

UNIVERSITY FOR DEVELOPMENT STUDIES

**A COMPARATIVE STUDY OF THE NORTHERN RURAL GROWTH
PROGRAMME AND MASARA N'ARZIKI AGRICULTURAL CREDIT
SCHEMES IN THE WA WEST DISTRICT OF THE UPPER WEST REGION**

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(UDS/MDM/0247/12)

**THESIS SUBMITTED TO THE DEPARTMENT OF GOVERNANCE AND
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MANAGEMENT**

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DECLARATION

I, Fidelis Belekpetaa Naapaneh, author of this thesis report do hereby declare that the work presented in this thesis: “a comparative study of the Northern Rural Growth Programme and Masara N’Arziki agricultural credit schemes in the Wa West District of the Upper West Region” is the result of my original work in the Department of Governance and Development Management of the Faculty of Planning and Land Management, University for Development Studies. This work has never been presented in whole or part for any other degree of the university or elsewhere.

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I hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines on the supervision of thesis laid down by the University for Development Studies.

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ABSTRACT

In developing countries, various agricultural credit schemes have been implemented by both government and civil society organizations as a way of overcoming the challenges of access to credit by the actors in agricultural value chains, particularly farmers. This study used the cross sectional research design to examine how effective and efficient the Masara N'Arziki and the NRGP Agricultural Credit schemes are in meeting the credit needs of farmers in the Wa West District of the Upper West Region of Ghana. The study employed mainly qualitative methods in the collection and analysis of the data. It was found that Masara N'Arziki was more effective as compared to NRGP in providing farmers' credit in the required volumes, at the right time, delivered at the right place and providing access to timely and acceptable market prices. It was however found out that NRGP is more efficient than Masara N'Arziki in respect of the cost of the credit to farmers. The study discovered that the two lending organizations disburse their credit to groups and not individuals. Although this approach enabled the organizations to easily recover their credit, it did not recognize the peculiar needs of farmers. Farmers under the NRGP complained of late receipt of credit, often in May or June, by which time farmers would have already started their farming activities. The study concludes that although the NRGP and Masara N'Arziki credit schemes have generally facilitated farmer access to credit, they have not effectively addressed the needs of farmers, in ways that can enhance the former's capacities for sustainable production. The study thus submits that organizations which provide credit to farmers should design their schemes mindful of the needs of farmers for timely delivery of credit as well as the volume of credit needed. The study further recommends that further research should be conducted on the nature of wins or losses associated with agricultural credit actors.



DEDICATION

I dedicate this work to all the small holder farmers in Ghana who work assiduously and break all the odds that confront them in their farm activities to put food on the tables of all mankind.



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ACRONYMS

ACDEP	Association of Church Development Projects
AEA	Agriculture Extension Agent
AGRA	Alliance for Green Revolution in Africa
BAAC	Bank for Agriculture and Agricultural Cooperatives
CARD	Centre for Agriculture and Rural Development
CBN	Central Bank of Nigeria
CSO	Civil Society Organization
CUA	Credit Union Association
DA	District Assembly
DADU	District Agriculture Development Unit
DoC	Department of Cooperatives
DVCC	District Value Chain Committee
FAO	Food and Agricultural Organization
FASDEP	Food and Agricultural Sector Development Policy
FBO	Farmer Based Organization
FIs	Financial Institutions
GDP	Gross Domestic Product
IDs	Input Dealers
IFAD	International Fund for Agriculture Development
JLG	Joint Liability Group
MiDA	Millennium Development Authority
MoFA	Ministry of Food and Agriculture
MSPs	Mechanization Service Providers
NBSSI	National Board for Small Scale Industries
NEPAD	New Partnership for Africa's Development



NGOs	Non-Governmental Organizations
NRGP	Northern Rural Growth Programme
PCG	Partial Credit Guarantee
RCB	Rural Community Banks
RFIs	Rural Financial Institutions
SADA	Savannah Agricultural Development Authority
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Science
UWR	Upper West Region



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CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background

Agriculture has been a critical sector in the economic development of countries the world over. Historians have observed the recurrence of a sequence whereby agricultural revolution predated successful industrial revolutions (McCloskey, 2004; Berg & Hudson, 1992). In the theories of economic development propounded by Lewis, agriculture was seen as the basis for industrial growth and development. It has therefore been the bed rock upon which the advanced economies of the world rose to industrialization. Agriculture helped to lower the prices of food for industry and cheaper labour for industrial employment in eighteenth century England. In most developing countries where industrial production is at a minimal level, agriculture contributes to national development by providing food and employment for the teeming population, supplying raw materials to the industrial sector, and constituting a major source of foreign exchange earnings (Anthony, 2010).

Agriculture in Ghana is one important contributor to the socio-economic and political development of the country. Ranging from employment, to food security and to GDP, Ghana's agriculture has been a major contributor to economic development since independence. In 1997, the sector's contribution to GDP was 40.4%, 39.6% in 2000, 39.8% in 2003, 30.4% in 2006 and 30.2% in 2010 (MoFA, 2011). Its declining contribution to GDP notwithstanding, the sector's contribution is still significant. The sector has also been a major source of employment to several of the population, supporting at least 80% of the total population economically through farming (MoFA, 2011). According to the Food and Agriculture Sector Development Policy (FASDEP



II), it is estimated that about 2.74 million households operate a farm or keep livestock. According to the 2000 population and housing census, 50.6% of the labour force, or 4.2 million people, are directly engaged in agriculture (Ghana Statistical Service, 2013b). In 2010, agriculture, including forestry and fishing, constituted the largest industry employing 42.0 percent of the workforce aged 15 years and above (Ghana Statistical Service, 2013a).

Its contribution to foreign exchange has also been remarkable over the years. In 2010 alone, value of agricultural non-traditional exports amounted to US\$ 164.9 million compared to US\$ 74.5 million in 2000 (MoFA, 2011). According to the Bank of Ghana's 2012 annual report, the value of timber product exports amounted to US\$121.4 million whilst receipts from the export of cocoa beans amounted to US\$635.9 million. The share of cocoa beans alone to total exports was 16.2 % in 2012 compared to 15.9 % in 2011 (Bank of Ghana, 2013). The sector has also made significant contributions to food security in the country. Total volume of major crops alone in 2010 summed up to over 30 million metric tons, with cassava contributing over 13.5 million metric tonnes (MoFA, 2011).

Though the sector still contributes to GDP and employment and the general economic development of the country, it has been realised that growth in the sector in the last three years has been low and on a decline. In 2012, the agriculture sector grew by just 1.3% compared to a growth rate of 7.0 % in the industry sector. Though the estimates showed an improvement in the growth of the agriculture sector compared with a growth of 0.8 per cent in 2011, the sector's contribution to the economy continued to decline. The share of the agriculture sector declined from 25.3 per cent of GDP in 2011 to 22.7 per cent in 2012 (Bank of Ghana, 2014). Its contribution to employment



has also witnessed a decline over the years, falling from 50.6% in 2000 to 42% in 2010 (Ghana Statistical Service, 2013a). It is thus obvious that notwithstanding the immense contributions that the agriculture sector has made to the socio economic development of the country over the years, the sector is still bedeviled with several challenges preventing the sector from experiencing massive growth.

The slow growth of agriculture is due to a combination of factors that reduce farmers' incentives to invest and produce. A major challenge is the limited access to credit by the actors in agricultural value chains, particularly farmers (Ayaz and Hussain, 2011). Small and large farmers as well as the non-farm population in agriculture sector all suffer from the problem of lack of capital. Small farmers particularly face cumbersome procedures and collateral problems in accessing credit (Ahmad, 2011). Often times, farmers are uncomfortable with the banking procedures of filling application forms, providing passports, and getting a witness or guarantor. According to Etwire, Dogbe & Nutsugah (2013), the Agricultural Development Bank requires that farmers and farmer groups submit a viable business proposal for assessment before a loan is granted. Even the long periods that these loans usually take, from credit officers to management and then to board of directors, before they are approved, sometimes keep the farmers in suspense on the fate of their loan request. Adding to the challenges of farmers sourcing credit is the occasional disappointment or the bank's failure to approve or disburse the credit facility to farmers. Where the credit is approved, it is sometimes far below the amount requested or disbursement is done very late. Besides, the high processing fees and interest rates charged further worsen the challenge of access to credit.



Consequently various agricultural credit schemes have been implemented by both government and civil society organizations as a way of overcoming the challenges of access to credit for the agricultural sector the world over.

In Northern Ghana, different credit schemes have been implemented by both government and civil society organizations. These include the Production and Term Financing Credit Schemes of Stanbic Bank Ltd, the in-kind credit scheme of Masara N`Arziki, and the Cashless Value Chain Crop Financing Scheme of CARD (Etwire et al., 2013). Others also include in-kind credit schemes of the Livestock Development Project, Block Farming Project, SADA and the credit linkage scheme under the Northern Rural Growth Programme all of which have been funded by central government. Though several agricultural credit schemes have existed in Ghana and Upper West for that matter, little is known about the effectiveness and efficiency of these schemes. With the implementation of the in-kind credit scheme of Masara N`Arziki and the Credit Scheme under the Northern Rural Growth Programme in the Wa West District since 2010 and 2012 respectively, little is known about how these are effective and efficient in meeting the credit needs of farmers in the district. This study therefore seeks to compare the effectiveness and efficiency of the two credit schemes, how they both deliver credit to farmers and the challenges encountered in the credit delivery of the two credit schemes in the UWR of Ghana.

1.2 Problem Statement and Analysis

Farming is one of the oldest professions of mankind. It has provided food and employment to many people over the years. To do proper farming, one needs access to land, inputs and good weather conditions. The major factor which can easily be influenced to help improve farm yields is the input. However, most farmers in Ghana



lack the appropriate inputs for their farming activities. Most farmers lack the necessary finances and credit. Lack of access to credit has been identified as one of the main factors militating against the development of smallholder agriculture (Etwire, Dogbe & Nutsugah, 2013). It is believed that one of the major solutions to the issue of credit that small holder farmers face is the establishment of farmer credit schemes. This has led to the establishment of farmer credit schemes to help give some form of support to farmers both in kind and in cash.

In the Wa West District, various credit delivery methodologies are being adopted by government and civil society organizations (CSO) in the delivery of credit to farmers. These include the Masara N'Arziki credit scheme, the partly donor funded Northern Rural Growth Programme (NRGP), government's Block Farm project, and SADA Project among others. The Masara N'Arziki and the NRGF credit schemes are major credit sources for farmers in the District. However, little is known about the effectiveness of these credit schemes in meeting the credit needs of farmers. As observed by Kuwurno et al (2012), several factors including loan size received, visits by the bank before and after loan disbursement, loan delays and extension visits, determine the effectiveness of a credit facility. The study therefore sought to compare the effectiveness and efficiency of the Masara N'Arziki and the NRGF credit schemes in the District. This study determined how credit is delivered by both schemes, how effective and efficient the two schemes are and how agricultural credit to farmers can ensure sustainable agricultural production. ***Therefore, the problem which attracts the interest of this research is the little knowledge about the effectiveness and efficiency of the Masara N'Arziki and the NRGF credit schemes in meeting the credit needs of farmers in the Wa West District.***



1.3 Research Questions

1.3.1 Main Research Question

- ✚ How effective and efficient are the Masara N'Arziki and the NRGP Agricultural Credit schemes in meeting the credit needs of farmers in the Wa West District of the Upper West Region of Ghana?

1.3.2 Sub-Research Questions

- ✚ How is credit delivered by the two schemes?
- ✚ How effective and efficient are the two credit schemes?
- ✚ How can agricultural credit to farmers ensure sustainable agricultural production?

1.4 Research Objectives

1.4.1 Main Research Objective

- ✚ To ascertain the effectiveness and efficiency of the Masara N'Arziki and NRGP Agricultural Credit schemes in meeting the credit needs of farmers in the Wa West District of the Upper West Region of Ghana

1.4.2 Sub-Research Objectives

- ✚ To examine how credit is delivered by both schemes
- ✚ To assess the effectiveness and efficiency of the two credit schemes
- ✚ To recommend alternative ways to ensure improved sustainable agricultural production by agricultural credit



1.5 Significance of Study

Access to finance remains a major challenge for smallholder farmers in most developing countries (Onumah and Meijerink, 2012). It has been argued by some researchers that providing rural farmers with credit will increase output and productivity. However, it is one thing having a credit scheme in place and another having it effectively implemented to meet the needs of its intended beneficiaries. A comparative study of the Masara N'Arziki and NRGP credit schemes was to establish how effective and efficient each credit scheme was in meeting farmers' credit needs. The research would also serve as an informed decision making tool to management of the two credit schemes on best strategies to employ to make their schemes more effective to their farmers.

This also served as basis for recommendations on best strategies to employ in delivering credit to farmers in the country and beyond. It will therefore inform government and other policy makers on the multiplicity of factors to consider in designing future credit schemes so as to make them more beneficial to farmers.

The research also contributed to the body of knowledge on agricultural credit schemes to farmers. Besides it also added to literature on comparative studies on agricultural credit schemes.

1.6 Scope of Study

The study focuses on the Wa West District of the Upper West Region where the Masara N'Arziki and NRGP credit schemes are being delivered. The study was restricted to beneficiaries of the credit schemes. It however included all stakeholders delivering the two credit schemes. It was also limited to selected communities where



the two credit schemes were delivered since it is believed that the findings from the selected communities can be generalized for the other beneficiary communities.

Contextually, the study looked at how the two schemes deliver credit to farmers, reclaiming and reducing default in payments, the effectiveness and efficiency of the two credit schemes and also some of the challenges the credit schemes and the farmers face.

