing agricultural

activities. Male dominance in the membership of the FBOs implies that economic power will continue to be in the hands of men, which will lead to more influence in decision making at the household level.

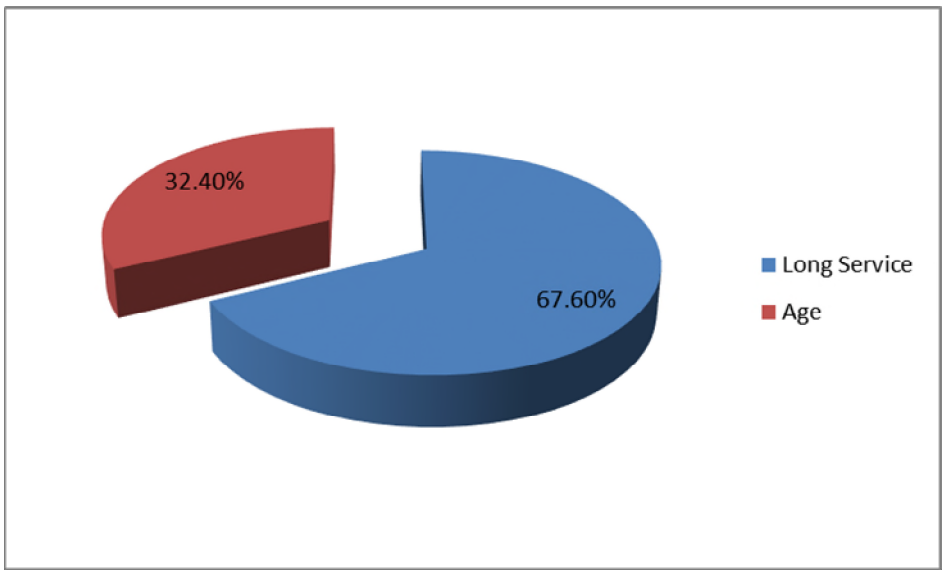
Table 4. 5: Gender Composition of the Organization

	Frequency	Valid Percent
More males than females	18	87.6
More females than males	1	3.8
Equal number of males and females	2	8.6
Total	21	100.0

Field Survey, 2016

Leadership plays a vital role in the direction and operation of every organization or institution. Leadership is the engine that gives direction as to the vision and mission of every organization. Therefore, the mode of choice of leaders in organizations should be placed as the most important component of the growth of the organization. On the basis of chosen Organizations leaders, the study revealed that, 67.6 percent of all the Organizations were chosen based on the number of years of service while the remaining 32.4 percent of the leaders of all the Organizations were selected based on the actual age of the people in question as evidenced in figure 4.3 below. This means that leadership selection is based on the experience by members who have been in the organization for long. This implies that such a leader would have known all the organization's structure and its operation.

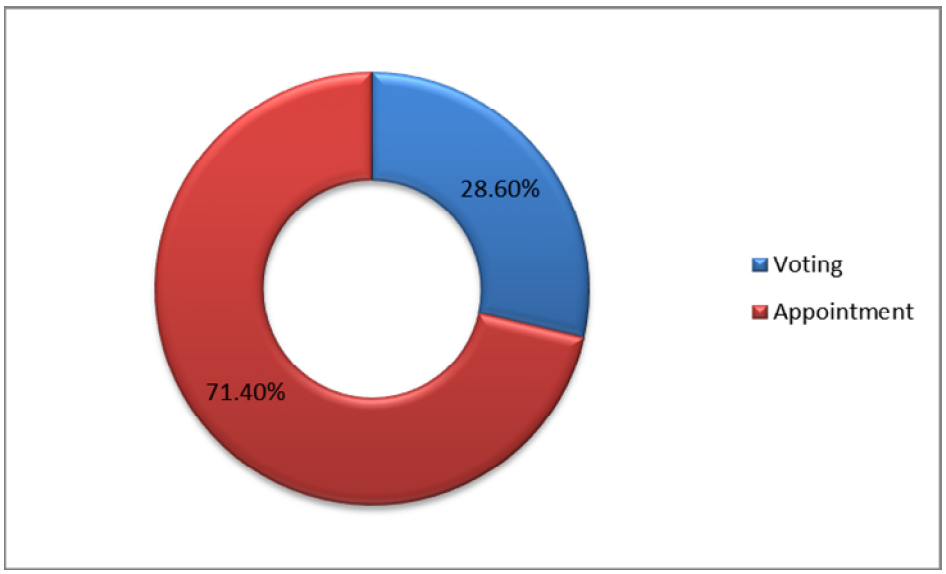
Figure 4. 3: Basis of Chosen Organizational Leaders



Field Survey, 2016

Another area of the study is mode of selection of leaders of the organizations. The study reveals that, while 71.4 percent of all leaders of the Organizations were selected by voting; only 28.6 percent of the respondents indicated that their leaders were selected by appointment (See figure 4.4 below). This means that majority of votes of the people in the groups to a candidate makes him or her the leader of the group, which implies that majority view of the FBOs form part of decision making process of the FBOs in the Tamale metropolis. This form of governance gives opportunities to all members to advance their arguments in terms of selection and decision making in the FBOs. It also gives members the right to vote and to be voted for when nominated by the group members in the FBOs.

Figure 4. 4: Selections of Leaders of FBOs



Field Survey, 2016

From the study, it was established that, the selection process made of 94 responses (89.5percent) can be said to be transparent, 9 responses (8.6percent) selection process can be said to be very transparent, 1 response (1percent) selection process can be said to be fairly transparent while the other 1 response (1percent) selection process is also considered less transparent. In almost all the organizations, have some sort of transparency in its leadership selection as indicated by the information above. This finding also confirms the findings in figure 4.4 above where 71.4 percent of all leaders of FBOs in Tamale metropolis are selected by voting. This finding is in line with the argument of Uphoff, (1994) who stated that accountability and transparency should be built into the management styles of FBO leaders.

Table 4. 6: Transparent Process of Appointment of Members to Executive/Leaders in the Group

	Frequency	Valid Percent
Very transparent	9	8.6
Less transparent	1	1.0
Transparent	94	89.5
Fairly transparent	1	1.0
Total	105	100.0

Field Survey, 2016

In other to avoid challenges like dictatorship; and power over drunk by leaders, there is the need to have some sort of limits to the term of office of all office holders of organizations and institutions. This study also attempted to find out the terms of office of FBOs leaders in the Tamale Metropolis Findings from the study revealed that, 64.8 percent of the executives of the Organizations have 2-3 years term of office, 15.2 percent have more than 5 years term of office, and 14.3 percent have 4-5 years term of office, while the remaining 5.7 percent have a maximum of 2 years term of office (See table 4.7 below). This means that all the FBOs in Tamale metropolis have some guidelines as to how to transfer power from one office holder to the other in terms of change in leadership. This is one of the key ways to be transparent and accountable to its members and for stakeholders who have vested interest in the running of the FBOs.

Table 4. 7: Term of Office of Executives

	Frequency	Valid Percent
Less than 2 years	6	5.7
2-3 years	68	64.8
Maximum of 4 years	15	14.3
More than 5 years	16	15.2
Total	105	100.0

Field Survey, 2016

Decision making is one of the most important factors in the development and growth of every organization. Data on the decision making in the groups revealed that, 68.6 percent of all the decisions made by the Organizations were taken in consultation with other members of the group, 24.8 percent were taken by the chairperson, 4.8 percent were taken through meetings of the executives while 1.9 percent of the decisions are taken using individual to individual contact (See table 4.8 below). This means that there is transparency and accountability to members of FBOs in Tamale metropolis as to the operation and dealing with other institution outside their jurisdiction.

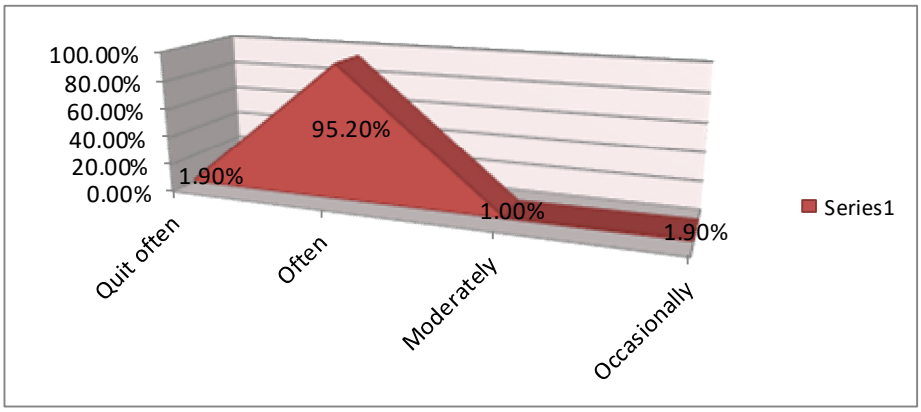
Table 4. 8: Decision Making in the Group

	Frequency	Valid Percent
By the chairperson	26	24.8
Through meeting of the executives	5	4.8
In consultation with other members of the group	72	68.6
Individual to individual contact	2	1.9
Total	105	100.0

Field Survey, 2016

On the issue of consultation and reporting to other members about decisions that affect the groups, it was find that, 95.2 percent often consulted and reported to other members of the groups, 1.9 percent consulted and reported quite often, 1.9 percent reported and consulted occasionally, and 1.0 percent moderately reported and consulted other members of the group on decisions affecting them (See figure 4.5 below). This finding means that there is openness and transparency among members of FBOs in the Tamale Metropolis. It thus implies the people trust each other in terms of information flow and transmission.