1.7 Limitations of the Study

The limitations of the study included the limited time that the study needed to be carried out. As an academic exercise, there are deadlines attached to this study hence, it limits the number of respondents that could be covered.

Finance was another challenge faced by the study. This is because the researcher had to use his personal finances to carry out the study. It is believed that, if the researcher could get some external financial support, the study could be done more extensively and in a more detailed manner.

Also, because the study concerned farmers, the researcher could only meet the farmers in the evenings. The researcher therefore had challenges travelling back home in the night as there was always the fear of high-way robbers.

1.9 Organization of Chapters

The study is organized into five chapters. Chapter one contains the introduction to the study. It provides the context within which the study is examined, the problem statement and questions, which leads to an outline of the research objectives and significance of the study. In addition the chapter discusses the scope of the study. Chapter two contains a review of literature on the concepts, theories, and debates



underpinning the study. Chapter three focuses on the methodology, methods, sampling procedures and tools to be used for data collection and analysis as well as the background on the study area. Chapter four contains data presentation and analysis of findings and chapter five provides a summary of findings, recommendations and conclusion.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents an overview of existing knowledge in the area of agriculture credit delivery with the aim of identifying gaps and situating the study in context. The review specifically covers operationalization of the concepts agriculture, agricultural credit, microfinance and agricultural finance in Ghana, agricultural credit delivery strategies and effective and efficient agricultural credit schemes.

2.2 Theoretical Framework

Agriculture is the major contributor to economic development in most developing countries (Stringer, 2001; Evenson, 1997). It employs a significant percentage of the labour force in these countries. Interestingly, the bulk of agricultural production from these countries comes from the small-scale farmers' household capital (Foin, 2007). These farmers are largely unorganized and as well lack economic power (Foin, 2007). As a result, farmers in developing countries are unable to produce in large quantities. This calls for the need for access to capital in the form of credits.

Since the early 1990s, there has been growing recognition of the need for financial intermediation in the economy in general. Both theoretical and empirical studies find that a well-developed financial system is beneficial to the economy as a whole. Basically, the argument behind this idea is that the efficient allocation of capital within an economy fosters economic growth (Levine, 1997). Financial intermediaries ensure steady flow of funds to end users, and act as evaluators of credit risk for the borrower (Scholtens and van Wensveen, 2003).



This study reviews the theory of financial intermediation under two dominant arguments. The first and most used argument in most studies on financial intermediation is the informational asymmetries argument. Proponents argue that informational asymmetries generate market imperfections, many of which lead to specific forms of transaction costs. Thus, financial intermediaries appear to overcome these costs, at least partially. Diamond and Dybvig (1983) for instance consider lenders as coalitions of borrowers that provide households with insurance against idiosyncratic shocks that adversely affect their liquidity position. Brealey, Leland and Pyle (1977) also interpret financial intermediaries as information sharing coalitions. Diamond (1984) shows that these intermediary coalitions can achieve economies of scale. Diamond (1984) is also of the view that financial intermediaries act as delegated monitors on behalf of ultimate borrowers. Monitoring help in increasing returns to scale, individual or corporate borrowers will delegate the monitoring activity to such a specialist as the financial intermediary. The “informational asymmetry” argument focuses on the borrower-lender relation in particular. Central themes in the borrower-lender relation are the screening and monitoring function of the lender, the adverse selection problem (Akerlof, 1997), credit rationing (Stiglitz and Weiss, 1981), the moral hazard problem (Stiglitz and Weiss, 1983) and the ex post verification problem (Gale and Hellwig, 1985).

The second proposition is the transaction costs approach (examples are Scholes, Benston and Smith, 1976; Campbell and Kracaw, 1980; Fama, 1980). In contrast to the first, here, the financial intermediaries act as coalitions of borrowers who exploit economies of scale or scope in the transaction technology. The notion of transaction costs encompasses not only exchange or monetary transaction costs (see Tobin,



1963; Towey, 1974; Fischer, 1983), but also search and monitoring costs (Benston and Smith, 1976). Here, the role of the financial intermediaries is to transform particular financial claims into other types of claims, called qualitative asset transformation). As such, they offer liquidity (Pyle, 1971) and diversification opportunities (Hellwig, 1991).

The review above suggests that classical theories on financial intermediation focus on the role of intermediaries in reducing the frictions of transaction costs and information asymmetry. While these factors may once have been central to the role of intermediaries, they are increasingly less relevant as contemporary intermediation turns towards issues of risk management and facilitation of effective participation (Allen and Santomero, 1997). Besides, it is widely acknowledged that there has been an unprecedented amount of financial innovation in recent years (Miller, 1986; Allen and Gale, 1994). Thus, theories of intermediation need to reflect the fact that financial systems have changed. In this light, the study views financial intermediation in a neoclassical context, in which classical variables of intermediation are integrated with contemporary issues faced by farmers.

In their study to examine the determinants of formal agricultural credit allocation to the farm sector in Nigeria, Oboh and Ekpebu (2011) noted that there is the need to critically assess factors affecting credit allocation in order to provide necessary information towards designing a more effective and sustainable credit system that can serve poor farmers better. Credit schemes exist but farmers also have peculiar farming challenges. Agricultural inputs may not be within reach, infrastructural facilities may be grossly inadequate, natural factors may be persistent, attachment to crude methods of farming and lack of farming experience may also exist. How effectively do



agricultural credit respond to these challenges? The idea of the neo-classical theory of efficiency gives the maximum possible output of a given quantity of input. Hence, the mission of increasing agricultural productivity through credit schemes could be facilitated through efficient management of the schemes.

2.3 Definition of Concepts

2.3.1 Agriculture

The word agriculture can be traced to the Latin word “agricultura” formed out of two Latin words; “agr” which means ‘field’ and “cultura” which means ‘growing or cultivation’. Agriculture therefore refers to the science or practice of farming, including the rearing of crops and animals (Ayegba & Ikani, 2013).

Agriculture is also called farming or husbandry (Ayegba & Ikani, 2013). It is the rearing of animals and cultivation of land to produce food, bio-fuel and other products used to sustain life. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization.

The study of agriculture is known as agricultural science (Ayegba & Ikani, 2013). Ciparisse (2003) provides both a narrow and a broader definition of agriculture. From a narrow perspective, FAO defines agriculture as the cultivation of crops and animal husbandry as well as forestry, fisheries, and the development of land and water resources where as in a broader sense, it goes beyond crops cultivation, animal husbandry, forestry, fisheries and natural resource development to include agro-industries, manufacturing of agricultural inputs and machinery, regional and river development, and rural development (Ciparisse, 2003).



Anthony (2010) in discussing agricultural credit and development also provided another definition of agriculture. According to him, agriculture is the cultivation of land, raising and rearing of animals for the purpose of production of food for man, animals and industries. It involves and comprises of crop production, livestock and forestry, fishery, processing and marketing of those agricultural production (Anthony, 2010).

It can thus be concluded that agriculture refers to the rearing of animals and the cultivation of crops. This however also includes forestry and fishery, and the processing and marketing of such products. Agricultural activities in the study area include all the aforementioned components. Focus however, will be on crop cultivation, processing and marketing of crops which are supported by the credit schemes of NRGP and Masara N'Arziki.

2.3.2 Agricultural Credit

The word credit has different shades of meanings depending on the context in which it is used. According to Nmadu, Iwuajoku, & Jiya (2012), the word credit is derived from the Latin word “credo” which means belief by the lender in the ability and willingness of the borrower to fulfill financial obligations. Credit can also be defined as a process of obtaining control over the use of money, goods and services, currently in exchange for a promise to repay at future date (Nmadu, Iwuajoku & Jiya, 2012). The Concise Oxford Dictionary, Tenth Edition also defines credit as the ability of a customer to obtain goods or services before payment, based on the trust that payment will be made in the future. Again, it refers to credit as money lent or made available under an arrangement of payment to be made in the future.



According to Ledgerwood, Earne & Nelson (2013), credit refers to the ability of a client to borrow money in exchange for an agreement to repay the funds with interest and/or fees at some future point(s) in time. Credit therefore ranges from working capital loans, emergency and consumption loans, to leasing products and housing loans (Ledgerwood et al., 2013).

Another understanding of the term is also provided by Kuwornu, Ohene-Ntow, and Asuming-Brempong (2012). In their definition, they refer to credit as the control over the use of money, goods and services of another person. This however is at a price usually regarded as the interest rate. The interest rate is required to be paid together with the amount borrowed at a specified time in the future (Kuwornu et al., 2012).

For the purpose of this study, the definition provided by (Nmadu et al., 2012) is adopted. Credit is therefore a process of obtaining control over the use of money, goods and services, currently in exchange for a promise to repay at future date. Though this often attracts some interest, it is not always the case, particularly with credit designed for the pro-poor by government or some civil society organizations.

Agricultural Credit (AC) is a financial term that refers to loans and other types of credit extended for agricultural purposes (Nmadu et al., 2012). For Olagunju (2013), credit to farmers can be categorized into cash credit (loans given to farmers by financial institutions), and non-cash credit which comprise the supply of inputs to farmers by companies, individual entrepreneurs/businessmen etc., for which these farmers make payments after harvesting.

Kuwornu, Ohene-ntow, and Asuming-brempong (2012) also provide a definition for the term agricultural credit. According to them, agricultural credit refers to the present and temporary transfer of purchasing power from a person who owns it to a person



who wants it, allowing the later the opportunity to command another person's capital for agricultural purposes but with confidence in his willingness and ability to repay at a specified future date. The definition further adds that, it is the monetization of promises and exchanging of cash in the present for a promise to repay in future with or without interest. Without the willingness and ability to repay, the promise to repay at a future date would be futile (Kuwornu et al., 2012). In this study therefore, agricultural credit refers to the offer of the use of cash or kind with the aim of investing or utilizing it for agricultural purposes with the promise of paying back of such offer based on the terms of agreement made earlier.

2.3.3 Micro Credit and Micro Finance

Microfinance and microcredit are often used interchangeably but however connected to the state of rural finance and poverty reduction. Microcredit is often used to describe institutions like the Grameen Bank which focuses on getting loans to the rural poor for poverty eradication and social change with most key players being NGOs. Microfinance came into play with the recognition that households can benefit from financial services more broadly and not just obtaining credit for microenterprises. Thus the change in language means a change in focus towards giving poor households access to full range of financial services and towards the commercial sustainability of the institution (Armendariz De Aghion & Morduch, 2000).

Micro finance refers to the practice of people to save and/or take small loans from individuals and groups within the context of self-help in order to engage in small retail businesses or farming ventures (Bank of Ghana, 2007). Generally, microfinance encompasses the provision of financial services and the management of small



amounts of money through a range of products and a system of intermediary functions that are targeted at low income clients. It includes loans, savings, insurance, transfer services and other financial products and services.

According to the State Bank of Pakistan (2009) microfinance is the provision of financial services for poor and low income people and also covers the lower ends of both rural and agriculture finance. It includes financing both in rural and urban areas.

Littlefield, Murdugh, and Hashemi (2003) refer to micro finance as financial services for poor households. Such financial services are not only limited to business investments in their microenterprises but also to investments in health and education, to manage household emergencies, and to meet the wide variety of other cash needs that they encounter. The range of services includes loans, savings facilities, insurance, transfer payments, and even micro-pensions (Littlefield et al., 2003)

According to Daley-Harris and Laegreid (2006) microfinance refers to the provision of loans, savings, insurance, transfer services and other financial products targeted at low-income clients. Micro-credit on the other hand is the extension of small loans to very poor people that allows them to care for themselves and their families. In conclusion, it can be said that microcredit is a component of microfinance, in that it involves the provision of credit to the poor, whilst microfinance adds on non-credit to include other financial services such as savings, insurance, pensions and payment services.

2.3.4 Agricultural Finance

From the perspective of Ledgerwood et al (2013), agricultural finance is primarily a subset of rural (micro) finance, and is dedicated to financing agriculture-related



activities such as inputs, production, storage, processing, and marketing of goods. In addition to funding for working capital, agricultural finance also funds investment and infrastructure, such as irrigation systems, storage facilities, and machinery. It includes a variety of products including credit, savings, insurance, and transfer payments. Agricultural finance is provided in various forms (cash and in-kind) to agro enterprises and farmers operating small, medium, and large farms. It also includes financial services such as warehouse receipts systems, savings or other capitalization mechanisms, as well as insurance and forward contracts that are specific to agriculture ((Ledgerwood et al., 2013).

The State Bank of Pakistan (2009) provides yet another understanding of the term agricultural finance. Agricultural finance is defined as a subset of rural finance dedicated to financing for agricultural related activities. It identifies such agricultural related activities as input supply, production, processing, and marketing.

2.4 Evolution of Agricultural Credit in Ghana

In Ghana, government as well as civil society organizations and Financial Institutions have over the years adopted various methodologies in the delivery of credit to farmers. Based on literature, credit to farmers in Ghana can be categorized into credit in cash and credit in-kind. Agricultural credit can be traced to 1955 when the first credit Union was established in Jirapa in the then Northern Territory. Prior to that, farmers relied on groups, moneylenders, acquaintances among others for credit to farm (Etwire et al., 2013) This could not cater for the demand for credit by farmers. The Government of Ghana shortly after independence prioritized agricultural development and finance by establishing the National Investment Bank (1963) and Agricultural Development Bank (1965) (Egyir, 2010). These like the Credit Unions



also gave cash credit to individual farmers. Ghana Commercial Bank which was established in 1957 also delivered cash credit to farmers. This credit delivery scheme was seriously challenged with high default rates by farmers. This was attributed to diversion of loans from farm activities among other factors. According to research findings by Kuwurno et al (2012), the value of 27.57% of agricultural loan for the non-farm sector suggests that there is a reasonable level of loan diversion in the Eastern Region.