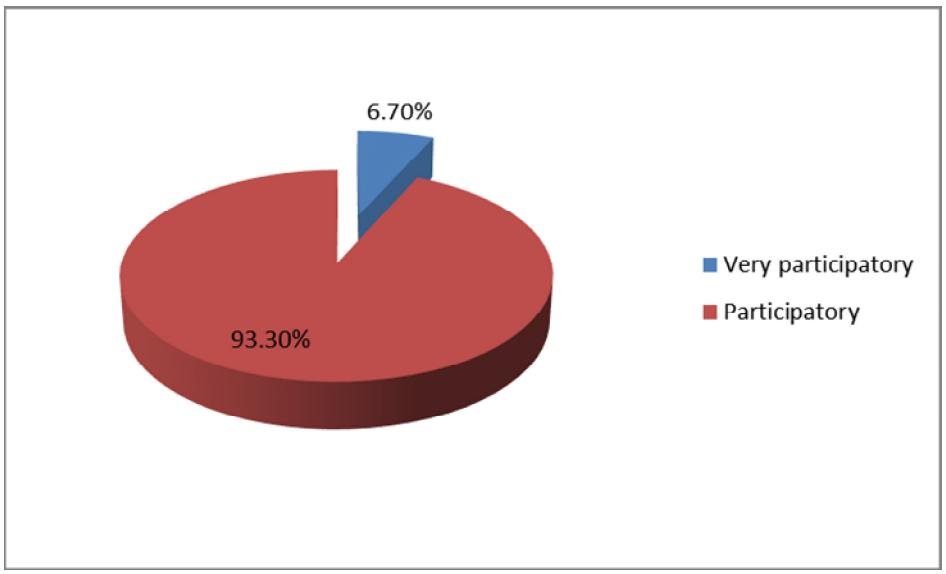
Figure 4. 5: Leadership Consultation and Reporting to other Members about Decision that Affect the Group



Field Survey, 2016

Participatory form of decision making gives opportunity to the voiceless and the vulnerable groups in every organization or institution to make an input in the subject of discussion. It thus forms part of the processes of decision making. As part of the investigation the study looked at decision making process. The study shows that, of all the decision-making processes in the Organizations, 93.3 percent of processes are participatory while the remaining 6.7 percent is considered to be very participatory as shown in the diagram below (See figure 4.6 below). This finding also gives credence to the above finding which also supports transparency in decision making and accountability.

Figure 4. 6: Decision Making Process in the Organizations



Field Survey, 2016

Table 4.9 of the study assesses the operational structure of FBOs in Tamale metropolis in Northern region of Ghana. Some of the procedures were evaluated on an individual basis. The 1st item (questions) in the table is "Ranking of quality of meeting of FBOs in Tamale metropolis", the mean score of the question is 1.86. Thus, indicating excellent ranking of meetings of FBOs in Tamale metropolis. The minimum score for this question is 1 i.e. "excellent" and maximum score is 5 i.e. "fair". The next question in line is "Experience of the group executives in handling group dynamics issues" also has mean score of 1.92 which is very good. Performance of the leaders that they really represent the interest of the group members was also the next in question for respondents in table 4.7, has a mean score of 1.91 which is very good with an 81.9 percent of the respondents. The 4th item in line of the questions in table 4.9 was "Cordial relationship between group executives and members" with a mean score of 1.93 which is very good, also the next in line question is "Ranking the system of evaluating the performance of the group executives" with a mean score of 2.17 which is very good with 62.9 percent of the respondents.

Table 4. 9: Respondents Views on the Structure of their Organization

	Minimum	Maximum	Mean	Valid percent (%)
Ranking of quality of meeting	1	4	1.86	81.0
Experience of the group executives in handling group dynamics issues	1	3	1.92	81.0
Performance of the leaders that they really represent the interest of the group members	1	3	1.91	81.9
Cordial relationship between group executives and members	1	3	1.93	81.9
Ranking the system of evaluating the performance of the group executives	1	4	2.17	62.9

Field Survey, 2016

Table 4.10 of the study looked at the members of the FBO involvement in organizing meetings. The 1st question in the table is "How do FBO members organize meetings as a group", the mean score of the question is 1.89 with percentage of 88.6 percent response, indicating that FBOs organise meetings occasionally. The minimum score for this question is 1 i.e. "Always" and maximum score is 4 i.e. "Not at all". The next question in line is "How do you often participate in those meetings" also has mean score of 1.04 with percentage of 96.2 percent response which is always, an indication of always participating in meetings. In the decision-making process, how you see yourself participating was also the next in question for respondents in table 4.8, has a mean score of 1.02 which is always also indicating that respondents participate in decision making process, with a 98.1 percent response. The 4th item in line of the questions in table 4.8 is "I take part in the decision making process in the group/FBO" with a mean score of 1.03 which is always with 97.1 percent response, also the next in line question is "I attend meetings organized by the FBO members in the community" with a mean score of 1.03 which is always with 97.1 percent response, "I pay membership dues and other levies to the FBO/group" was also

the follow up question to respondents of which the mean score is 1.08 which is always with 95.2 percent of the respondents agreed.

Table 4. 10: Members of the FBOs Involvement in Organizing Meetings

	Minimum	Maximum	Mean	Valid percent (%)
How do FBO members organize meetings as a group	1	2	1.89	88.6
How do you often participate in those meetings	1	2	1.04	96.2
In the decision making process, how do you see yourself participating	1	2	1.02	98.1
I take part in the decision making process in the group/FBO	1	2	1.03	97.1
I attend meetings organized by the FBO members in the community	1	2	1.03	97.1
I pay membership dues and other levies to the FBO/group	1	4	1.08	95.2

Field Survey, 2016

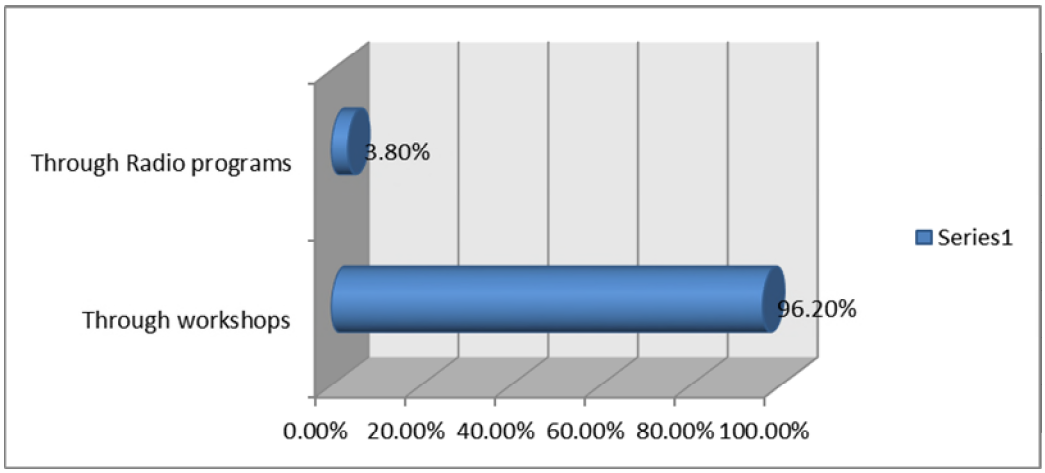
4.4 Roles of FBOs in the Development of Agriculture in Tamale Metropolis in the Northern Region of Ghana

This section looked at the role of FBOs in the development of agriculture; it tries to investigate the various issues affecting the development of agriculture in Tamale metropolis. It thus investigates how FBOs work to achieve their objectives.

In the operations of FBOs, their activities need to be known by stakeholders who are engaged in the training and support of their membership for effective and efficient administrative management. The study found out that, 96.20 percent of the activities of the groups are made known to the public through workshops while the remaining 3.80 percent are through radio programs. This means the operations of the FBOs are well known by stakeholders in the Tamale

metropolis. This implies that the FBOs activities are known to government agencies and financial institutions where they can access information and financial assistance.

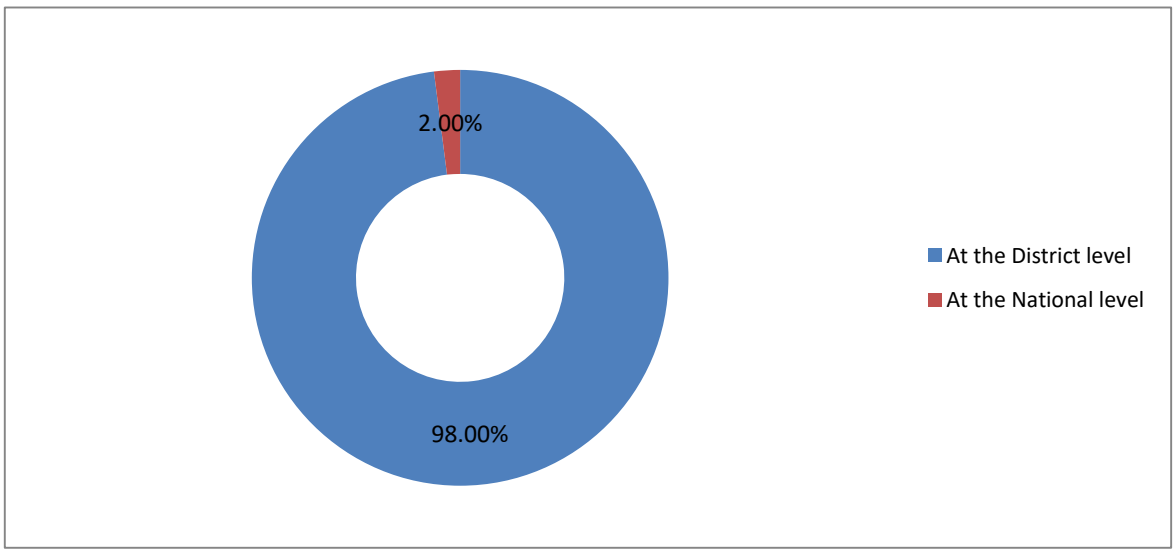
Figure 4. 7: Making Group Activities known to the Public



Field Survey, 2016

On the issue of the level at which the activities of FBOs are known to the general public, the data shows that 98.0 percent of the FBOs activities are made known at the district level, and 2.0 percent is made known at the national level. This means that the activities and operations of the FBOs are only known at the local level. This implies the activities of the FBOs are not known at the national level and thus whatever they produce will remain at the local level which is not good for their operation.

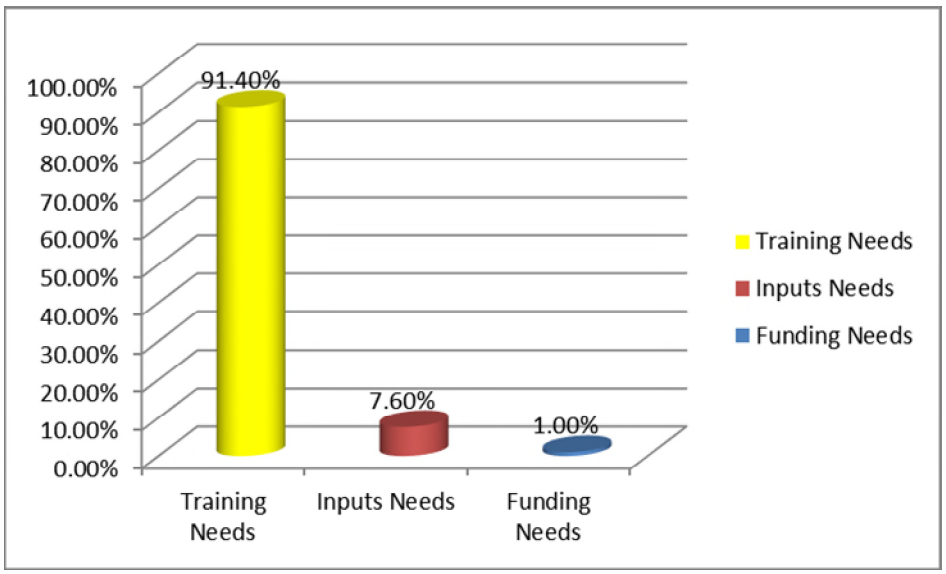
Figure 4. 8: Level at which FBOs Activities are known to the General Public



Field Survey, 2016

Networking is an integral part of the growth of organizations and institutions. This is normally done to link organizational operations and activities to others who have vested interest in their operations. This networking is done in different ways by different institution and organizations. The study revealed that, 91.4 percent of the activities linking the groups to other organizations through training needs, 7.6 percent are inputs needs and only 1.0 percent are funding needs as shown in figure 4.9 below. This means that FBOs in Tamale metropolis undergo training with other organisation.

Figure 4. 9: Activities Linking FBOs with other Organizations



Field Survey, 2016

The study further revealed that, 81.7 percent of those stakeholder's part of the group's network of activities is Government, 17.3 percent are NGOs while 1.0 percent are Development agencies (See table 4.11 below). This finding means that FBOs in Tamale metropolis solely depend on government for their needs like training and funding. Other institutions like NGOs and international development agencies play some role in the activities of the FBOs in the Tamale metropolis. Official interview with MoFA director and extension officers show that they engage with the FBOs in various ways to improve on their performance in their chosen field of operation.

Table 4. 11: Institutions that play Part of FBOs Network of Activities

	Frequency	Valid Percent
NGOs	18	17.3
Government	85	81.7
International Development Agencies	1	1.0
Total	104	100.0

Field Survey, 2016

The study shows that, 91.4 percent of agricultural produce range of members of the groups are wider, 3.8 percent are very wider, 1.9 are narrow, 1.9 are very narrow, and 1.0 percent are moderate (See table 4.12 below). If the FBOs agricultural products are wider it means some of the FBOs cultivate more categories of produce in their operational areas in Tamale metropolis. Thus, growing many crops annually at a time is good but also, has its disadvantages. This sometimes lead to FBOs/farmers paying more attention to some crops at the expense of other crops especially when it comes to the period of weeding. A farmer has this to say:

"It is because we work as a group that we cultivate only soyabean in our group farm, in my farm at the individual level, I cultivate yam, guinea-corn, maize, millet, and even groundnuts. In my yam field my wife intercrops it with okro every year. "Ti borila binsheg kam ti behigu ni"- which means we need everything to live well"

Table 4. 12: How wider is FBOs Agricultural Produce Range

	Frequency	Valid Percent
Very wide	4	3.8
Narrow	2	1.9
Wider	96	91.4
Very narrow	2	1.9
Moderate	1	1.0
Total	105	100.0

Field Survey, 2016

Marketing of agricultural produce is one of the challenges FBOs and other organizations involved in farming face. Most of the produce get spoil as a result of the inability of the FBOs to get the right market for their produce. As part of the study, the researcher investigated how FBOs in the Tamale metropolis market their farm produce. Data from the study revealed that, 85.7 percent of the agricultural produce was marketed through community gathering, 11.4 percent were marketed through agricultural shows, 1.0 percent was marketed through talk-shows, and 1.9 percent was marketed by other means. This is shown in table 4.13 below. This finding means that the FBOs market their products in the local community gathering. This implies the produce of the FBOs are only know to the local community members in the Tamale metropolis. This situation affirms the statement by Khols (1986) that no product should ever be produced unless it has a market, and that marketing begins with production on the farm.

Table 4. 13: Marketing of Agricultural Products

	Frequency	Valid Percent
Agricultural shows	12	11.4
Radio advertise and talk shows	1	1.0
Community gatherings	90	85.7
Others	2	1.9
Total	105	100.0

Field Survey, 2016

The study revealed that, 60.0 percent of the organizations transportation for members of the group were on regular basis, 35.2 percent were on irregular basis, while 4.8 percent of the members arrange individual transport (See table 4.14 below). This finding means that FBOs use regular groups transport to convey their farm produce to the market or for storage.

Table 4. 14: Organization of Transportation for Members of FBOs

	Frequency	Valid Percent
Regular group transport available for members	63	60.0
Irregular group transport available for members	37	35.2
Members arrange individual transport	5	4.8
Total	105	100.0

Field Survey, 2016

Table 4.15 of the survey assesses FBOs role in agriculture in Tamale metropolis. The 1st item (questions) in the table is “The trend regarding collective produce sold through your group in the last two years has been good”, the mean score of the question is 2.00 with 81.0 percent of the respondents were agreed. The minimum score for this question is 1 i.e. “Strongly agreed” and maximum score is 5 i.e. “strongly disagree”. The next question in line is “Efforts made by your group in marketing members produce is appreciable” also has mean score of 1.95 which is agreed with 89.5 percent of the respondents agreed. Your group is able to meet specific

requirement and standards set by its clients was also the next in question for respondents in table 4.16, has a mean score of 1.98 which is agreed with a 87.6 percent of the respondents. The 4th item in line of the questions in table 4.15 was "The group members are able to meet the contractual requirements of their customers in terms of quality and quantity demand" with a mean score of 2.15 which is agreed with 86.5 percent responses, also the next in line question is "Members of the group are able to influence the selling price of their produce" with a mean score of 4.42 which is disagreed with 78.1 percent of the respondents disagreed.

Table 4. 15: FBOs Role in Agriculture in Tamale Metropolis

	Minimum	Maximum	Mean	Valid percent (%)
The trend regarding collective produce sold through your group in the last two years has been good	1	3	2.00	81.0
Efforts made by your group in marketing members produce is appreciable	1	3	1.95	89.5
Your group is able to meet specific requirement and standards set by its clients	1	4	1.98	87.6
The group members are able to meet the contractual requirements of their customers in terms of quality and quantity demand	1	4	2.15	86.7
Members of the group are able to influence the selling price of their produce	1	5	4.42	78.1

Field Survey, 2016

4.5 Main Constraints to the FBOs Effectiveness in Developing Agriculture in Tamale Metropolis

Constraints are inevitable in every organization or institution when it comes to farming in the northern region of Ghana. This section looked at constraints among farmer base organizations in peri-urban Tamale that are engaged in farming related activities. The following constraints were

mentioned by respondents as the constraints faced by FBOs in the Tamale metropolis, 16.2 percent of the respondents indicated that they lack training on leadership and management, 14.3 percent of the respondents indicated they lack of guaranteed market for their farm produce, 13.3 percent of the respondents indicated they lack of improved seed for farming, 12.4 percent of the respondents indicated that they lack of improved seeds and tractor services for farming (See table 4.16 below). This implies the FBOs in the Tamale metropolis are not able to farm or engage effectively in their farming activities as a result of the constraints mention above. This finding is similar to the finding from both the focused group discussion and the interview conducted which reveals that FBOs in Tamale metropolis have some challenges and those challenges were mentioned as follows; Voluntary contribution of members is not forth coming as its expected, less access to improved seeds, No storage facilities, less access to fertilizer, Lack of funds and credits facilities from financial institution for FBOs.

Table 4. 16: Constraints of FBO Members Operations

Constraints	Frequency	Valid Percent
Accessing credit market for farm produce	9	8.6
Lack of improved seed and tractor services for FBOs	13	12.4
Lack of resources to expand production of farm produce	10	9.5
Lack of guaranteed market for farm produce	15	14.3
Lack of tractor services for farming	8	7.6
Organizing meeting for members on improve methods of farming	11	10.5
Lack of fertilizer for improve farming	8	7.6
Lack of improved seeds for farmer base groups	14	13.3
Lack of training on leadership and management of FBOs	17	16.2
Total	105	100.0

Field Survey, 2016

Respondents were also asked about the benefits the gain out of joining the FBOs. Data from the study reveals the following benefits members gain from joining the FBOs; Access to marketing, Training on new methods of farming, Access to financial assistance, help from other FBO members in a form of farm inputs for farming, Transportation of farm produce after harvesting, and Access to land for farming. This means that at least all members have some form of benefits from joining the FBOs in the Tamale metropolis (See table 4.17 below).