Credit in kind was thought of as a solution to reducing credit diversion and hence to reduce credit default by farmers. Farmers were therefore provided with inputs such as seed, fertilizers, weedicides and herbicides among others. Several credit schemes adopted this model some of which include the production and term financing schemes of the Stanbic Bank Ltd, cashless credit of CARD and SEND Ghana among others (Etwire et al., 2013). These with time insisted on farmers to be in groups and registered before they could have access to credit. Group solidarity was expected to serve as some form of collateral in the event of a default. This was still faced with defaults since farmers were confronted with weather changes that resulted in poor yields and limited markets to sell their produce at break-even prices.

Value chain financing has also been preferred by some institutions as an improvement over the in-kind credit to farmers in groups. Though this embraces all the actors in agricultural value chains, credit to actors and for that matter farmers is disbursed to the service provider who has delivered a particular service(s) to the farmer group or other actor. Though another kind of cashless or in-kind credit scheme, only the service provider receives cash for the service rendered. This was expected to ensure that farmers receive the services to which the credit is being advanced. In all these



credit schemes that have existed in Ghana, little is known about the extent to which they met the credit needs of farmers.

Credit to farmers in Ghana over the years has taken different forms, but mostly credit in cash or credit in kind. Egyir (2010) observed that farmers relied mainly on informal and semi-formal financial services prior to the establishment of the formal banking system in Ghana. The main sources of credit included thrift groups, moneylenders, and acquaintances among others. The experience of Ghana shows that money lending has been in practice for long and is done by people who are usually wealthier farmers or traders. It could also take the form of loans in kind for example fertilizer, seed and food stuff (Quartey et al, 2012). Credit Unions were later established by 1955 and these also supported farmers with credit in cash (Etwire, Dogbe, & Nutsugah, 2013).

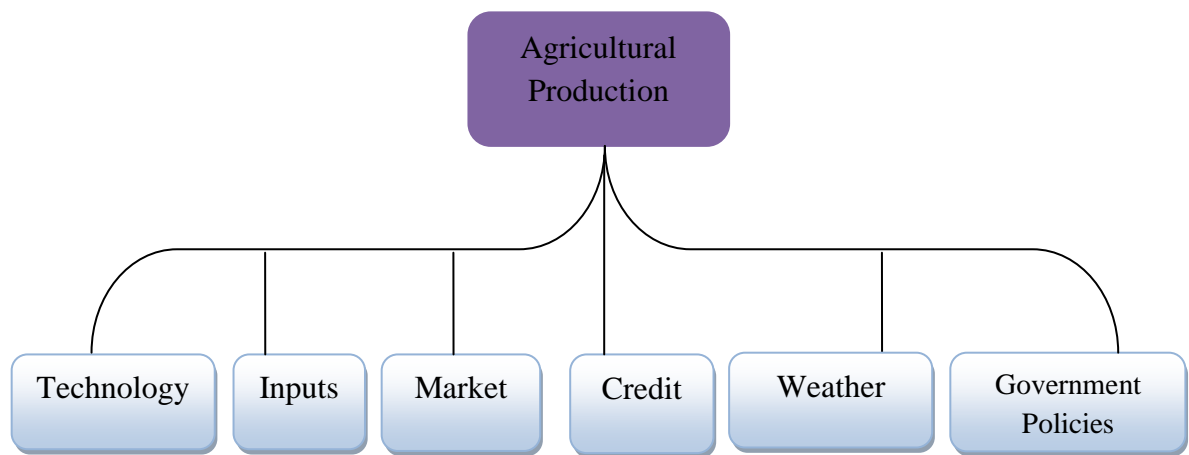
2.5 Factors Affecting Agricultural Production

In an increasingly globalized world, agricultural production is influenced by an interplay of different factors. Agricultural production depends on infrastructure and education, distributing key technologies and inputs, and promoting producer and marketing organizations that link small farmers to new market chains (Diao, Hazell, Resnick, & Thurlow, 2007). According to Kuwornu et al (2013) agricultural production is also influenced by access to financial resources, modern technologies and organizational structures. Thiam (2007) also acknowledged that agricultural production is influenced by several factors. Just as production is generally influenced by land, labour, capital and entrepreneurship, so is agricultural production also influenced by such factors. Specifically, agricultural production is influenced by factors such as climate/weather, inputs supply, markets, government policies and technology. One key factor however is credit. Asghar and Chughtai (2012) recognized



that credit strongly influences agricultural production because it is very important in the purchase of different agricultural inputs towards an increased output. It can therefore be concluded that among other factors that influence agricultural production, particularly in Africa are credit, technology, inputs, markets, weather, and government policies. The chart below illustrates these factors influencing agricultural production.

Figure 2. 1: A Chat showing Factors Influencing Agricultural Production



Source: Adopted from Thiam (2007)

The role that credit play in agricultural production has been highlighted by several authors as being significant. In developing economies, agricultural credit plays an important role in making farming sector more productive and efficient. According to Sial, Awan, and Waqas (2011) agricultural credit is very important in agriculture production because availability of credit removes financial constraints relating to cash inputs, secondly technical efficiency of farmers will increase and thirdly agricultural credit will increase resource allocation and profitability. The State Bank of Pakistan (2009) maintain that, availability of agricultural credit is a prerequisite for enhancing productivity and improving standard of living by breaking the vicious circle of poverty of small farmers. It has been observed that farmers usually utilize the credit



facility to meet short term credit needs mostly for purchase of inputs. The experience of developed economies shows that agricultural credit for investment in the form of machinery, equipment and infrastructure has played major role in increasing productivity and future cash flows (State Bank of Pakistan, 2009).

Again, credit is seen as the back bone for any business and more so for agriculture which has traditionally been a nonmonetary activity for the rural populations. Agricultural credit is an integral part of the process of modernization of agriculture and commercialization of the rural economy (Khalid, Abedullah, & Kouser, 2009). As Asiedu and Fosu, put it, modern agriculture has now become complex and needs careful planning to achieve success, that is, agriculture is no more a mode of life rather it has changed into commercial farming. Credit then becomes a very important component in the modernization of agricultural activities (Asiedu & Fosu, n.d.). Baker and Holcomb (1964) observed that increased productivity of farm resources comes from innovations that originate in the farm supply sector. However, most of these innovations that have the potential of instigating the modernization of agricultural activities require high capital investment, high-yielding seeds, and fertilizers, which cannot easily be provided by farmers. Most of the modern inputs are therefore purchased on credit. Income obtained by subsistent farmers from both on-farm and off-farm activities is also not adequate for the needed agricultural transition or growth, thus, more and more farm households depend upon credit. Credit, thus provide an opportunity to the farmers in modernizing agricultural production.

Research over the years has shown that the impact of credit on agricultural production has been positive. Ahmad (2011) in investigating the impact of institutional credit on



agricultural output in Pakistan concluded that there is positive relationship between credit and agricultural output. Credit is always helpful for the needy farmers to buy agriculture inputs. Therefore, credit has indirect impact on output because it is important to purchase different agricultural inputs those have strong impact on agricultural output. He also concludes that output is enhanced through providing three inputs, that is, tractors, tube wells and seeds while credit is the main source for purchasing these inputs.

Asghar and Chughtai (2012) conducted a study on the impact of agricultural credit on production of wheat crop of District Faisalabad in Pakistan. The study concluded that credit has positive impact on the per acre production of wheat crop. It has rejected the null hypothesis i.e. Credit has not positive impact on per acre production of wheat crop and proved that credit is positively significant on wheat production and other variables i.e. seed, fertilizer and pesticide are also found positively significant. Therefore, it is concluded that the credit borrowed from ZTBL is positively affecting the production of wheat crop and indirectly becomes a helping hand for the poor rural farmers which may lead to increase their living standards.

A study was also conducted by (Saleem & Farzand, 2011) on the impact of agricultural credit on agricultural productivity in Dera Ismail Khan district of Pakistan. The study identified that high population density and decreasing agricultural land are affecting farming sector in Pakistan but that, the requirements of foods are increasing day by day. Therefore credit had become a dire need of farmers to fulfill the cash requirements of agriculture inputs. As such, credit utilized for seeds, fertilizer and pesticides was found positive and having significant impact on agricultural productivity. In another study regarding efficiency of agricultural credit in Pakistani



Punjab by Sial and Carter (1996) it is highlighted that the individuals who obtained average size loans produced 48 percent more output than the non-borrowers.

In a speech by Subbarao (2012) on the accomplishments and challenges of agricultural credit in India, the impact of credit on agriculture was again brought to bear. According to him, a quick assessment by the Reserve Bank of the relationship between institutional credit to agriculture (from commercial banks, cooperatives and RRBs) evidences positive and statistically significant elasticity – every 1 per cent increase in real agricultural credit resulted in an increase in real agricultural GDP by 0.22 per cent with a one-year lag. Further, the Granger causality test (based on lag length of 1) also indicated that the causality was unidirectional from agricultural credit to agricultural GDP.

Olagunju (2013) in accessing the impact of credit access on value chain activities of Agro-Processing Industries in Oyo State of Nigeria also acknowledged the impact of credit on agricultural production. The results obtained for the processors with credit indicated that they were efficient than their counterparts producing without credit. This result points to the positive impact of credit on value chain activities. There was under capacity utilization in almost all types of processing industries in the state due to lack of adequate supplies of raw material, bottlenecks in market penetration and marketing strategies, and inadequate credit.

2.6 Agricultural Credit Delivery Schemes and Strategies

During the past two decades, several rural finance institutions (RFIs) have emerged as success stories in their outreach, self-sustainability and also in reducing the poverty especially among small holder farmers. Bank for Agriculture and Agricultural Cooperatives (BAAC) of Thailand is one of the biggest names among the most



successful agricultural finance in the world that have provided credit among other financial services to rural farmers (State Bank of Pakistan, 2009). It has focused mainly on lending to borrowers in the low- to medium income range. This strategy has been supported by a progressive cross subsidizing interest rate policy, with higher interest rates charged on larger loans, ceilings placed on loan amounts, and loans offered to small farmers without traditional collateral through joint liability groups. At first, BAAC lent mostly through large agricultural cooperatives, but repayment problems led the bank to increase its direct lending to individual farmers (State Bank of Pakistan, 2009). Since its establishment in 1966, and up to 2005, BAAC was only allowed to provide loans to Agriculture sector-individual farmers for their agricultural activities, or agricultural cooperatives for onward lending to their members but this was extended to the non-agricultural borrowers from 2006 onwards, but the volume of which must not exceed 20% of the total loan volume at any point of time.

Among the lending strategies of the bank, the most extensively used is retail loans through Joint Liability Groups (JLG). Under this scheme, the bank extends non collateralized loans through groups of farmers who are made co-liable for each other's loan. This has thus remained a main strategy that has put the bank's credit delivery to farmers ahead of others. A typical group has 12 to 15 members. In addition to JLG, BAAC also finance farmers against individual landholdings and may require the deed for "safekeeping" of produce as added loan security. Loan size is set at about 60% of the projected revenue from sale of the crop. In adopting a strategy to manage risk, the bank began to rationalize its interest rate policy, by adopting a risk-based loan pricing that is, pricing interest rates based on repayment performance classification of borrowers.



Another strategy of the bank in its credit delivery is by widely extending its outreach to 5.68 million farm households (98.1% of total farm households). BAAC has 908 branches and 945 field offices which adequately deal with the needs of the entire rural community of the country. More than 80% of its clients are small farmers (State Bank of Pakistan, 2009). Again the bank has designed and put in place a strategy for high loan recoveries. This is by tight monitoring, follow-up and recovery policies and good risk management systems like funeral funds, insurance, peer pressure under joint liability group scheme, etc. The bank keeps close & regular interaction and also holds meetings with farming communities by way of its field officers. It not only facilitates in the resolution of community issues relating to farm/non-farm activities, but it also keeps track of the cash flows and proper utilization of loans by the borrowers which help them get repayment in time.

To keep track of cash flows, the field officers make collection/ recovery from the sale points of products directly, and for proper utilization of loans, the loans are generally disbursed in installments, with the disbursement of every new installment depending on the proper & optimal utilization of previous installment. The other strategy it uses is offering farmers, education, coaching and training. This is done through a weekly broadcast of a thirty minutes radio programme dubbed BAAC-Friends of Farmers (State Bank of Pakistan, 2009).

Another credit scheme is that by the Land Bank of the Philippines which was established on August 8 1963 with a special focus on serving the needs of farmers and fishermen. To strengthen and expand its credit program, Land Bank grants development assistance to farmers and fisher-folk cooperatives. The Bank provides various forms of technical assistance to promote technology transfer and to improve



productivity, product quality, and value- adding operations. The Bank also provides marketing capability-building assistance to enhance the competence of bank-assisted cooperatives in preparing and implementing a marketing plan.

As a strategy, loan borrowers are exempted from submitting the usual documentary requirements for credit evaluation and approval. Loans are given even without collateral, and loan repayment is adjusted to the cash flow of the borrower to encourage timely payment.

The Grameen Bank of Bangladesh is the other bank whose credit delivery to farmers has been outstanding and has been talked about in several literatures. The Grameen Bank is not subject to the Banking Companies Ordinance or to any other law related to financial institutions in Bangladesh, nor is it subject to interest rate ceilings. It has also been partially insulated from other government policies.

Thus far, the Grameen microfinance methodology has been the most popular and widely replicated model in Asia with considerable consistency in attaining successful results, particularly in achieving greater outreach and high repayment rate (Etwire, Dogbe, & Nutsugah, 2013). It's key strategies centre on (a) exclusive focus on the poor with priority on the 'poorest' women, (b) financial services delivery that facilitates participation and ensures timely repayment (small loans payable in periodic, mostly, weekly installments) and (c) formation of solidarity groups, self-choice of loan activities, loans for income generation only, and eligibility of succeeding loans based on repayment of previous loans. Although each borrower must belong to a five-member group, the group is not required to give any guarantee for a loan to its members. Repayment responsibility solely rests on the individual borrower, while the group and the centre oversee that everyone behaves in a



responsible way and none gets into repayment problem. There is no form of joint liability, i.e. group members are not responsible to pay on behalf of a defaulting member. The bank also has its interest rates on loans lower than even government rate.