Table 4. 17: Benefits of Joining the FBOs

Benefits from joining the FBOs	Frequency	Valid Percent
Access to marketing	20	19.1
Training on new methods of farming	24	22.8
Access to financial assistance	15	14.3
Help from other FBO members in a form farm inputs for farming	25	23.8
Transportation of farm produce after harvesting	9	8.6
Access to land for farming	12	11.4
Total	105	100.0

Field Survey, 2016

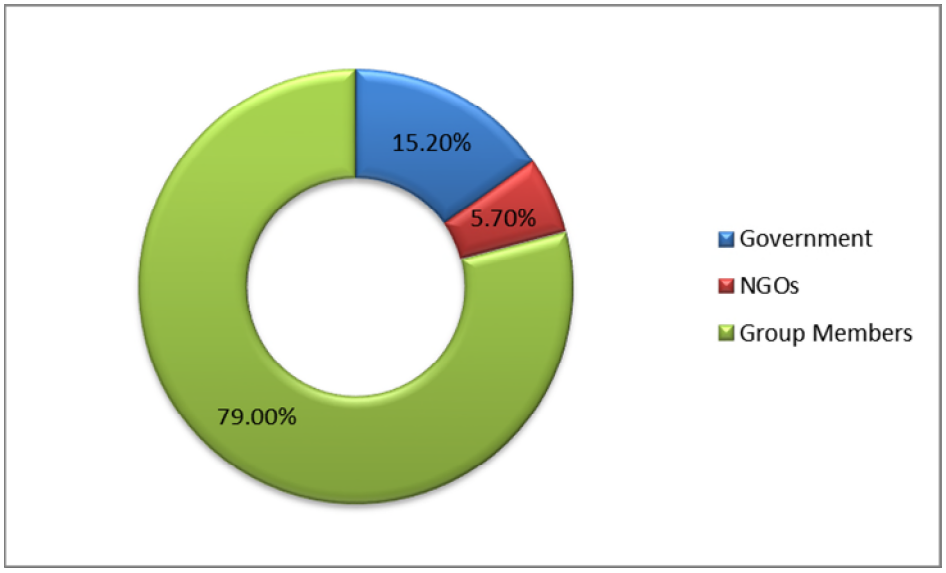
In a focus group discussion in Baglahi community with five executives of an FBO, they indicated that they are confronted with many challenges in their farming activities. The Magazia said in 2015 an organization called "Yara" provided them with fertilizer after which they should pay back. Despite the application of the fertilizer that farming season, yield was not good but still "Yara" picked two bags of maize each from each farmer after harvest. Thus worsening their situation, she stated that:

"They want to buy their own tractor and indicated that for now the group has an amount of Thirty Thousand Ghana cedis (GH¢30,000) in their accounts. According to them their making

every effort to mobilize more funds to be able to buy the tractor for their own good"

Every institution or organization needs to have a source of funding to be able to stay in business or run its administration. Organizations or institutions like the FBOs also need to have sources of funding to be able to farm and run their administration effectively and efficiently. As a result, the study also investigated the main source of funding for the FBOs in the Tamale metropolis. The study reveals that 79.0 percent of the groups rely heavily on its members for financial capital, 15.2 percent rely on government while 5.7 percent rely on Non-Governmental Organizations for financial capital (See figure 4.10 below). This finding means members of FBOs fund their activities without support from any other source. This means that members of the FBOs either contribute or pay dues and other fines to run their activities. This is an encouraging sign of success for the FBOs.

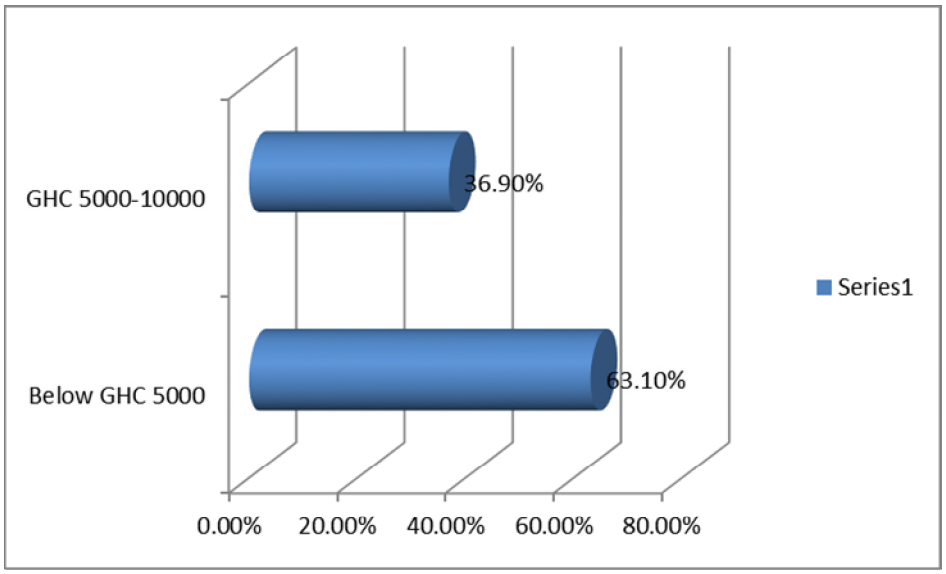
Figure 4. 10: Main Sources Financial Capital of the FBOs



Field Survey, 2016

On the amount of money FBOs benefited from their membership to fund their organizations, the study further revealed that, 63.1 percent of the groups benefitted less than GHC 5000 while 36.9 percent benefitted between GHC 5000-10000 (See figure 4. 11 below). This finding means that membership contribution to the FBOs is not up to GHC 5000, thus implying the expenditure pattern of the FBOs should not be above GHC 5000 or else the FBOs will have to go for assistance in the form of loan or grant from the government which is not easy to come by.

Figure 4. 11: Amount group benefited from Members



Field Survey, 2016

Training is an important element in the existence and running of the FBOs faming activities to improve on their agronomic practices among others. This will help improve on their farm yield or increase production in cases of manufacturing. On the issue of whether the organization gives training to its members, there was a unanimous decision as 100 percent answered in favor the organization offered training to its members. This means that FBOs members are very familiar with the agronomic practices, which is an important element in the application of various farming practices. This implies the FBOs are either producing more than they are currently doing

or manufacturing more than they are currently doing since training is aimed at improving from good to best.

One leader as well as a member interviewed stated that trainings on roles and functions of FBO members and leaders have been very useful which enabled them to contribute to their organizations. When asked what the training had changed, one FBO Chairman stated:

> *"I didn't know where my limits were initially. I thought maybe that I was the owner of the FBO. from now on I now know that it is the members that have put me there (while laughing)"*

On the kinds of training and development given to FBOs members, the study reveals that 16.2 percent of the respondents were given training on leadership skills and agronomic practices, 14.3 percent of the respondents were of the view that they were been trained on leadership skills as to how to lead and manage their FBOs in the Tamale metropolis, 12.4 percent of the respondents indicated that they were trained in best agronomic practices, and Gender issues, 11.4 percent of the respondents indicated that they were trained in organizational leadership and soap making, 10.5 percent were of the view that they were trained in agronomic practices and leadership training for members, 9.5 percent indicated that they were trained in leadership skills and Gender based issues and agronomic practices and group management skill in farming respectively, 8.6 percent of the respondents indicated that they were trained in technology management of farm produce, and 7.6 percent of the respondents indicated that they were trained on Gender issues, leadership skills and marketing farm produce (See table 4.18 below).

Focused group discussion also confirms the findings above; best agronomic practices, leadership skills, marketing strategies, training on gender issues, and improved method of farming.

Table 4. 18: Kinds of Education/training given to FBOs Members

	Frequency	Valid Percent
Agronomic practices and group management skills in farming	10	9.5
Leadership training for members	11	10.5
Education on leadership skills	15	14.3
Education in leadership and soap making	12	11.4
Leadership skills and Gender based issues	10	9.5
Gender issues, leadership skills and marketing farm produce	8	7.6
Leadership skills and agronomic practices	17	16.2
Training on technology management of farm produce	9	8.6
Training on agronomic practices, and Gender issues	13	12.4
Total	**105**	**100.0**

Field Survey, 2016

Data from the study also revealed that 94.3 percent of the FBOs members had their training annually, 2.8 percent had their training occasionally, 1.9 percent of the FBOs members had their training every two years while 1.0 percent had their training quarterly in the Tamale metropolis (See table 4.19 below). This means that almost all FBOs members have some sort of training as to how to improve the growth of their FBOs. This is an indication that the FBOs are well focused as to what they want to achieve in their agenda of growth and development.

Table 4. 19: How Often Training is done for FBOs members

	Frequency	Valid Percent
Annually	99	94.3
Every Two Years	2	1.9
Occasionally	3	2.8
Quarterly	1	1.0
Total	105	100.0

Field Survey, 2016

4.6 Recommendations that will Improve FBOs' Capacity to Develop the Agricultural Sector in Tamale Metropolis

It was revealed by the study that the groups kept 100 percent records of all its activities as shown below. This means that all FBOs in Tamale metropolis take records of their farming and business activities to sustain their organizations. The records will also help the FBOs when they are in need of funds from financial institutions as bases of their performance and experience in their field of operations. This implies FBOs in Tamale metropolis records all their transactions and operations.

Respondents gave different forms of records been kept by their FBOs as follows; attendance register and minutes; membership records and payment of dues, minutes book and attendance register and visitors book, production and minutes of meetings, financial and production records, training documents from MoFA are all records kept by FBOs in Tamale metropolis (See table 4.20 below). This contradicts what (Fulton 2010) pinpointed that most FBOs records are not properly kept.