According to Saadani, Arvai & Rocha (2011), traditionally, government policy interventions in financing micro enterprises including agriculture have included partial credit guarantee schemes, direct lending facilities, and lending by state-owned financial institutions. Partial Credit Guarantee Schemes (PCGs) are operated by a large number of countries and are considered one of the most market-friendly types of interventions. In developed countries such schemes have been operational for over four decades while their use in developing countries is more recent. PCGs facilitate access to finance by creditworthy firms when such access is constrained by insufficient credit information and collateral.

As a risk-sharing mechanism, PCGs reduce the risks and potential losses of creditors, inducing lending to riskier types of borrowers. Arguably, PCGs generate fewer market distortions compared to other policy interventions, such as directed lending programs or state banks, because they usually entail less interference in credit allocation and use private banks as the main vehicles for loan origination. Many countries have also used partial credit guarantees as a countercyclical policy tool. Korea is one of the most notable examples of a country that have used credit guarantees during crises to alleviate the adverse effects on SMEs. As another example, in the current global crisis, the European Union has allowed partial credit guarantees in member states to increase the coverage ratio to 90 percent for distressed borrowers especially farmers until end-2010, and allowed the possibility for subsidized guarantee premiums. In addition, some guarantee schemes introduced



simplified and faster approval processes (e.g. Portugal, Romania, Greece) or raised the maximum guaranteed loan amount (e.g. Germany).

In Nigeria, credit schemes were established as part of measures aimed at increasing agricultural output (Anthony, 2010). As such, there was the establishment of Nigerian Agricultural Cooperative Bank in 1973, and the establishment of Rural Banking programme in 1977. These entire credit schemes were made to allocate more funds to rural farmer with the intention of increasing food supply. Still on this scheme, Central Bank of Nigeria (CBN) prescribed different lending rates for agricultural sector with lower interest rate enjoyed by farmers. In the year 2004, the president of Nigeria together with some African countries' leaders launched New Partnership for Africa's Development (NEPAD), whose objective was to reduce hunger and poverty. Agriculture was seen as the engine of growth to propel African economies out of hunger and poverty and credit schemes were seen as key drivers of growth in agricultural production.

In Ghana, various financial institutions, civil society organizations and even central government have designed and implemented credit schemes to farmers using different strategies. Northern Region Branch of the Stanbic Bank of Ghana operated two credit schemes (production and term financing) accessible by smallholder farmers. Production loan is strictly for the purpose of working capital and should usually be paid within a year. The Alliance for a Green Revolution in Africa (AGRA), Millennium Development Authority (MiDA) and self-generated funds have been the sources of capital mobilized to meet farmers' production loans. As part of its strategy, it encouraged farmers to either be in farmer based organizations (FBOs) or part of an out grower system, in which case the FBO leaders or nucleus farmer would be dealing



with the bank and responsible for monitoring. A farmer group requesting for production loan should be in business and have a production and repayment plan. Again, the scheme stresses on skills and experience of the farmer group, guaranteed market and good record of loan utilization and repayment by a farmer group. A farmer group applying for term finance must be profit oriented and financially and economically viable. The group must also submit a business plan and may be required to provide collateral. Potential clients are expected to finance 15% of the requested loan.

The Center for Agricultural and Rural Development (CARD) is a Non-Governmental Organization (NGO) established to promote household food security, microfinance and rural development in northern Ghana. Cashless Value Chain Crop Financing is the name of its credit scheme available to farmers in the Northern Region. Under this scheme, CARD sources for loans from formal sources (including Stanbic Bank Ghana Limited) at commercial rates and in turn offer farmers with credit in-kind (tractor ploughing, provision of improved maize seed, herbicides, fertilizer among others). Farmers then entrust their harvested produce with CARD at the end of the season hence the scheme is cashless in both directions. CARD then stores and sells the produce when prices are favourable, and after deducting the cost of credit including management fees, the remaining balance if any, are paid back to the farmers. Farmers interested in the scheme must be in groups and registered preferably with the Ministry of Food and Agricultural or a working with a developmental project. The target crops are maize, rice and soybeans. Members of the group should be committed and cultivating between 1-5 hectares.



In the Upper West Region, including the Wa West District, the Masara N`Arziki which literally means maize for prosperity is a farmers association that extends credit to its members but with its headquarters in the Northern Region. It is being facilitated and funded by Wienco Ghana Limited and Yara Ghana Limited. The association provides its members with credit in kind. Credit provided by the scheme include fertilizers, hybrid seeds, herbicides, insecticides, spraying equipment, innovative farm implements, technical advisory services among others. Repayment is usually in kind at the end of the season where farmers pay with their harvested produce. For farmers to be considered for credit, they should be in groups of about 8-20 members and should be registered with the association. The group should not cultivate less than 5 hectares and no members should be less than 18 years old. Loan repayment is done through the supply of farm produce to for which the credit was taken. The main strategies of this scheme are getting farmers to sign production contract with the scheme even before the delivery of the facility. These contracts are backed by a court registry. Besides, field officers offer technical backstopping to farmers on crop agronomy and also making regular visits to farmers' fields. Again, proper records are kept by the field officers. Prior to credit approval and disbursement, all applications are vetted to be sure of the past records of the farmer group or be sure of their credit worthiness particularly when it is a new group.

In the Northern Rural Growth Programme under the industrial crops window, farmers are linked to credit from the participating financial institutions. The requirement is for farmers to either be in a group, often referred to as farmer based organizations or under the support of a nucleus farmer. The credit linkage and delivery usually starts with a pre-season planning and interface meeting between the various actors of the



value chain, including the marketing company, input supplier, bank or financial institution and the farmers to confirm market for commodity. The strategies employed by this credit linkage and delivery scheme are that farmer group first assess their credit needs and put together a general credit requirement of the group for the season. The facilitating agency, (ACDEP) together with the schedule officer from MOFA goes through these applications and thereafter submits them to the bank. The bank also vets farmers' applications for credit worthiness and diligence tests. When the bank approves of the loan application, the farmer group is served with loan contract, spelling out the terms and conditions. The farmer groups are however not given cash for their production activities, but are made to contract services or goods from suppliers. The essence of this strategy is to reduce the instance of credit diversion to other non-farm activities. The farmer group, together with the schedule officer then authorizes the bank to pay suppliers based on countersigned invoices. At harvest, the farmer group delivers produce to pre-designated buyer with whom contract has been signed at pre-season planning session. The pre-designated buyer pays off farmers' indebtedness through a cheque in the name of the group to the Bank, using monetary equivalent of part of crop delivered. The balance of the crop is reserved for the farmer group to decide on when, how much and to whom to sell.

As observed in the credit schemes discussed above, it has been realized that credit to farmers is in either cash or kind. Some strategies include disbursing loans to farmer groups rather than individuals, getting all actors of the chain to participate fully so as to ensure good recovery, asking for partial guarantees to reduce risk and getting farmers to sign production and supply contracts with buyers to speed up repayments. Other strategies also include having good worker-farmer ratio so as to ensure regular



contacts with farmers, multiple loan vetting procedures, and giving education to farmers on financial management among others. As the literature revealed, one successful strategy in one area might not be successful in another area. Agricultural credit delivery schemes and strategies are therefore designed taking into consideration the multiplicity of factors that influence credit to farmers in a locality.

2.7 Challenges of Agricultural Credit Delivery

In the past, particularly in the 1950-70s, governments, financial institutions and donor agencies' focus on delivering "affordable" finance to target farmers in the rural sector has been met with challenges (Onumah & Gerdien, 2012). Credit guarantee schemes used by governments, donors and NGOs to promote credit delivery to smallholder farmers have been challenged on the grounds of sustainability. The sustainability of such credit schemes have been questioned because of moral hazard problems, where beneficiary borrowers appear to have incentives to default. With the hope of debt write-offs, farmers are unable to repay their credit and this affected the ability of the scheme to offer credit to others. Besides, the adverse selection problems where lenders finance high risk borrowers with the assurance that losses will be covered in the event of borrowers default further worsened the situation.

Writing on the agricultural credit guarantee scheme in Nigeria's agricultural development, Nwosu (2010) catalogued a number of challenges that were encountered in delivering credit to farmers. One of such challenges was the increasing incidence of loan defaults. The rate of loan repayment by beneficiaries was very low and this was adduced to natural disasters, poor farm management, low product prices, loan diversion, deliberate refusal to pay and the inability of farmers to assess loan requirements properly leading to farmers' receipt of inadequate or excessive loans.



The other challenge was bank related where participatory banks in did not cooperate fully in lending to farmers. Because of the high cost of processing loans relative to the actual loans and the high default rate of the farmers, many banks preferred to pay penalty to risk lending their funds to agriculture. Also banks faulted the farmers for submitting incomplete application forms. In some cases where loans were approved, it arrived too late for it to fulfill the purpose for which it was intended.

Makombe, Temba, and Kihombo (1999) conducted a study on credit schemes and women's empowerment for poverty alleviation in Tanzania and also noted some challenges with credit delivery. According to them, it was noted that credit schemes face constraints due to issues related to management, clients' perception, credit policy and design. In India, Shah, (2007) observed that the challenges with credit delivery were the mounting overdue and non-performing assets of rural financial institutions. The overdue problem of different entities of rural credit delivery structure was reported to be an all pervasive phenomena that cut across different agencies. As reported by Gulati and Bathla (2002), not only the outstanding loans of various rural financial institutions operating in India grew significantly but the overdue of these financial institutions had increased considerably during the period between 1980 and 1998. Subbarao, (2012) also noted that anecdotal evidence suggested that a number of factors inhibit smooth credit delivery to the agriculture sector. These are insistence on collateral, complicated loan administration procedures, distances from the villages to the branches, higher monitoring and follow up costs, and a culture gap between bank officials and farmers.

Other challenges also include political interference, inflexible lending policies and procedures including cumbersome documentation, difficulties in recoveries of



overdue loans, lack of provision for consumption credit, absence of effective systems for screening credit risks and, finally a misplaced belief that the borrowers in the agricultural sector, particularly, small and marginal farmers with low per capita incomes are risky and hence non-bankable. Some of these factors ostensibly translate into higher transaction costs, which include expenses incurred in appraisal of borrowers, processing, documentation and disbursement charges, loan monitoring/supervision and collection, and the proportionately allocated cost of branch, division and head office expenses.

In Ghana, the problems of agricultural credit to farmers arise from the following: source, availability and use (Kuwornu et al., 2013). There is inadequate or complete absence of financial projections and planning, and also high level of illiteracy among farmers and lack of relevant information as to how, when and where to obtain credit. There is also lack of skilled personnel in credit institutions to supervise and monitor loan packages as well as manage them, and diversion of credit to non-agricultural purposes by farmers. Every segment of agricultural production requires the availability of adequate capital since capital determines access to all other resources on which farmers depend for their operation. Accessibility to credit alone without good management by beneficiaries cannot guarantee the expected improvement in farmer's food production level, income and hence prompt loan repayment. It has been shown that farm level credit if well applied, enhances capital formation and diversified agriculture, increases resource productivity, size of farm operations, innovations in farming, marketing efficiency, value added and net farm incomes.

In Northern Ghana, agriculture is mostly subsistence, and this makes farmers unattractive as borrowers (Etwire et al., 2013). Most financial institutions are either



understaffed or do not have many qualified personnel who have expertise in agriculture, hence financing smallholder agriculture is a challenge. Specifically on agricultural credit delivery challenges, farmers and farmer groups mostly lack collateral security that may be relied on in the event of default. Farmers also tend to have poor banking culture mostly operating dormant accounts. Most farmers and farmer groups in the region do keep written records of their operations such as input usage, outputs, and expenditures. Most farmers keep mental records and are therefore unable to present basic records required by some financial institutions before loans are approved. Agriculture is also heavily dependent on the weather. Farmers are therefore hugely affected by poor rainfall, floods, droughts, pests and diseases among others, which in the long run affect loan repayment. A large proportion of farmers and farmer groups are financially illiterate and are therefore unable to comprehend changes in interest and exchange rates (Etwire et al., 2013).

2.8 Financial Institutions and Credit Delivery in Ghana

The financial institutions in Ghana can be classified into three categories: formal, semiformal and informal. The formal finance sector is predominately made up of commercial banks, which are normally within urban areas; and for rural areas there are Rural Community Banks (RCBs) and their association is the ARB Apex Bank (Etwire et al., 2013). Financial institutions that fall into this category are incorporated under the Companies Code 1963 (Act 179), which gives them legal identities as limited liability companies, and subsequently licensed by the Bank of Ghana under either the Banking Law 1989 or the financial Institutions (Non-Banking) Law 1993 to provide financial services under Bank of Ghana regulation. Most of these banks target urban, middle-income clients and higher net worth clients. However Rural Community Banks and the Agricultural Development Bank concentrate on the rural



areas. Therefore, these two institutions have become the main source of financial resources for smallholder farmers in Ghana.

The semi-formal financial sector consists of credit unions, savings and loans (also known as Microfinance institutions), and financial non-governmental organizations (NGOs). Credit unions are organizations that offer savings and credit facilities exclusively to its members. However, these organizations are performing poorly because a majority of their focus is on welfare programs, and therefore cannot impose higher interest rates on their clients. The credit union association (CUA) is similar to ARB Apex Bank, however, it does not have any control over portfolios. There are some credit unions that operate within banks whose tasks are to look for clients and to report back to the bank. There are a total of 47 Savings and Loans reporting institutions in Ghana. As of 2009, services from Savings and Loans are provided to 358,717 borrowers, with an average loan balance of US\$ 290.9 per borrower. According to Mix Market there are 47 reported microfinance institutions in Ghana. Ghana's Savings and Loans have 6 percent of portfolios at risk for more than 30 days. This is the at-risk average compared to its peer groups with East Asia and the Pacific at 4 percent, Eastern Europe and Central Asia at 4 percent, Latin America and the Caribbean at 5 percent, Middle East and North Africa at 3 percent, and South Asia at 2 percent.

Informal financial services refers to all transaction, loans and deposits that take place outside the regulated monetary system and these include activities of intermediaries such as relatives and friends, traders and moneylenders. In Ghana, informal credit is defined to embrace all financial transactions that take place beyond the functional scope of banking and other financial sector regulations. Informal credit transactions



can be grouped into non-commercial transactions, such as transactions between relatives and friends or small-scale group arrangements, and commercially based ones, conducted by savings collectors, estate owners, landlords, traders, and money lenders.

The susu system is a traditional savings collection system, and is thought to have originated in Nigeria and was introduced in Ghana in the early twentieth century. Under the susu system, farmers and other small scale businessmen deposit money with the operators periodically (e.g., daily, weekly, monthly), for which they could access loans (cash credit) from these operators in the near future (i.e., after some number of times of contribution) for their individual business. Traders have also been a major component of rural finance in Ghana, who operates between producers in rural areas and urban markets. They provide credit in the form of inputs on supplier's credit or an advance against future purchases of crops. Traders do not usually require collateral, but rather the agreement of the farmer to sell them crops over an agreed period. Informal financial units have been formed to meet the demand of a diverse customer base. There has been substantial increase in demand for informal credit and savings in Ghana. This is due to an increase in unsatisfied demand for formal sector credit, which has been continuously restrained as part of stabilization efforts.

2.9 Effective and Efficient Agricultural Credit Schemes

Although effectiveness and efficiency are exclusive, yet they influence each other (Bartuševičienė & Šakalytė, 2013). Effectiveness and efficiency are central to the assessment of organisations and their projects. Roberts (1994: 19) He defines efficiency as "to the degree of economy with which a process consumes resources- especially time and money". He distinguishes effectiveness as "how well the process



actually accomplishes its intended purpose". Effectiveness requires the application of some qualitative criteria, while efficiency lends itself to quantitative measurement.

Efficiency measures relationship between inputs and outputs or how successfully the inputs have been transformed into outputs (Pinprayong & Siengthai, 2012; Low, 2000). Thus, the fewer the inputs used to generate outputs, the greater the efficiency. Usually, effectiveness determines the policy objectives of an organization or the degree to which the organization realizes its own goals (Zheng, Yang & McLean, 2010). According to Heilman & Kennedy– Philips (2011) effectiveness helps to assess the progress towards mission fulfillment and goal achievement. To achieve effectiveness therefore, an organisation or project should strive for better communication, interaction, leadership, direction, adaptability and positive environment.

In effect, although an agricultural credit project or scheme is managed effectively, yet, due to the poor operational management, it will be performing inefficiently (Karlaftis, 2004). An inefficient and ineffective credit scheme is set for an expensive failure. In such case there is no proper resources allocation policy and there is no organizational perspective of their future. In this study, effectiveness and efficiency of the strategies and operations of the Masara N'Arziki and the NRGPs schemes are measured in the context of the schemes' objectives, from the perspectives of respondents.

Honohan (2010) proposed that to promote effective credit schemes, those introducing credit guarantee schemes should ensure (i) clearly defined precise and coherent welfare improvement goals; (ii) a reliable and realistic approach to accounting so that costs can become clear early; (iii) built-in data collection that allows prompt evaluation of outcomes; (iv) attention to scheme design that maximizes the chance of



successful goal achievement, limits the extent of the guaranteed loans as a percentage of total credit and places an affordable ceiling on total budgetary exposure; (v) transparency in operation and reporting.

According to Rajab (2015), transaction costs in rural areas are high compared to urban areas, due to problems of collateral provision, low and irregular income flows and the small amounts involved in the transactions. Adams and Pischke (1984), identified three types of borrower transaction costs: non-interest charges by lenders; loan application procedures that require the applicant to deal with agents outside the banking system, such as agricultural extension staff, local officials and cosigners; and travel expenses and time spent promoting and following up the application. Due to these factors the costs of reaching the rural poor and small scale farmers are high for financial institutions, which charge high interest rates when compared to market rates in the formal banking sector. This demands improved management of and innovations in financial intermediation for the agricultural sector.

Individual farmers have different investment needs, and may require seasonal and/or investment loans to meet specific financing requirements (World Bank, 2015). Thus, diversification of credit schemes for farmers contribute to smoothing out their credit requirements and income flows. Timely availability of farm inputs such as seed and fertilizer, in accordance with cultivation practices, is essential in farming, and requires flexible financing mechanisms (Kubayo, 2009; Thorsten, 1999). Effective agricultural finance also aim at encouraging savings and building up the financial reserves of farmers to strengthen their self-financing capacity (Grimm & Richter, 2006).



2.10 Conceptual Framework

The focus of this study is to compare two Agricultural credit schemes, that is, the Masara N'Arziki and the NRGPs. It was therefore important to develop a framework for comparison of the two schemes. However, there exist no frameworks for comparison of agricultural credit schemes. Scientific literature available in the field of agriculture and credit delivery are on the impact of credit on agricultural production (Ahmad, 2011; Asghar & Chughtai, 2012; Olagunju, 2013), factors that hamper accessibility to credit for agricultural production (Quartey, Udry, Al-hassan, & Seshie, 2012; Subbarao, 2012) and strategies to resurrect agricultural credit delivery (Shah, 2007).

Owing to the absence of an existing framework for comparison of agricultural credit schemes to be adopted or adapted in this study, the research has therefore developed a framework for comparison of the credit schemes based on knowledge and experience as a credit facilitator (Fig 2.1). The framework is based on factors that influence the effectiveness and efficiency of credit schemes in meeting the needs of beneficiary farmers. For the purposes of this study, seven areas of comparison were used. These were the form of credit delivery, terms and conditions, approval and disbursement, selection processes/eligibility, repayment, other services rendered beside credit and the actors involved in the credit delivery.

Taking the form of credit as an area for comparison, the different forms used by each scheme were looked at be it in cash or cashless/in-kind. The terms and conditions under which the credit was given were also compared. Three terms and conditions will be used in this study, charges (processing fee/commitment fee), credit duration and interest on credit. Thirdly, the approval and disbursement was assessed and

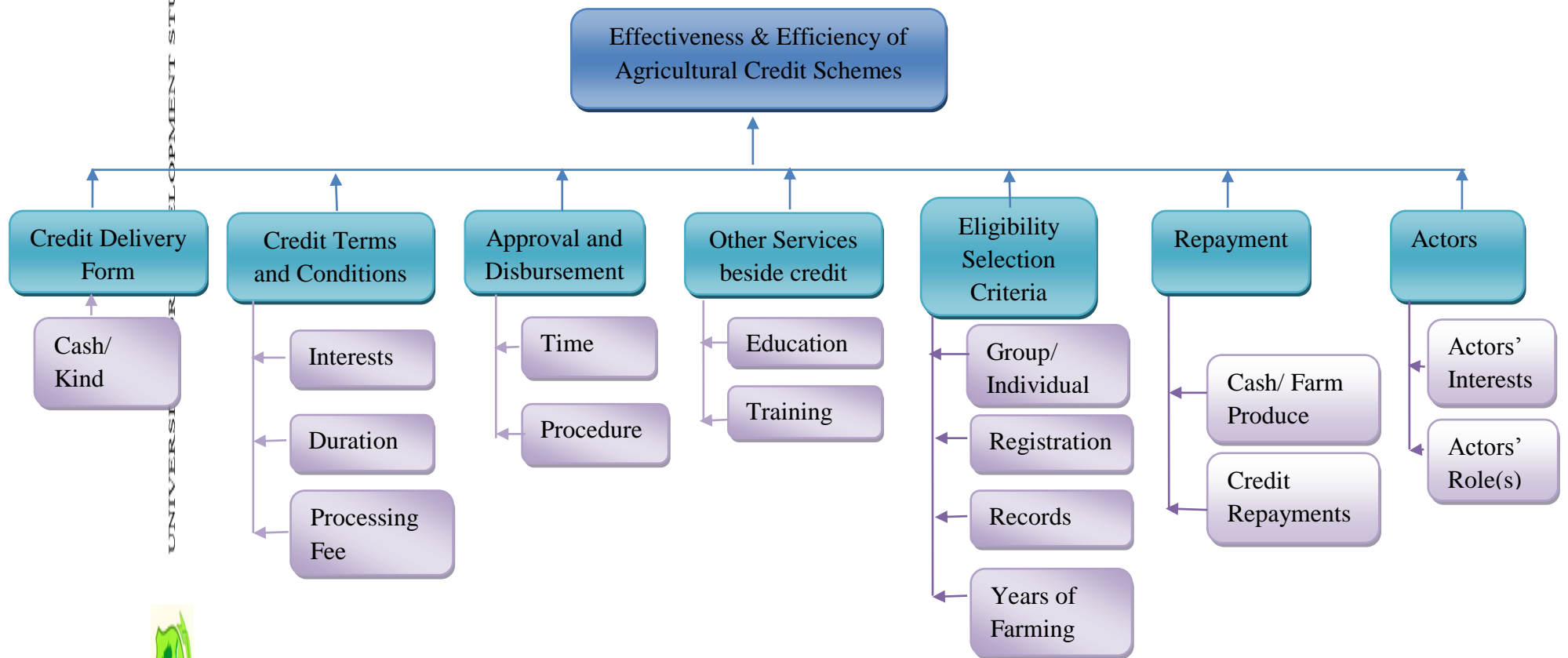


compared in the areas of the processes and timing. Access requirements is another area for comparison, which will be based on whether it is group or individual lending, registration with the scheme and other bodies, records of the beneficiary and the required number of years of existence and experience. The mode of credit repayment will also be compared, whether in cash or kind, credit repayment rates in the last two years. The last area for comparison was the actors involved.

The significance of such a comparison was to help establish the different strategies that were employed by the two credit schemes in credit delivery. This thus helped to analyse the strengths and weaknesses of the various strategies and therefore helped make informed conclusion on which scheme is most effective and efficient in meeting the credit needs of beneficiary farmers; as well as make recommendations on measures for improvement of the two schemes and agricultural credit delivery in general.



Figure 2.2: Conceptual Framework for Analysing Agricultural Credit to farmers



Source: Author's Construct, 2014

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the methods that were used in collecting and analysing the data from the field. It also tries to show the rationale for using the various methodologies and the selection of the study communities. It gives an overview of the theoretical underpinnings of the methods used followed by the data collection procedures. The various procedures used in analysing the data collected from the field are also explained here.

3.2 Profile of Study Area

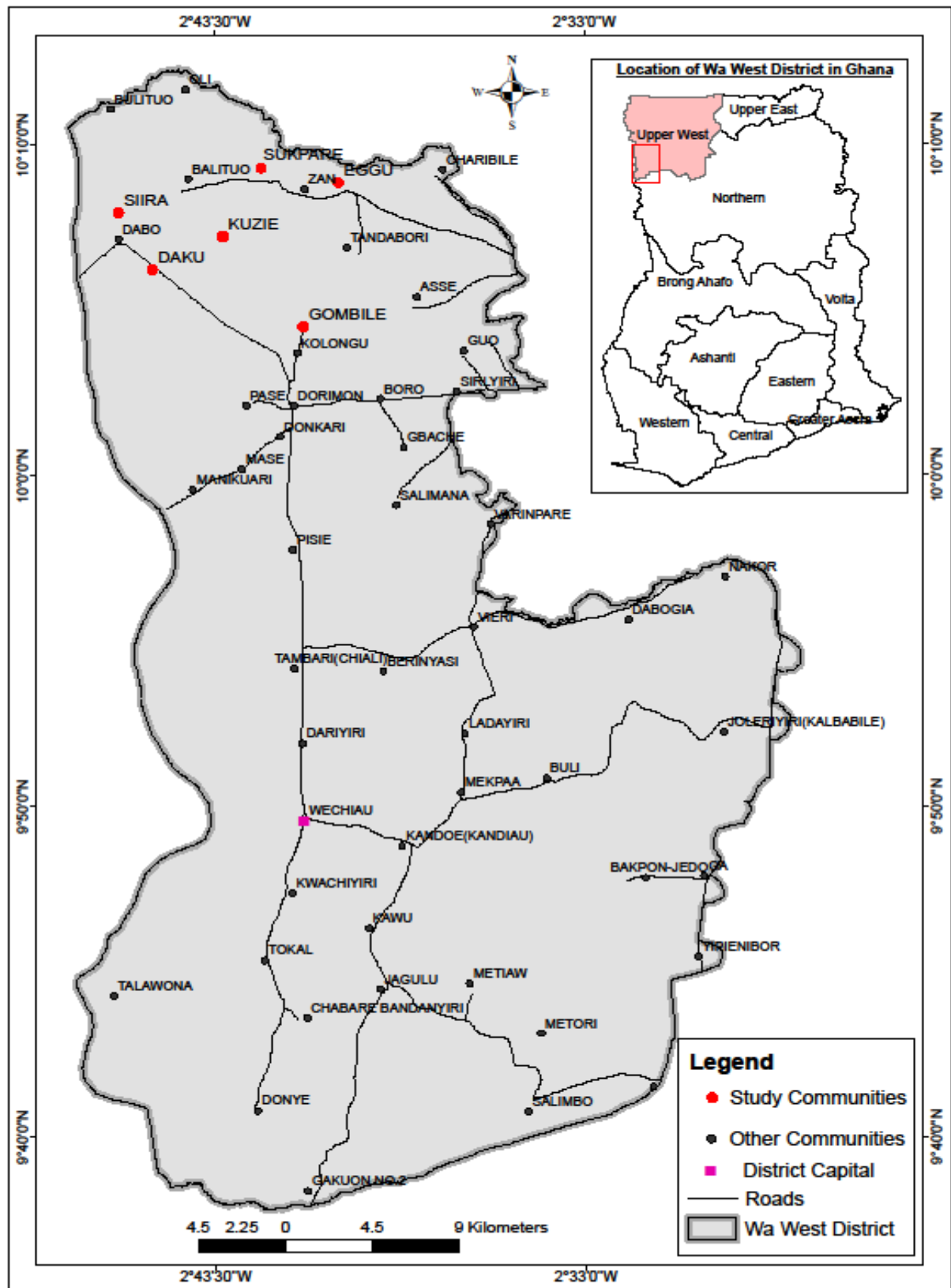
3.2.1 Location and Size

The Wa West District is one of the eleven districts that make up the Upper West Region. It was created in 2004 by legislative instrument 1751 with Wechiau as the District capital. The District is located in the Western part of the Upper West Region, approximately between longitudes 40°N and 45°N and Latitudes 9°W and 32°W. The District Shares Boundaries with Sawla-Tuna-Karlba District to the South, Wa Municipal to the East, Nadowli District to the North and to the West with Ivory Coast. The total area of the district is approximately 1,856 square km. This constitutes about 10 % of the region's total land area, which is estimated at 18,478square km (RCC-Wa, 2013).