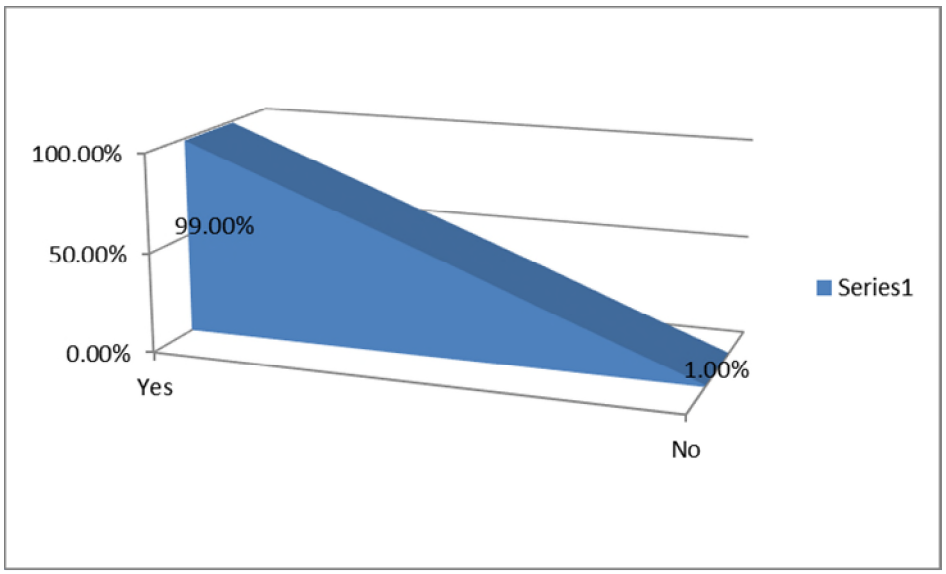
Table 4. 20: Kinds of Records Kept by FBOs in Tamale Metropolis

	Frequency	Valid Percent
Attendance register and minutes.	14	13.3
Payment of dues	13	12.4
Loans and list of members	9	8.6
Attendance register for Visitors	17	16.2
Minutes book attendance register, production	15	14.3
Minutes of meetings, attendance registers,	5	4.8
Minutes of meetings,	10	9.5
Production records	7	6.6
Training documents from MoFA	15	14.3
Total	**105**	**100.0**

Field Survey, 2016

The study revealed that the groups receive 99 percent support and as little as 1 percent less supports from stakeholders and other partners (See figure 4.12 below). This means that almost all FBOs in the Tamale metropolis have some form of support to upgrade their activities.

Figure 4. 12: Supports for Groups



Field Survey, 2016

The study also revealed some of the support FBOs members usually get from stakeholders as follows; Agro chemicals and extension services, Agronomic practices and seeds, Agronomic practices and extension services, Agronomic practices and spraying machines, Capacity building and imputes, Credit, seed and agronomics practices, Extension services, Fertilizer and Seeds, Training on leadership skills and gender issues, Training on management (See table 4.21 below).MoFA officials also confirms that they support FBOs in Tamale metropolis in different ways as stated below; technical support, input support, Training in various topics of farming and production, Edif rice support, groups dynamics and packaging.

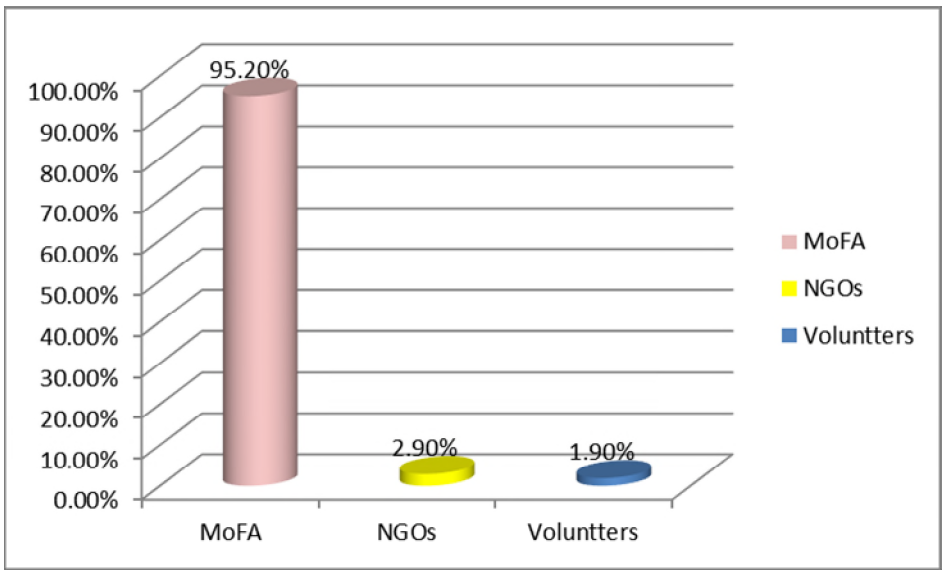
Table 4. 21: Kinds of Support for FBOs members

	Frequency	Valid Percent
Agro chemicals and extension services	17	16.2
Agronomic practices and seeds	8	7.6
Agronomic practices and extension services	13	12.4
spraying machines	18	17.1
Capacity building and inputs	10	9.5
Credit, seed and agronomics practices	13	12.4
Extension service, Fertilizer and Seed	5	4.8
Training on leadership skills and gender issues	8	7.6
Training on management.	13	12.4
Total	105	100.0

Field Survey, 2016

The study further revealed that, out of the 99 percent (in figure 13) of support the groups received, 95.2 percent of these were offered by the ministry of food and agriculture, 2.9 percent were offered by Non-Governmental Organizations and 1.9 percent was by volunteers. See figure 4/13 below. This finding means that all the support is mainly from government source to the FBOs to improve on their performance which will leads to growth.

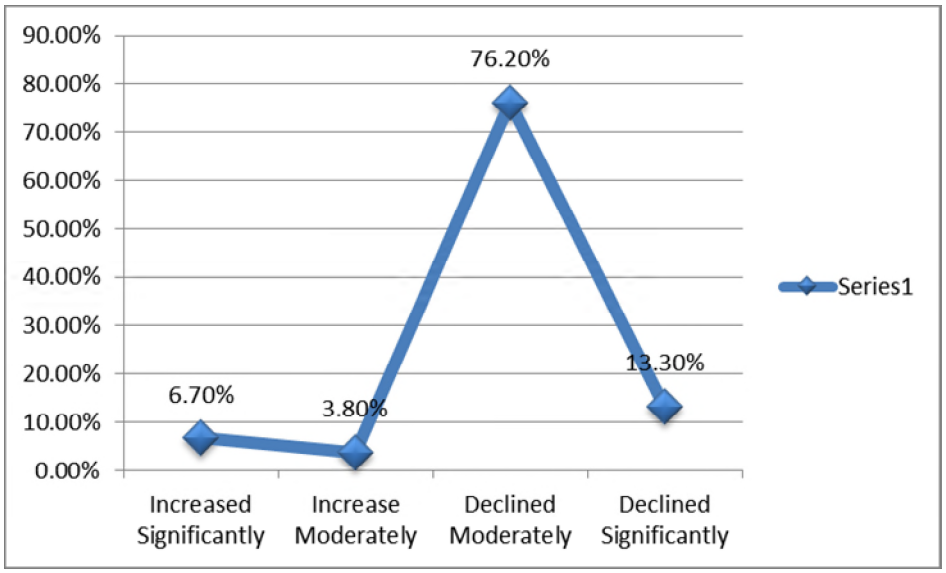
Figure 4.13 Agencies that gives Support to FBOs



Field Survey, 2016

The study on access to subsidised inputs for members of the groups, shows that, access to subsidised inputs decrease steadily from 6.7 percent to 3.8 percent and then increase sharply to 76.2 percent and finally fell sharply to 13.3 percent afterwards (See figure 4.14 below).

Figure 4. 13: Situation Regarding Access to Subsidize Inputs for Members of your Group in the last Two Years



Field Survey, 2016

In an interview with a key informant in Dakpemyili Community concerning their agribusiness activities in relation to credit, he said for the past four years they have been receiving credit from ACDEP, AFS, and SFMC. He concluded:

> *"What is keeping members of these groups together is the credit. Individuals looking for credit elsewhere is difficult"*

Table 4.22 of the student survey assesses constrains FBOs face in production in the Tamale metropolis. Some of the procedures were evaluated on an individual basis. The 1st item (questions) in the table 4.22 is "What is the trend regarding access to output markets for members of your organization in the last two years", the mean score for the question is 2.93 indicating declined moderately. The minimum score for this question is 1 i.e. "Increased significantly" and maximum score is 4 i.e. "Declined significantly". The next question in line is

"How has the average production/output level of your members changed in the last two years" also has mean score of 2.96 which is declined moderately. How has the average income of your members changed in the last two years was also the next in question for respondents in table 4.22, has a mean score of 2.95 which is declined moderately with 88.6 percent of the respondents. The 4th item in line of the questions in table 4.22 was "What is the situation regarding storage" with a mean score of 3.42 which is declined moderately with 49.5 percent response.

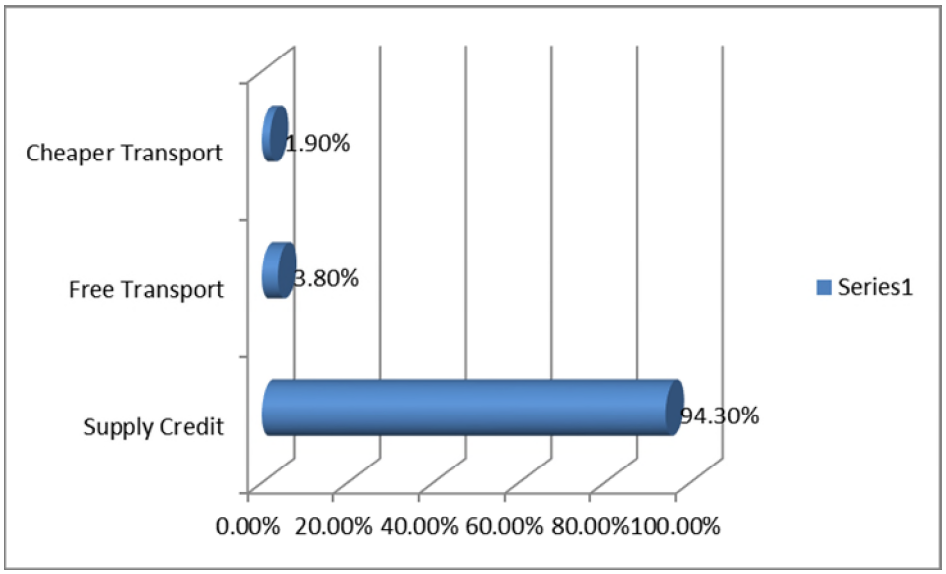
Table 4. 22: Constraints FBOs face in Production

	Minimum	Maximum	Mean	Valid percent (%)
What is the trend regarding access to output markets for members of your organization in the last two years	1	4	2.93	87.6
How has the average production/output levels of your members changed in the last two years	1	4	2.96	89.5
How has the averaged income of your members changed in the last two years	1	4	2.95	88.6
What is the situation regarding storage facilities available for the produce of your members	1	4	3.42	49.5

Field Survey, 2016

The study revealed that supply credit is the highest special facility of inputs supply with an average of 94.3 percent while free transport and cheap transport offer special facilities up to 3.8 percent and 1.9 percent respectively (See figure 4.15 below).