According to the 2010 population and housing census, the Wa West District has a total population of 81, 348 people of which 41, 121 constitute the female population and 40, 227 are the male population(Ghana Statistical Service, 2012).



Figure 3. 1 Map of Wa West District



Source: Ghana Statistical Service, (2013).



3.2.2 Relief/Topography, Drainage and Geology/Soils

The Wa West District topography is gently rolling with a few hills ranging between 180 and 300 meters above sea level. It is drained by one main river – the Black Volta, to the west marking the boundary between the district and the Republic of Burkina Faso.

The Black Volta and its tributaries is the main drainage system in the District. The Black Volta and its several feeder tributaries present opportunities for irrigation in the district that can promote all year round farming. Most of the tributary streams are seasonal, thus disrupting communication during the rainy season along all the major roads to the District capital.

The soils in the district are mostly Leptosols, Lixisols and Vertisols. There are also strips of Fluvisols along the flood plains of the Black Volta as well as sandy loams along some of its tributaries. The general nature of the soils, coupled with the traditional land use practices and limited rainfall, tend to have adverse effect on crop production. This forces the youth to look for sustenance elsewhere at the expense of their lives or health.

3.2.3 Climate and Vegetation

The Wa West District lies within the Guinea Savannah Zone which is characterized mainly by short grasses and only few woody shrubs and trees. Common trees in the District consist of drought and fire resistant trees such as baobab, dawadawa, shea trees and kapok. Commercial trees such as Cashew and Mangoes are also found in the district. The vegetation is very congenial for livestock production, which contributes significantly to household incomes in the District. The greatest influence on the vegetation is the prolonged dry season. During this period, the grass becomes dry and the subsequent bush burning leaves the area patched and mostly bare of vegetation. Consequently, the torrential early rains cause soil



erosion. Bush burning reduces the vegetative cover and adversely affects rainfall. Transpiration is reduced considerably and this affects average annual rainfall totals.

The climate of the district is tropical continental type with the mean annual temperature ranging between 22.5°C to 45°C. A lesser known and used environmental resource is what is referred to as diurnal temperature variation. The Wa West District, like most of the other districts of the three northern regions have the comparative advantage during the months of November to February (the harmattan period) of having relatively cool night temperatures of between 18°C to 22°C and rather hot day temperatures of as high as 38°C to 40°C. The relatively cool nights are very suitable for stimulating good flowering in fruits and vegetables, heavy fruit setting and good ripening and colour turning in fruits. This gives the northern part of Ghana that comparative advantage of this type of less known climatic resource for generating other economic benefits; and Wa West District should not hesitate to take full advantage of this. The period between February and April is the hottest. Between April and October, the Tropical Maritime air mass blows over the area which gives the only wet season in the year; with the suitable rainfall for agriculture being effectively only four to month in a year. The poor rainfall pattern leads to the migration of the youth, a factor associated with the underdevelopment of the human resource base of the district.

3.2.4 Ethnicity and Religion

Ethnicity refers to the ethnic group to which a person belongs. The major ethnic groups in the district are the Dagaaba, Waala and Brefor. These however trace their routes to one of the major ethnic groups in Ghana. On that basis, the predominant ethnic group in the district is the Mole-Dagbani constituting 79.4% of the population. This is followed by the Grusi ethnic group which constitutes 18.9% of the population. Other ethnic groups in the District include the Akan, the Ewe, the Guan, and the Mande. (Ghana Statistical Service, 2012).



Religion also plays an important part of the people in the District. There are three major religions in the District, namely Christianity, African Traditional and Islam. Christianity is the dominant religion with 38.4% of the population followed by African Traditional religion taking up 29.5% whilst Islam constitutes 23.5% of its population. Of the total male population, Christianity is 37.6%, 23.7% for Islam and 30.1% of Traditional religion. Other religions and those without religion constitute the remaining proportion of the total male population in the District. Of the total female population, Christianity constitutes 39.7% with Islam and African Tradition constituting 23.4% and 28.8% respectively. Other religions make up 0.4% of total female population whilst female population with no religion constitutes 7.7% (Ghana Statistical Service, 2012).

3.2.5 Agriculture

Agriculture accounts for 80% of the Wa West District economy. Most farmers undertake a combination of crops and animal production. The main crops grown by the farmers are maize, millet, maize, cowpea and groundnut. Of these the District has comparative advantage in groundnuts and cowpea production. However, productivity of crops is low due to a combination of factors such as inadequate rainfall, low fertility, poor cultural practices and low technology application. For example rainfall distribution and amount in the district are concentrated in within the second and third quarters of the year. Since the district is dependent on rainfall agriculture, the implication of such rainfall pattern is low crop productivity and inability to produce all year round, hence there is a high risk of food insecurity. Low crop productivity is one of the major causes of poverty in the District.

The second most important type of primary agricultural production in Wa West District is livestock production. The livestock sub-sector continues to make steady but moderate gains



as it is now becoming the most lucrative investment in the midst of low income levels emanating from crop production.

3.2.6 Financial Services

There are no banking and non-banking services in the district. This has made access to credit very difficult thereby adversely affecting all aspects economic activities. Thus all workers receive their salaries in Wa. This has implication for absenteeism.

3.3 Description of Cases

Masara N`Arziki which literally means maize for prosperity is a farmers' association with its headquarters in the Northern Region and is being facilitated and funded by Wienco Ghana Limited and Yara Ghana Limited. The association provides its members with credit in kind which include fertilizers, hybrid seeds, herbicides, insecticides, spraying equipment, innovative farm implements, and technical advisory services among others. Repayment is usually in kind at the end of the season where farmers pay with their harvested produce. For farmers to be considered for credit, they should be in groups of about 8-20 members and should be registered with the association (Etwire et al., 2013). The NRGP is jointly funded by the International Fund for Agricultural Development (IFAD) and the Government of Ghana. Under the industrial crops window, farmers are linked to access credit in kind from the participating Financial Institutions (FIs). Driven by the value chain concept, farmers are expected to sell their produce to a participating aggregator and the value of their produce sold paid into their loan account from which the loan was taken (Dere, 2011). Under the Block Farm and SADA projects, credit to farmers is also in kind but this is implemented by government through District Agricultural Development Unit (DADU). Recovery is also in kind, except for where there is insufficient produce to pay off credit taken.



3.4 Theoretical and Methodological Approach

The study employed mainly qualitative methods in the collection and analysis of the data. However descriptive statistics were also used in presenting the limited quantitative data. The choice of qualitative methods is founded within the social constructivist model and operational assumptions about the nature and form of the social world (Schwandt, 1994; Lincoln, Lynham & Guba, 2011).

3.5 Study design

According to Arora (2011), one of the commonly used research designs in the social sciences is the cross-sectional research design. The cross-sectional design is seen to be very suitable for studies aimed at finding out the prevalence of a phenomenon, or situation among a cross-section of the population. The study therefore used the cross sectional research design as it tried to look at the strategies used in credit delivery and how effective and efficient the two schemes were in meeting the credit needs of farmers in the district.

In addition to the cross sectional study, the study also used both the qualitative and quantitative methods in carrying out this study. The qualitative methods allowed the study to present the information gathered verbally in a detailed and complete form (Sarantakos, 2005). The mixture of the qualitative and quantitative methods helps to bring about some synergy between the two (2) approaches.

3.6 Sampling Technique and Sample size determination

A multi stage sampling was used in the study. Purposive sampling, snowball sampling and clustering were employed at various levels of the data collection process. The study first divided the Wa West District into four Clusters. The district was divided into North-East, North-west, South-east and South-west. This ensured that there was fair representation of the



entire district in the study. This also allowed for a generalisation of the results for the rest of the district.

The study used purposive sampling procedure (Bradshaw and Stratford, 2000) to select two (2) out of the six (6) organisations providing credit to farmers in the Wa West District. Hence it purposively selected farmers who were beneficiaries to these two credit schemes. Masara N'Arziki operated in 12 communities whilst NRGP operated in 14 communities. Communities in which these programmes were working were targeted to be part of the study. All three communities of NRGP-Gombile, Siira and Daku were purposely selected. In the case of Masara N'Arziki, three of them-Eggu, Kuzie and Sukper were selected for the study using simple random sampling. A list of the farmers under NRGP was obtained from the scheme providers. These were 16, 14 and 13 in Gombile, Siira and Daku respectively. All farmers, except one who had travelled out of the community at the time of the study, were interviewed. In the case of Masara N'Arziki, a list of farmers could not be obtained from the scheme providers for confidential reasons. In order to get the farmers for the study, snowballing was used to identify the farmers. A total of 42 farmers were interviewed under NRGP whilst 34 farmers were interviewed under Masara N'Arziki.

3.7 Sources of Data

In carrying out this research, primary and secondary data was sourced for the study. Primary data was obtained from the field Survey through well-structured interviews and questionnaire. Secondary data on the other hand was gathered from documented literature such as textbooks, journals, MoFA reports, organisational reports from Masara N'Arziki and NRGP, internet search engines and other relevant material that were useful for the study.



3.8 Data collection instruments

Structured questionnaire was used for this study. In a structured questionnaire, the researcher asks a set of pre-determined questions using the same order of questions and wording as captured. The questionnaire was used to gather data from the farmers who were beneficiaries of the credit schemes of Masara N'Arziki and NRGP. Though some researchers have however criticised the questionnaire as being costly, time consuming and that they offer less anonymity to respondents, it was still the most preferable tool used for the study. This is because it gave respondents the opportunity to freely express themselves and give additional information which might be relevant to the study (Sarandakos, 2005).

The level of illiteracy amongst farmers in the Wa West District was also one of the reasons why the interview method was used. It allowed the researcher complete freedom to explain the questions to respondents (Arora, 2011). The interview schedule and FGDs were used to solicit information on the strategies, strengths and challenges of both NRGP and Masara N'Arziki credit schemes.

Also, two focused group discussions were held in each of the selected communities and this further added to the validity of the data collected as issues that were not raised at the interview stage came up and were discussed with the farmer groups. The focussed group discussions helped to get understanding of what an effective and efficient credit scheme is from the perspective of farmers. It provided input into the design of the questionnaire.

3.9 Key informant interviews

With the aid of a checklist, in-depth interviews were also conducted for representatives of both Masara N'Arziki and NRGP. This allowed for triangulation of the responses as the researcher was able to compare what the farmers said with what the organisations also said. This enabled the researcher to make an informed judgement on the issues raised. Key



informant interviews were also very useful in the interaction between the researcher and the respondents to further generate information that questionnaires would not have been able to generate.

3.10 Data processing, analyses and presentation

Proper handling and analysis of data collected from the field is essential for achieving the objectives of the study. Qualitative data analysis involves structuring large and complex interview data into a presentable and communicable framework for the reader (Russel, 2000). Baxter (2000) suggested seven methodological procedures to analyze qualitative data. These include: data collection (data gathering); coding of data for themes (coding), exploring data for concepts (data exploration); distilling data to remove the 'wheat from the chaff' (data distillation); linking concepts and ideas into a coherent theory (theoretical development); and finally, using the concept to reconstruct the event or experiences of the subject under investigation (theoretical representation). This procedure suggested by Baxter was followed in the analysis of the strategies, strengths and challenges for both Masara N'Arziki and NRGF credit schemes for rural farmers in Wa West District.

The data that was collected through the key informant interviews was disaggregated into the relevant themes of the study; effectiveness, efficiency, strategies for credit delivery and challenges in credit delivery and presented alongside that of the household respondents. Also, the computerized programme called Statistical Package for Social Sciences (SPSS) was used to analyze close-ended questions and data analyzed by using descriptive statistics. Frequency tables were drawn and the data presented in the form of graphs. The open-ended questions were analyzed by the researcher with the aim of quantifying emerging characteristics and concepts.



CHAPTER FOUR

PRESENTATION OF FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents and discusses the findings of the study in five major sections bearing in mind the study objectives. The first section (4.2) captures the personal profiles of survey respondents that have relevance to agriculture credit. The second section (4.3) compares the strategies of Masara N'Aziki and NRGP agriculture credit schemes based on a framework¹ in respect of seven criteria. The third section (4.4) outlines and compares the strengths of the two credit schemes in reference to their operational strategies while section four (4.5) also identifies and compares the weaknesses of the two credit schemes. Furthermore, section 4.6 presents and discusses the challenges farmers encounter in accessing credit under each of the credit schemes. Finally, section 4.7 presents the discussion on the effectiveness and efficiency of the two credit schemes.

4.2 Personal Profile of Respondents

4.2.1 Gender

From the household survey of beneficiary farmers of Masara N'Arziki and NRGP agriculture credit schemes, 65.8% were males and 34.2% were females. Although this suggests that both males and females have access to agriculture credit as in the case of the Grameen microfinance, from the in-depth interviews conducted with farmers, it was uncovered that women have less access to agriculture credit compared to men because of their limited access to land for production in large scale. In other words, women produce in smaller scale, and thus require less/no credit for production compared to men who often produce in large scales.

¹See framework in Figure 2.2



4.2.2 Educational level

In developing economies like Ghana, educational level is a social factor that greatly affects people's awareness of and access to services. In the case of agricultural credit, educational level of farmers is widely known to be one of the factors that affect farmers' adoption of credit schemes. Thus, farmers with high educational status stand better chance to access credit information as they are likely to be much aware of such information and can also easily interact with credit managers who in many cases do not understand the local languages of farmers.

Majority (73.7%) of farmers who participated in the study were found to be illiterate (Table 4. 1). It was revealed from the in-depth interviews that, the high illiteracy level of farmers limit their engagement with credit officers who do not understand the local language and for that matter access to credit.

Table 4. 1: Educational level of respondents

Educational levels	Frequency	Percent
No formal education	56	73.7
Primary	5	6.6
JHS/Middle school	8	10.5
SHS/Technical	6	7.9
Tertiary	1	1.3
Total	76	100.0

Source: Author's Field Survey, 2014

4.2.3 Marital status

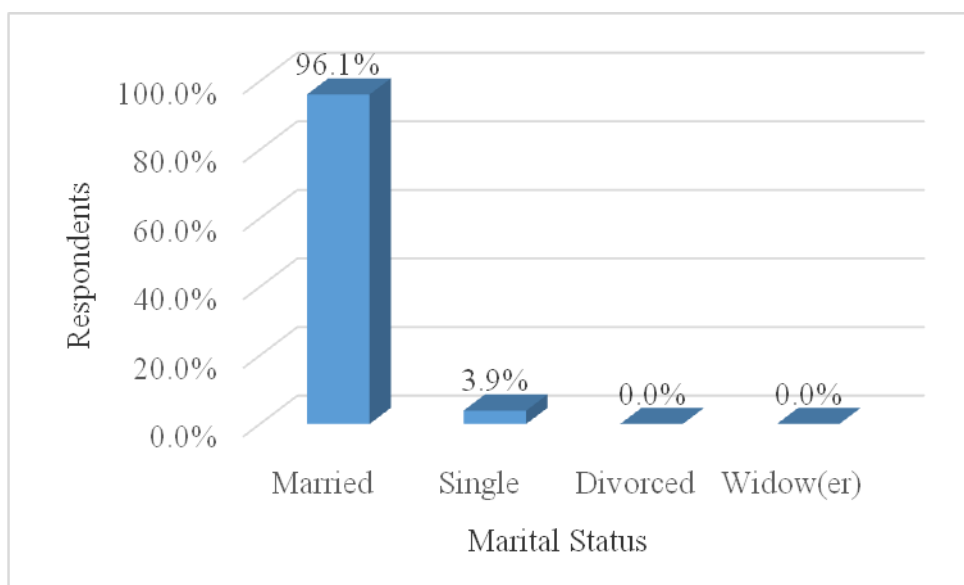
An assessment of the marital status of farmers is crucial because according to Bennett (1979), separated or divorced women are more likely to lack access to land which would negatively



affect their interest to avail themselves for financial/credit services. The marital status of farmers working with NRGP and Masara N'Arziki was assessed to establish its effect on access to and adoption of credit/financial services.

Majority of the farmers surveyed (96.1%) who were either NRGP and or MN credit beneficiaries were married with few of them being single (Figure 4. 1). Of the 74 farmers surveyed, none of them was divorced or Widow(er). This affirms the findings of Bennett (1979) that divorced women are likely not to have access to land which in turn adversely affect their access to agricultural credit.

Figure 4. 1: Marital status of respondents



Source: Author`s Field Survey, 2014

4.2.4 Type of farming

From the household survey, it was revealed that majority of farmers (84.2%) were peasant farmers while 15.8% were subsistence farmers (Table 4. 2). It was uncovered that, no farmer cultivates exclusively for commercial purpose. From the in-depth interviews, it was noted that, the production of agriculture commodities solely or partly for consumption adversely affects the ability of some farmers to repay their loans, particularly in periods of poor harvest.



Farmers viewed the act of selling few harvested produce to defray loan while household goes hungry as morally unjust. Consequently, in periods of low yields, farmers are always unwilling to sell or give part of farm produce to offset loan.

The peasant and subsistence nature of farming found in Wa West district is consistent with the findings of Etwire et al (2013) that, in Northern Ghana, agriculture is mostly subsistence.

Table 4. 2: Types of farming

Types of farming	Frequency	Percent
Subsistence	12	15.8
Peasant	64	84.2
Total	76	100.0

Source: Author's Field Survey, 2014

4.2.5 Number of years of farming

All respondents were found to have been engaged in farming. Of the 76 respondents, 93.4% have been farming for the past six (6) years (Table 4. 3). This suggests that majority of respondents have experience in farming and thus would have had much insight on the issue under study; the strategies, strengths and weaknesses of Masara N'Arziki and NRGP credit schemes as well as the general challenges farmers encounter in accessing credit.

Table 4. 3: Number of years of farming

Years of farming	Frequency	Percent (%)
1 – 5	5	6.57
6 – 10	23	30.2
11 – 15	16	21.05
16 – 20	12	15.78
21 – 25	3	3.94



26 – above	15	19.73
Total	76	100

Source: Author`s Field Survey, 2014

4.2.6 Other economic activities

Farmers in the study district engaged in other economic activities besides farming as a source of livelihood. Majority of farmers constituting 96% were found to engage in animal rearing in addition to farming. Some other economic activities farmers are involved in include trading, fishing and artisan/craftsmanship. From the in-depth interviews, farmers revealed that in periods of low yields, they sometimes used income from other economic activities to repay agriculture loans, particularly selling livestock/poultry.

Table 4. 4: Other economic activities of farmers

Economic activities	Frequency	Percent (%)
Animal rearing	73	96%
Artisan/Craftsmanship	2	3%
Fishing	6	8%
Trading	21	28%
Others	3	4%

Source: Author`s Field Survey, 2014

4.2.7 No. of years benefited from credit scheme

From the household survey, all respondents have been beneficiaries of NRGP and or Masara N`Arziki agricultural schemes (Table 4. 5). These place them in a better position in discussing the strategies, strengths, weaknesses of the two credit schemes including challenges involve in accessing credit.



A further analysis of the number of years farmers have benefited from Masara and NRGP credit schemes revealed that, although Masara and NRGP have been operational in respondents' communities since 2009 and 2011 respectively, majority of farmers have not been consistent beneficiaries (Table 4. 5). The proportion of respondents that have benefited from either Masara N'Arziki or NRGP programme for three farming seasons is 21%, two farming seasons is 67% and 1 farming season is 12%. Most farmers attributed their inability to consistently access credit from the two schemes for farming due to loan delinquency and or delay in payment. It was revealed that farmers who have benefited for one or more years and have been able to repay their loans stand a better chance of accessing loan for the next farming season.

Table 4. 5: No. of farming seasons benefited from credit scheme

No. of farming seasons benefited from credit scheme	No. of respondents		Total
	NRGP	MASARA N'ARIZIKI	
1	1	8	9
2	31	20	51
3	10	6	16
Total	42	34	76

Source: Author's Field Survey, 2014

4.3 Comparison of Masara N'Arziki and NRGP agriculture credit delivery strategies

The first objective of the study seeks to compare how the Masara N'Arziki and NRGP agriculture credit schemes delivered credit to farmers. The credit delivery strategies of the two credit schemes were compared based on a framework of seven criteria (see framework in chapter two). These include credit delivery form, credit terms and conditions, eligibility/selection criteria, credit approval and disbursement, credit repayment,



collaboration with other actors and other service beside credit. The findings in respect of each criteria are presented below.

Table 4. 6: Credit Delivery Strategies of Masara N'Arziki and NRGP

Strategies	Masara N'Arziki	NRGP
Eligibility/selection criteria	Farmers must be in FBOs Registered with scheme	Farmers must be in FBOs Operate an active bank account Registered with scheme
Credit terms and conditions	Interest rate unknown-factored into maize supplied as repayment	Interest rate of 24% per annum
Credit delivery form	Delivered in-kind	Delivered in-kind
Credit approval and disbursement	Less than four weeks after application Disbursed by April	Usually between 4-8 weeks Disbursed in late June
Credit repayment	Maximum of 10 months Strictly in produce-maize	Usually within 9weeks Flexibility for cash repayment
Collaboration with other actors	Limited collaboration-usually inputs from Yara and Wienco	Wide collaboration-MoFA, input dealers, aggregators, banks, tractor owners
Other services beside credit	Mainly credit delivery	Provides credit education Provides capacity building to farmers

Source: Author`s Field Survey, 2014



4.3.1 Selection process/eligibility

These two credit schemes operate through FBOs rather than individual farmers because members of the FBO provide guarantee for each other. In other words, there exists group solidarity. A group size ranges from 10 to 25 for NRGP with the ultimate aim of registering with the Department of Cooperatives and 5 to 25 for Masara N'Arziki. Therefore in the event of a default of a member, it simply implies that the group as a whole has defaulted and other members are liable in paying the debt. In each of the credit schemes, credit is only given to active FBOs. In the case of an already existing FBO that has ever contracted credit, it should have a good track record, particularly prompt loan repayment.

NRGP credit scheme further requires that a prospective FBO seeking credit is certified by the District Value Chain Committee (DVCC)² and has an active bank account with one of their affiliated FIs. Any FBO that wants to access credit from bank under the NRGP scheme must first apply through the DVCC. The DVCC receives applications from FBOs and makes its own preliminary vetting. Lists of FBOs that meet the DVCC criteria including their applications are submitted to the FI for subsequent appraisal. FI upon receiving applications of FBOs does its own appraisal before approving or disapproving the application. This suggest that, under the NRGP credit scheme, the ultimate decision of approving or disapproving credit of FBOs rest on the bosom of the FI. The diligence carried out by FIs in giving out credit under the programme is because loans given to farmers to enable them access inputs and other services belong to the bank, and in the event of a default, the FIs bear's liabilities not NRGP. NRGP is only acting as a facilitator for effective collaboration among all actors in the agricultural value chain.

²Consists of representation of all value chain actors; FIs, tractor service providers; MOFA schedule officer; buyers, input dealers



Farmers, particularly those who ever benefited from both credit schemes asserted that, it is easier to access facility from Masara N'Arziki than NRGP. According to respondents, accessing NRGP credit facility through banks is bureaucratic resulting in untimely approval of loan and delay in accessing ploughing and input services for farming - until the loan is approved, farmers can't access services like ploughing and inputs from other actors in the NRGP credit value chain. It however took between two to three visits to the bank before the credit is disbursed to the farmers. Per every visit to the bank, the farmer group incurred a cost of GHc15.00.

4.3.2 Credit Terms and Conditions

In both NRGP and Masara N'Arziki agricultural credit schemes, the interest rate charged on credit is always subject to review based on the prevailing economic circumstances. The interest rate banks charges under the NRGP credit scheme is jointly taken by NRGP District Value Chain Committee with farmers inclusive. The process can be described as participatory and transparent. In 2014 farming season, the rate was peaked at 24% per annum.

As mentioned earlier, the principal together with interest in the case of Masara N'Arziki is paid in the form of a specified quantity of farm produce. Like the NRGP, the specified quantity of farm produce to be collected as payment of the credit provide is reviewed from time to time by management of Masara N'Arziki without involving farmers. In 2013 farming season, a ton of maize was collected per every acre of maize farmer the organization has supported FBO to produce. This was increased to 1.2 tons in 2014 farming season equivalent to GHc 616.00 per acre. The lack of involvement of farmers in determining the quantity of farm produce to be given to Masara N'Arziki's payment of in-kind credit provided to farmers limits transparency transaction to some extent.



The amount of farm produce farmers are expected to pay per acre of maize farm is constant if even they pay before the 10th month that is the maximum number of months given to FBOs to repay the loan. However, in the case of NRGP loan, the interest varies directly with the number of months since it is always a function of the number of months, rate and principal.

4.3.3 Form of credit delivery

According to Thiam (2007), agricultural finance is provided in various forms (cash and in-kind) to agro enterprises and farmers operating small, medium, and large farms. It also includes financial services such as warehouse receipts systems, savings or other capitalization mechanisms, as well as insurance and forward contracts that are specific to agriculture.

From the in-depth interviews and household survey, all respondents indicated that the form of credit delivery of both Masara N'Arziki and NRGP is *in-kind*. In both schemes, the *in-kind* credit takes the form of ploughing services and inputs provision (specifically weedicides, insecticides, seeds and fertilizers).