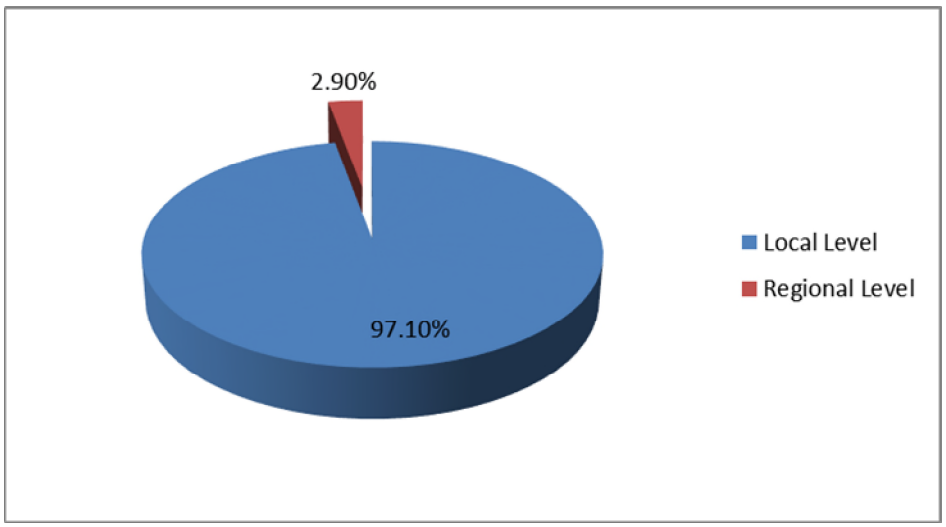
Figure 4. 14: Special Facility of Input support



Field Survey, 2016

On the issue of sale of farm produce, the study established that 97.1 percent of the produce was sold at the local level while the rest were sold at the regional level (See figure 4.16 below). This means that all FBOs in the Tamale metropolis still base most of their activities in the local market. This implies they sell greater chunk of their produce to local people within the Tamale metropolis.

Figure 4. 15: Sale of Farm Produce



Field Survey, 2016

In an interview on the sale of farm produce at Nachimbia Community with the Secondary Level FBO Secretary, he indicated that the middlemen have been cheating them all the years. According to him in measuring produce these middlemen over measure the produce to the point that the measuring bowl will be full and some produce on their hands. He concluded:

"We are seriously looking for ways to be able to establish contacts with the big buyers such as Ghana Nuts in Brong Ahafo Region. For soyabeans we are satisfied with Savana Farmers Marketing Company because they use a scale to measure the produce"

Field Survey, 2016

The study also looked at the challenges FBOs face in their quest to improve on their farming activities in the Tamale metropolis. Data from the study reveals that there are a number of challenges FBOs in the Tamale metropolis face. These challenges are as follows and also shown in table 4.23 below: Credit, market and fertilizer, Fertilizer not available, Tractor service and

seeds for planting, Lack of knowledge in agrochemicals uses , High interest rates and cost of inputs, Less access to credit and fertilizer, Lack of knowledge in technology management of farm inputs, Less access to seeds, and credit, Less credit, fertilizer and tractor services, Limited access to credit and high cost of inputs, Unstable market for farm produce. This means that FBOs in the Tamale metropolis are facing difficulties in their operations, it thus shows how the FBOs are struggling to build up their organizations in the Tamale metropolis.

MoFA officials through interview also state the following as operational challenges faced by FBOs in Tamale metropolis; Most FBOs are limited to rain feed agriculture, inadequate financial support, Support and commitment of FBOs members, no access to credit facilities, higher illiteracy rate of FBOs members is also hindering their performance, high cost of inputs, problem of ready market for farm produce, and the lack of tractor services at the peak of farming season.

Table 4. 23: Operational Challenges of members of FBOs

	Frequency	Valid Percent
Market and fertilizer	10	9.5
Storage facilities not available	12	11.4
Tractor services and seeds for planting	6	5.7
Lack of knowledge in agrochemicals applications	10	9.5
High interest rates and cost of inputs	13	12.4
Less access to credit	9	8.6
Lack of knowledge in technology management of farm inputs	11	10.5
Less access to seeds, and credit	8	7.6
Less credit fertilizer and tractor services	7	6.7
Limited access to credit and high cost of inputs	5	4.8
Unstable market for farm produce	14	13.3
Total	**105**	**100.0**

Field Survey, 2016

In the view of the respondents there are several ways by which the challenges in table 4.23 could be resolved for FBOs in the Tamale metropolis to be able to operate well or go into their farming activities without challenges. In their view they gave the following recommendations to government and stakeholders as to the way forward; government should build warehouse for storage of farm produce , partners should provide subsidy for farmers, government should supply seeds and fertilizers to farmers, government should encourage credit unions to advance funds to farmers, government and NGOs should provide seed and technology, government should provide ready market for farm produce like it's done for cocoa, Government should invest in research to improve on seeds for farmers, Stakeholders should train farmers on new and improve methods of farming , FBOs members should also seek for more knowledge in farming, Local involvement in decision making in farmer base policy, Provision of more dams for dry season farming.

Table 4. 24: Recommendation to Challenges

	Frequency	Valid Percent
Government should build warehouse for storage of farm produce	8	7.6
Government, should provide subsidy for farmers	11	10.5
Government should supply seeds and fertilizers to farmers	14	13.3
Government should encourage credit unions to advance funds to farmers	9	8.6
Government and NGOs should provide seed and technology	10	9.5
Government should provide ready market for farm produce like it's done for cocoa	7	6.7
Government should invest in research to improve on seed quality for farmers	12	11.4
Stakeholders should train farmers on new and improve methods of farming	5	4.8
FBOs members should also seek for more knowledge in farming	17	16.2
Local involvement in decision making in farmer base policy	12	11.4
Provision of more dams for dry season farming		
Total	**105**	**100.0**

Field Survey, 2016

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Summary of major findings of the study, conclusions and recommendations are presented in this chapter. The study looked at the under exploration of the potential of FBOs in agriculture in Tamale metropolis in Northern region of Ghana. Firstly, the study investigated the operational structure of FBOs in Tamale metropolis in the Northern region. Secondly, the study assessed the roles of FBOs in the development of agriculture in Tamale metropolis in the Northern region. It further identified the main constraints to the FBOs effectiveness in developing agriculture in Tamale metropolis in Northern region, and finally, it makes recommendations that will improve FBOs' capacity to develop the Agricultural sector.

5.2 Summary of Findings

5.2.1 Operational Structure of FBOs in Tamale Metropolis

On the issue of Operational Structure of FBOs in Tamale Metropolis in the Northern Region of Ghana, the study shows that 97.1 percent of FBOs operating in Tamale metropolis are officially registered as business entities in Ghana. The study also revealed that 87.6 percent of these establishments (FBOs) were initiated by the Ministry of Food and Agriculture or Government, additionally, the study established that, 54.3 percent of the organizations has their membership ranging between 1-10 people. Similarly, the study found out that, 18 organizations have a membership composition of more males than females representing 87.6 percent of the organizations, On the basis of chosen Organizations leaders, the study revealed that, 67.6 percent of all the Organizations leaders are chosen based on the number of years of service, Findings from the study further revealed that, 64.8 percent of the executives of the Organizations

have 2-3 years term of office, and finally, of all the decision making process in the Organizations, 93.3 percent of their processes are participatory.

5.2.2 Roles of FBOs in the Development of Agriculture in Tamale Metropolis

The study revealed that, 91.4 percent of the activities are linking the groups to other organizations through training needs. The study further revealed that, 81.7 percent of those part of the group's network of activities is Government. Data from the study also reveals that, 85.7 percent of the agricultural produce was marketed through community gathering, the study revealed that, 60.0 percent of the organization of transportation for members of the groups were on regular basis, also 78.1 percent of the FBOs members are able to influence the selling price of their produce,

It further revealed that 86.7 percent of the FBOs members are able to meet the contractual requirements of their customers in terms of quality and quantity demand, and finally, 89.5 percent of FBOs practice group marketing for members produce.

5.2.3 Main constraints to the FBOs effectiveness in developing agriculture in Tamale Metropolis

In an investigation conducted to find out the various constraints FBOs in Tamale metropolis faced, the following constraints were mentioned by respondents as the constraints in the Tamale metropolis. Findings from the study revealed that 16.2 percent of the respondents indicated that they lack training on leadership and management, 14.3 percent of the respondents indicate that they lack guaranteed market for their farm produce, 13.3 percent of the respondents indicated that they lack improved seed for farming, 12.4 percent of the respondents indicated that they lack of improved seeds and tractor services for farming.

5.2.4 Recommendations to improve FBOs' capacity to develop the Agricultural Sector

In the view of the respondents there are several ways by which the constraints of FBOs could be resolved for FBOs in the Tamale metropolis to be able to operate well or go into their farming activities without challenges. They gave the following recommendations to government and stakeholders/partners as a way forward; Government should build warehouses for storage of farm produce , Government, should provide subsidy for farmers, Government should supply seeds and fertilizers to farmers, Government should encourage credit unions to advance funds to farmers, Government and NGOs should provide seed and technology, Government should provide ready market for farm produce like it's done for cocoa, Government should invest in research to improve on seeds for farmers, Stakeholders should train farmers on new and improve methods of farming , FBOs members should also seek for more knowledge in farming, Local involvement in decision making in farmer base policy, Provision of more dams for dry season farming.

5.3 Conclusions

The study concluded that most FBOs in peri-urban Tamale are officially registered to do business in Ghana. For these establishments (FBOs) again, almost all of them were initiated by the Ministry of Food and Agriculture or Government, FBOs leaders are chosen based on the number of years of service, and the executives of the Organizations have 2-3 years term of office, and decision-making process in the FBOs are participatory. It also established that agricultural produce of FBOs are marketed through community gathering and are able to influence the selling price of their produce and also FBOs members are able to meet the contractual requirements of their customers in terms of quality and quantity demand. FBOs in the Tamale metropolis; lack of training on leadership and management, lack of guaranteed market

for their farm produce, lack of improved seed for farming, and lack of improved seeds and tractor services for farmers.

5.4 Recommendations

A study on the role of famer-based organizations in agricultural development with no recommendation on how to properly mainstream FBOs into the agricultural strategy would be seen to be incomplete. On the basis of the conclusions drawn, the following recommendations are proposed for consideration:

I) MoFA officials need to be well resourced by government to ensure continuous collaboration with FBOs in peri-urban Tamale. Thus, agricultural extension agents (AEAs) should be provided with efficient motorbikes to facilitate extension service delivery. This consequently can facilitate efficient monitoring and reporting system so that the performance of these FBOs can be tracked. In addition, lack of capacity and funds hamper the reach of extension services in peri-urban Tamale

II) Development Partners should nurture these FBOs and help them to establish working relationships with the financial institutions. A good relationship established between these bodies can let the FBOs access loans with ease and become financially viable in running their farming activities. Respondents referred to high cost of agricultural inputs for poor famers. They stressed the need for “supervised credit” as well as capacity building of farmers in credit management.

III) Development Actors should assist FBOs to Access guaranteed markets and good price for their produce. This may facilitate effective running of these FBO. Farmers and their organizations would be better equipped to participate effectively in decision making if they have access to information relevant to their activities

IV) Additionally, education they say is the bedrock of development. Thus, stakeholders networking with these FBOs should try as much as possible to provide intensive and frequent education as well as training to these FBOs so that they can be equipped with the necessary skills in areas such as group management, conflict resolution procedures, keeping of proper records, preparing simple business plans, etc.

V) Input supply centres should be created by government in the metropolis. In these centres inputs such as improved seed, fertilizer, insecticides, approved agrochemicals would be stocked for FBOs to access at subsidized prices. This when done will prevent the up and down movements of farmers and FBOs during the farming season.

VI) To ensure all year-round farming, irrigation cannot be done without. Therefore, government should provide FBOs with efficient irrigation facilities so that they would be able to produce all year round in their operational areas. Agricultural intensification is essential in peri-urban Tamale. Thus, improving food security requires irrigated agriculture. Irrigated agriculture will keep more youth on the field and will form the basis for improving market-oriented agriculture as well as agro-industries.

VII) In a related development, FBOs need to be sensitized on issues of gender inclusion in their agricultural development activities. This can be facilitated by development actors and other stakeholders concerned Thus decisions relating to agricultural activities do not affect only men or women and that ideas in relation to handling FBOs issues sustainably can come from both sexes

VIII) Besides, when FBOs produce and do not know where to store their produce it becomes waist. Thus, all stakeholders involved in networking with these entities should come together

collaboratively in this direction by providing our noble FBOs with efficient and good quality storage facilities.

IX) Soils that these FBOs cultivate are now weak and infertile because of continuous cultivation and the application of chemical fertilizers. To resuscitate our farmlands back we need to practice integrated soil fertility management. This can be done by embacking on serious and aggressive composting practices to support the weak and infertile soils that the FBOs cultivate. Again, partners and stakeholders should collaborate and see how they can best support FBOs to adopt the practice of applying cow dung or poultry droppings on their farmlands especially during the dry season.

5.5 Considerable areas for Further Research

Further study is needed to better understand the costs and benefits of supporting and promoting these FBOs and the type of training and support they need. Besides, follow-up studies using in-depth assessment of selected FBO will be useful in identifying what members really gain from these organizations, what the quality of participation and feedback mechanisms are within FBOs and factors that affect the sustainability of these FBOs. Also, assessment studies on the impact of FBO on their members incomes, food and nutrition, welfare and other areas for further research that concern them.

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APPENDICES

1.9 Appendix I: *Research Questionnaire*

UNIVERSITY FOR DEVELOPMENT STUDIES

FACULTY OF INTEGRATED DEVELOPMENT STUDIES

DEPARTMENT OF AFRICAN AND GENERAL STUDIES

Dear Respondent

I am carrying out a study on the topic **"The Role of Farmer-Based Organizations in Agricultural Development in peri urban Tamale"** This study is part of my Master's Thesis. The study is based on a selected sample in Northern Region, so your active participation is important. The outcome of this study will enhance knowledge on the role of Farmer-Based Organizations (FBOs) in Agricultural Development.

I do understand that your time is valuable, I believe the exercise will only take about thirty minutes (30m) of your time. Information gathered however, will be treated confidentially, and the results will be presented in such a way that no individual may be recognized.

Thank you for your time and contribution

Sincerely,

Signature,

Bugli Clifford: 0205915524 or 0243957210

Research Questions

NOTE: Please provide the correct information that applies to you by ticking (√) in the appropriate box of your choice and also fill in the blank space where necessary. Please give only ONE answer.

PART I

Personal Data for Respondents

Date ----------

Name of Community ----------

Type of Respondent [ ] MoFA Directors [ ] FBO leaders [ ] Key Informants [ ] Staff of MoFA [ ]

Agricultural Input Dealers [ ] FBO members { } NGOs ( )

1. Sex : 1 [ ] Male 2. [ ] Female

2. Age [ ] 22 and below 23 – 33 years [ ] 34 – 44 year [ ] 45 – 54 years [ ] 55- 64 years [ ] 65 and above { }

3. Marital status [ ] Single [ ] Married [ ] Divorced [ ] Widowed

4. Which of the following best describes your level of education?

Degree holder [ ] HND [ ] Postgraduate [ ] SSS/SHS [ ] JSS/JHS [ ] No formal education [ ]

PART II

SECTION A: Organizational Structure

5. Has this group been officially registered? Yes [ ] No [ ]

a. If yes identify the year in which your organization was registered

Before 2001 [ ] 2001-2003 [ ] 2004-2006 [ ] 2007- 2009

b. If no, Why? ----------

6. Which of the following bodies initiated the establishment of this group?

MoFA/Government [ ] NGO [ ] A Group of people within the community [ ] Department of Cooperatives ( )

Others (specify) ----------

7. What is the total number of membership in your organization?

1-10]] 11-20 [ ] 21-30 [ ] 31+ [ ]

8. What is the gender composition of your organization?

More males than females [ ] More females than males [ ]

Equal number of males and females [ ]

9. On what basis do you choose your leaders?

Long service [ ] Age]] Education [ ] Others (please specify) ----------

10. How do you select your leaders?

Voting [ ] Appointment [ ] Others (Specify) ----------

11. Does your organization have laid down rules that govern its operations?

Yes [ ] No [ ]

a. If yes, how are they enforced? ----------

b. If no, why? ----------

Please choose the appropriate option that applies to you by ticking in the bracket of your choice

12. How transparent is the process of appointing members of the executive/group leaders in this group?

Very transparent ( ) less transparent ( )

Transparent ( ) fairly transparent ( ) not transparent ( )

13. What is the term of office of the executives/group leaders in this organization?

Less than two years ( ) maximum of five years ( )

2 – 3 years ( ) more than five years ( ) maximum of four years ( )

14. How are decisions made in this group/organization?

By the chairperson ( ) through a meeting of the executives ( )

in consultation with other members ( ) other procedures (specify) ----------

15. How often does the leadership consult with and report to other members about decisions that affect the group?

Quite often ( ) Often ( ) moderately ( ) occasionally ( ) not at all ( )

16. How would you describe the decision making process in your group?

Very participatory ( ) participatory ( ) moderately participatory ( ) less participatory ( )

Not participatory at all ( ) none of the above ( )

17. What is the format of your meetings?

Agenda items are subject to discussion by members ( ) members agree on agenda ( )

non of these things take place ( )

18. Please tick the appropriate answer of your choice to the following questions.

Question	(1) Excellent	(2) Very good	(3) Good	(4) Fair
A). How would you rank the quality of the meetings for your group?				
B). How would rate the experience of the group executives in handling group dynamic issues				
C). How would you rate the performance				

of the leaders that they really represent the interest of the group members				
D). The cordial relationship between group executives and members is ---				
E). how would you rank the system of evaluating the performance of the group executives.				

19. Do you have an office for the organization?

Yes [ ] No [ ]

a. If yes, where is it located?

Within the community [ ] Outside the community [ ]

b. If no, where do you keep your documents? ----------

---

20. Please indicate how members of the FBO are involved in organizing meetings

Question	(1) Always	(2) occasionally	(3) Seldom	(4) Not at all
A) How do FBO members organize meetings as a group?				
B) How do you often participate in those meetings?				
C) In the decision making process, how do you see yourself participating?				
D) I take part in the decision making process in the group/FBO				
E) I attend meetings organized by the FBO members in the community				
F) I pay membership dues and other levies to the FBO/group				

Section B Assessment of the FBOs Role in Agriculture

21. Does your group have objective(s) for its activities?

Yes [ ] No [ ]

a. If yes, state the main objective(s) of you organization ----------

---

---

b. how significant are annual deviations from achievement of objective(s)

very serious { } serious { } fairly serious { } less serious { } not serious at all { }

22. How have you been making your activities known?

Through workshops ( ) through radio programs ( )

Through agricultural shows ( ) adverts in the news papers ( )

23. At what level are your activities known?

At village level ( ) at district level ( ) at national level ( ) at international level ( )

24. Provide the main activity that links your group with other organizations

Training needs ( ) input needs ( ) funding needs ( ) others (specify) ----------

---

---

25. Over the years who has been part of your network?

NGOs ( ) Government/MoFA ( ) International Development Agencies ( ) Others (specify)-

---

26. Over the years, indicate the avenues, you used to influence national policies in favour of group members.

Meeting with government ( ) policy conferences ( ) policy documents your group

participated in formulating ( ) others (specify) ( )

27. How wide is the agricultural produce range of members of this group/organization?

Very wide ( ) narrow ( ) wide ( ) very narrow ( ) moderate ( )

28. How does the group market members' agricultural products/produce?

Agricultural shows ( ) radio adverts and talk shows ( )

Community gatherings ( ) others (specify) ----------

29. Does the group organise transport to the markets for its members;?

Regular group transport available ( ) irregular group transport available ( )

Members arrange individual transport ( )

30. Indicate how you agree or disagree on the following issues. Strongly Agree ( ) Agree ( ) Uncertain ( ) Disagree ( ) Strongly Disagree ( )

Questions	1	2	3	4	5
A). The trend regarding collective produce sold through your group in the last two years has been good					
B). Efforts made by your group in marketing members produce is appreciable					
C). Your group is able to meet specific requirements and standards set by its clients					
D).The group members are able to meet the contractual requirements of their customers in terms of quality and quantity demanded					
E).Members of the group are able to influence the selling price of their produce					

31. Does your organization create opportunities, in terms of agricultural production for its

members? Yes [ ] No [ ]

a If yes to 31 above, by what means? ----------

b. If no, why? ----------

32.a What is the main source of financial capital for your organization/group?

Government [ ] NGOs [ ] Group members [ ]

b. How much has your group benefited in response to 32 above ? ----------

33. Does your organization give education and training to group members?

Yes [ ] No [ ]

a.(i) If yes, what kind of education and training? ----------

---

(ii) How often? ----------

b. If no, why? ----------

Section C Challenges of FBOs Operation

34. Does your group keep records?

Yes [ ] No [ ]

a. If yes, state the kind of record(s) ----------

---

b. If no, why? ----------

35. Does your group get support from somewhere?

Yes [ ] No [ ]

a (i) If yes, what kind of support does the group get? ----------

---

(ii) Which agencies give this kind of support? ----------

---

b. If no, why? ----------

---

36 Please tick the appropriate box in relation to the constraints that FBOs face in production

Question	(1) Increased significantly	(2) Increased moderately	(3) Declined moderately	(4) Declined significantly
A). what is the situation regarding access to subsidized inputs for members of your group in the last two years?				
B. what is the trend regarding access to output markets for members of your group in the last two years?				
C). How has the average production/output levels of your members changed in the last two years?				
D). How has the average income of your members changed in the last two years ?				
E. what is the situation regarding storage facilities available for the produce of your members?				

37. Do your members input suppliers' offer special facilities?

Supply credit ( ) Free transport ( ) Cheaper transport ( )

Purchase discounts ( ) others (specify)

38. Where do you sell most of your produce?

Local ( ) International ( ) Regional ( ) others (specify)

Are the group members regularly updated on the financial status of the group's account?

Yes [ ] No [ ]

a. If yes, how often? ----------

b. If no, why? ----------

---

39. Are the community members aware of the presence of this group/organization?

Yes [ ] No [ ]

a. If yes, how do you know? ----------

b. If no, why? ----------

40. Does your group face challenge(s) in its operations?

Yes [ ] No [ ]

a If yes, state some these challenges ----------

Section D Some Suggested Recommendations

41. Suggest possible ways of solving the challenges mentioned in 40 above ----------

---

---

42. Do you have any other thing(s) to share with me that we have not talked about it?

Yes [ ] No [ ]

If yes, state them ----------

1.10 Appendix II: Questionnaire for MoFA District Directors and NGOs

UNIVERSITY FOR DEVELOPMENT STUDIES

FACULTY OF INTEGRATED DEVELOPMENT STUDIES

DEPARTMENT OF AFRICAN AND GENERAL STUDIES

Dear Respondent,

I am carrying out a study on the topic **"The Role of Farmer-Based Organizations in Agricultural Development in peri urban Tamale"** This study is part of my Master's Thesis. The study is based on a selected sample in Northern Region, so your active participation is important. The outcome of this study will enhance knowledge on the role of Farmer-Based Organizations (FBOs) in Agricultural Development.

I do understand that your time is valuable, I believe the exercise will only take about thirty minutes (30m) of your time. Information gathered however, will be treated confidentially, and the results will be presented in such a way that no individual may be recognized.

Thank you for your time and contribution

Sincerely,

Signature,

Bugli Clifford: 0205915524 or 0243957210

PART I

PERSONAL DATA FOR RESPONDENTS

1. Sex: 1 [ ] Male 2. [ ] Female

2. Age: Below 30 [ ] 31-40 [ ] 41-50 [ ] 51-60 [ ] 61 and above [ ]

3. Level of education: Basic [ ] Secondary [ ] Tertiary [ ] others [ ]

4. For how long have you been in this position?

1-5 years [ ] 6-10 years [ ] 11 + [ ]

PART II

SECTION A: ASSESSMENT OF ROLES AND CHALLENGES OF FBOS

5. How many FBOs operate in agricultural activities in this district?

1-5 [ ] 6-10 [ ] 11+ [ ]

6.. Have they all been registered?

Yes [ ] No [ ]

If no, why? ----------

---

7. Do you monitor the activities of these FBOs?

Yes [ ] No [ ]

a If yes, how often do you monitor the activities of these FBOs?----------

---

b. If no, why? ----------

---

8. Do these FBOs activities in your district help in the development of agriculture?

Yes [ ] No [ ]

a. If yes to 8 above, state some of the activities that these FBOs do in the district ----------

---

---

b. If no, what activities do you expect from these FBOs to ensure agricultural development? -----

---

9. What kind of impression do you have about the level of performance of these FBOs?

Positive [ ] Negative [ ]

Kindly state your reason(s) ----------

---

10. Does your office offer the FBOs some sort of support?

Yes [ ] No [ ]

a If yes, state the kind(s) of support/services your office offer ----------

---

b. If no, why? ----------

---

11. How often does your office offer such support/services to these FBOs if yes to 10 above?

All the time [ ] Monthly [ ] Quarterly [ ] yearly [ ]

12. Identify the major problems of the FBOs in your district ----------

---

Section B: Suggested Recommendations for the improvement of the FBOs

13. What do you think should be done to improve the performance of these FBOs?

---

14. Do you have any other thing(s) to share with me that we have not talked about it?

Yes [ ] No [ ]

If yes, kindly state them ---

1.11 Appendix III: Interview Guide for Focused Group Discussions (for group executives)

Part A:

The Organizational Structure

1. a Has your group been officially registered?

b. Do you have an office?

2. Where do you keep the group's documents?

3. On what basis and how do you select leaders in your group?

Part B:

Assessment of FBOs Roles in Agriculture

4. a Does your group operate with set objective(s)?

b. State the objective(s) of your group

5. a. Do your groups give education and training to group members?

b. Mention the kind(s) of education and training that your group gives to group members

6. What kind(s) of opportunities do you derive from your organization as members?

Part C:

The Challenges of FBOs Operations

7. How do you get money to sustain your group/organization?

8. What are some of the challenges that confront your group?

9. Please, do you have any other thing to share with me that we have not talked about?

1.12 Appendix IV: Questionnaire for MoFA District Extension Staff

UNIVERSITY FOR DEVELOPMENT STUDIES

FACULTY OF INTEGRATED DEVELOPMENT STUDIES

DEPARTMENT OF AFRICAN AND GENERAL STUDIES

Dear Respondent,

I am carrying out a study on the topic **"The Role of Farmer-Based Organizations in Agricultural Development in peri urban Tamale"** This study is part of my Master's Thesis. The study is based on a selected sample in Northern Region, so your active participation is important. The outcome of this study will enhance knowledge on the role of Farmer-Based Organizations (FBOs) in Agricultural Development.

I do understand that your time is valuable, I believe the exercise will only take about thirty minutes (30m) of your time. Information gathered however, will be treated confidentially, and the results will be presented in such a way that no individual may be recognized.

Thank you for your time and contribution

Sincerely,

Signature,

Bugli Clifford: 0205915524 or 0243957210

PART I

PERSONAL DATA FOR RESPONDENTS

1. Sex: 1 [ ] Male 2. [ ] Female

2. Age: Below 30 [ ] 31-40 [ ] 41-50 [ ] 51-60 [ ] 61 and above [ ]

3. Level of education: Basic [ ] Secondary [ ] Tertiary [ ] others [ ]

4. For how long have you been in this position?

1-5 years [ ] 6-10 years [ ] 11 + [ ]

PART II

SECTION A: ASSESSMENT OF ROLES AND CHALLENGES OF FBOS

5. How many FBOs operate in agricultural activities in this district?

1-5 [ ] 6-10 [ ] 11+ [ ]

6.. Have they all been registered?

Yes [ ] No [ ]

If no, why? ----------

---

7. Do you monitor the activities of these FBOs?

Yes [ ] No [ ]

a If yes, how often do you monitor the activities of these FBOs?----------

---

---

b. If no, why? ----------

---

8. Do these FBOs activities in your district help in the development of agriculture?

Yes [ ] No [ ]

a. If yes to 8 above, state some of the activities that these FBOs do in the district ----------

---

---

b. If no, what activities do you expect from these FBOs to ensure agricultural development? -----

---

9. What kind of impression do you have about the level of performance of these FBOs?

Positive [ ] Negative [ ]

Kindly state your reason(s) ----------

---

10. Does your office offer the FBOs some sort of support?

Yes [ ] No [ ]

a If yes, state the kind(s) of support/services your office offer ----------

---

b. If no, why? ----------

---

11. How often does your office offer such support/services to these FBOs if yes to 10 above?

All the time [ ] Monthly [ ] Quarterly [ ] yearly [ ]

12. Identify the major problems of the FBOs in your district ----------

---

Section B: Suggested Recommendations for the improvement of the FBOs

13. What do you think should be done to improve the performance of these FBOs?

---

14. Do you have any other thing(s) to share with me that we have not talked about it?

Yes [ ] No [ ]

If yes, kindly state them ----------