In the NRGP credit scheme, the DVCC usually takes decision on the production cost per acre for all crops under the programme at the beginning of the farming season. This forms the basis of budgeting by FBOs. Upon approval of loan by FI, FBO does not access the loan in cash but rather it is credited into their account. The FBOs collect inputs from dealers while the financial institution debits their account and credit the input dealer accordingly based on countersign invoices by FBO executives and their Agriculture Extension Agent (AEA). Same applies to service rendered by tractor service operators. Similarly, in-kind credit in the case of Masara N'Arziki agriculture credit scheme also takes the form of inputs delivery and provision of tractor services. In 2013 and 2014 farming seasons, the package for one acre of maize farm include 250 kg of compound fertilizer; 10kg of pannar maize hybrid seeds; 1 litre of Lumax weedicides; and 1litre of rigal insecticides. All these translated into GHc480.00.



Farmers found it more convenient with the Masara N'Arziki arrangement compared to the NRGP since they got a completed package of support making them ready for production

4.3.4 Credit Approval and Disbursement

Masara N'Arziki usually approves and renders credit application of FBOs latest by the end of May, when farming season starts. Ideally, banks under the NRGP loan scheme are supposed to approve and disburse credit in May to enable farmers access ploughing and inputs timely, however, due to bureaucracy involve in accessing NRGP credit as described under the eligibility criteria, some loans are approved and disbursed as late as June although applications may be submitted before May. From the survey, one-third of farmers who have ever benefited from NRGP credit scheme said that it sometimes takes 8 to 10 weeks after submitting an application to a FI to access credit. Owing to the delay in accessing credit, it was revealed that, credit in most instances, comes at a time farmers do not need it. During a FGD with 'Enyesong' FBO at Gombile community in Wa West district, a discussant had this to say;

The banks are not helping us at all. They won't approve the credit quickly for us so that we would access the needed services from other actors with the programme. Our farming is basically rain fed and we deal with seasons a lot. I am a member of an FBO and we once applied for credit to plough and also buy weedicides to spray field immediately after ploughing to tame weeds. We applied for the credit in April but it was approved in late June, when ploughing was over and we were weeding.



Table 4. 7: Duration between Credit Application and Disbursement

Duration between credit application and disbursement	No. of respondents	
	NRGP	MASARA N'ARZIKI
>= 2 weeks	0	16
>2 <=4 weeks	18	18
>4<=6 weeks	7	0
>6<=8 weeks	3	0
>8<=10 weeks	14	0
Total	42	34

Source: Author`s Field Survey, 2014

The maximum repayment duration of both Masara N'Arziki and NRGP credit are 9 months and 10 months respectively. As explained above, Masara N'Arziki credit is usually approved in May, and farmers are expected to repay after harvest, not later than February. Also, in the case of NRGP, banks usually advance credit between the months of May and June, and farmers are expected to pay within the next 10 months from the day of disbursement.

4.3.5 Credit Repayment

For Masara N'Arziki, maximum repayment duration of ten months is allowed. For NRGP farmers are expected to repay within 9 months. But there is room for extension beyond the 9th month, but for every additional day, farmers are charged the interest attracted until the entire loan is paid off.

The mode of repayment of credit in the Masara N'Arziki and NRGP credit schemes vary significantly. Ideally, in the NRGP credit scheme, farmers are linked to buyers of the various



crops they were supported to cultivate. After harvest, the buyers get in touch with the FBOs to buy their produce. The money is credited into the account of the FBO. The bank debits FBO account to defray the loan. Any amount left in the account can then be accessed by the FBOs. In situations where the harvest sold is less than the credit, members of FBO contribute the outstanding amount to clear the loan.

The ideal NRGP marketing steps described above in most cases do not occur because of difficulty in arranging with registered buyers and or low prices of registered buyers. It is worth mentioning that, NRGP programme allows for flexibility when it comes to marketing of produce. Where the programme is unable to get buyers, farmers are allowed to sell in the open market. Furthermore, where prices of buyers in open market are higher than arranged registered buyers, farmers are allowed to sell to the later former. In circumstances where farmers sell in the open market, it's the responsibility of leaders of FBO to ensure that members contribute accordingly in payment of the loan. It needs to be mentioned that, the NRGP allows for rescheduling of loan in cases where reasons given by farmers for default are genuine and plausible.

With regards to Masara N'Arziki, payment of loan facility is done by giving out a certain quantity of the farm produce to the organization. As earlier on mentioned, in the 2013 farming season, 1 ton of maize was taken for every acre of maize farm a farmer was supported to produce. This was increased to 1.2 tons in the 2014 cropping season with the reasons that cost of inputs and ploughing services provided to FBOs have increased. In the event of crop failure, Masara N'Arziki does not collect cash neither do they accept rescheduling of credit, farmers are forced to buy maize to defray the debt. The mode of repayment of loan under the Masara N'Arziki agricultural scheme can be described as rigid, in that, they only accept part of the farm produce and do not also allow for rescheduling. It



was reported that owing to massive crop failure in 2013, a beneficiary of Masara N'Arziki credit scheme in Nabugubelle was alluded to have committed suicide to avoid the humiliation and pressure mounted by credit officers. In a FGD with 'Songbaala' farmer cooperative at Siira, a discussant remarked as follows;

For Masara N'Arziki credit officers, you dare not tell them that you can't pay their loan. You can even show them how poorly your crop faired but you must pay else they take you to court. During periods of crop failure, we usually sell our livestock, poultry or other farm produce to pay...sometimes we even borrow from friends and relatives to pay. As an FBO, your colleagues will also mount pressure on you to pay to avert they taking the whole group to court.

4.3.6 Level of collaboration with other actors in the agriculture value chain

NRGP collaborates with other value chain actors in the delivery of in-kind credit to farmers. As earlier on mentioned, NRGP only provides the wheel for bringing together all actors in the agricultural value chain to work towards enhancing crop production. Other actors NRGP collaborates with are FIs, MoFA, tractor service providers, farmers/FBOs, input dealers and buyers. The roles of the above mentioned actors in brief include but not limited to the following;

- Farmers/FBOs are responsible for production
- FIs advance credit to farmers/FBOs for production
- MoFA provides technical guidance to farmers in agricultural production
- Tractor service providers provide ploughing services to farmers
- Input dealers supply farmers with the needed inputs for production
- Buyers provide ready market for the produce of farmers



Representatives of the above mentioned actors in a district together with the District Value Chain Coordinator constitute the District Value Chain Committee (DVCC). The DVCC mutually takes decision on cost of production per acre for crops supported by the programme, selection of FBOs for subsequent appraisal by FI, interest rate on loans, costs of ploughing per acre, cost of inputs and finally prices of produce. The level of collaboration between farmers and other value chain actors in the NRGP credit scheme can be described as high and transparent as well. According to the beneficiaries, the benefits derived from the schemes include a better crop yields due to the application of fertilizers, increased farm sizes, and some social prestige as being members of a credit scheme.

Unlike NRGP, the level of collaboration between Masara N'Arziki and other actors in the agricultural value chain is limited. Whereas input dealers in the NRGP deliver inputs directly to farmers, Masara N'Arziki procures the inputs from dealers and intend deliver them to farmers all by themselves. Additionally, Masara N'Arziki involves the judiciary in the signing of contract documents. The involvement of the judiciary in the signing of contract documents particularly contributes significantly to the successful recovery of Masara N'Arziki agriculture credit as farmers feared being dragged to court compared to the NRGP credit which is done between bank officials and leaders of FBOs with AEA in most cases as witness. As such, default rate for Masara N'Arziki was 0% whilst that of NRGP was 9%.

With the exception of tractor service operators, Masara N'Arziki does not link farmers directly to MoFA, FIs, input dealers and buyers for services. Besides, farmers are not involve in determining the inputs requirement per acre of cultivated farm as well as the quantity of farm produce to be collected by the organization as payment of the credit.

In general, NRGP collaborates with a wide range of value chain actors, particularly in taking production decisions but limited in the case of Masara N'Arziki credit scheme. The high level



of collaboration between NRGP and other value chain actors at district level enhances the chances of the programme sustainability in the absence of NRGP, i.e., if the relationships between actors are deepened, they will continue to collaborate even in the absence of NRGP. On the contrary, the failure of Masara N'Arziki to link farmers to FIs, MoFA and buyers for services compromises the sustainability of the programme if they fold up.

4.3.7 Other services accessible aside credit

It was uncovered that, NRGP has a wide range of services aside in kind³ credit they provide to FBOs. These include: marketing services, education and provision of farm machinery. However, access to these services by FBOs is limited. In respect of marketing, it was noted that, the DVCC usually links FBOs to buyers and also takes decision on prices at which buyers will buy produce. However, the prices of produce usually agreed upon by the DVCC is always low resulting in most farmers selling their produce in the open market. In the views of farmers, it was more convenient and advantageous going by the repayment system of NRGP since it was more flexible for farmers to either repay by selling their produce to an identified buyer or to repay in cash where they were dissatisfied with the buyer identified by the DVCC in cash compared to Masara N' Arziki where it was strictly through the supply of specified quantity of produce.

In the case of provision of education on agriculture production, MoFA which is a key actor in the NRGP is supposed to render this service to FBOs but resource constrain on the part of MoFA makes them unable to carry out their role effectively. With regards to the provision of farm machinery like tractor, NRGP provides a window of opportunity for its FBOs under what is titled as "matching Grant". The FBOs are supposed to make a deposit of 10% of the cost, NRGP gives a matching grant of 30% while an NRGP affiliated FI gives out a loan of

³Ploughing services and inputs



60% in meeting the cost of the machinery. Owing to the high levels of poverty and peasant/subsistence nature of production by most farmers, they are unable to meet the 10% of machinery cost.

Masara N'Arziki besides its in-kind credit also educate farmers on best farming practices ranging from ploughing, sowing/planting, weeding, application of weedicides/insecticides, harvesting, processing and storage. However, respondents indicated that the education services provided by Masara N'Arziki are infrequent and limited.

4.4 Effectiveness and Efficiency of Masara N'Arziki and NRGF Credit Schemes

As adopted from literature, the effectiveness of both credit schemes was measured in terms of the degree of attainment of the set objectives of the credit schemes. In the context of this research, effectiveness was thus measured on the following objectives; farmers' access to credit in the required volume, at the right time, delivered at the right place and access to timely and acceptable market prices by the farmers. Efficiency was measured in terms of the cost of accessing the credit relative to the output/yields of farmers. It also looked at the cost of providing credit by the scheme providers to the farmers relative to the supplies from the farmers as well the attainment of set objectives of the schemes within the defined timelines. The results on these parameters were obtained from both the farmers and scheme providers.

Table 4. 8 Effectiveness and Efficiency of Masara N'Arziki and NRGF Schemes

Effectiveness	Masara N'Arziki	NRGF
Amount of credit received	94% (32) of farmers satisfied with amount of credit received	95% (40) of farmers dissatisfied with amount of credit received



Time of credit received	100%(34) of farmers satisfied with early credit delivery	95% (40) of farmers dissatisfied with late credit delivery
Point/Place of credit delivery	100% (34) of farmers satisfied with the point of credit delivered	69.9% of farmers dissatisfied with point of credit delivery
Timely and acceptable market arrangements	55.8% (19) satisfied with market arrangements	87.3% (36) of farmers dissatisfied with market arrangements
Efficiency		
Cost of credit per acre	Interest of GH¢ 43.42 paid on every GH¢ 241.00 credit received per acre	Interest of GH¢136 paid on every GH¢480 credit received per acre

In measuring the effectiveness of the credit schemes, the volume of credit available to farmers was considered. Out of the 34 farmers interviewed under the Masara N'Arziki credit scheme, 94% (32 farmers) indicated they were satisfied with the volume of credit received from the scheme providers. This was also confirmed during the FGDs where group members indicated that they were usually given the volume of credit required. One farmer could take credit for even up to fifteen acres, which met their demands. One respondent at Eggu remarked;



‘As for Masara N’Arziki, we are happy with credit they give. If you apply for even ten acres, fifteen acres, but they will give you’.

There was however a sharp contrast with NRGP where 40 farmers (95%) indicated the maximum acres one was supported with was just two.

In the area of the timing of the credit to farmers, all 34 respondents under the Masara N’Arziki scheme indicated it usually does not last more than four weeks from the time of applying for the credit and the delivery of the credit. It was confirmed during the key informants’ interview that latest by middle of April, credit in the form of inputs, is usually disbursed to farmers. In the case of NRGP, 95% (40) of farmers indicated they were dissatisfied with the scheme due to the late disbursement of the credit. It usually lasted at least six weeks from the time of application and the time of credit disbursement. According to farmers, NRGP’s credit is disbursed in mid-July

Another area of measurement of effectiveness was on the place of delivery of the credit. During the household survey, all respondents under the Masara N’Arziki (34) confirmed that credit, in the form of inputs was delivered right at the door steps/communities of farmers. Out of the total, 80% (27) of respondents indicated they were particularly drawn into Masara N’Arziki because of that factor. Even though farmers had a hint, they could indirectly be paying for such a service, they still were comfortable since it reduced the risk of travelling up and down to meeting input dealers to purchase these inputs. Under NRGP, respondents indicated that though the inputs were brought to the communities, it was usually the FBO leaders who were responsible for that, in which case the group members pay for the cost of transportation. The burden of moving up and down between the bank, input dealers and transport owners in order to bring the inputs to the farmers makes farmers see NRGP less effective.



On the grounds of timely and acceptable market prices, it was observed that Masara N'Arziki again was rated effective compared to NRGP. From the field survey that was conducted, respondents indicated their respective credit schemes provided market for their produce. This was in line with the land bank of the Philippines in their market capacity building strategy where markets were provided for farmers' produce (State Bank of Pakistan, 2009). This notwithstanding, a greater majority 85.7% (36) of respondents under NRGP indicated they were dissatisfied with the market prices and arrangements. A respondent in Siira had this to say about the marketing;

'The marketing is one of our biggest issues with NRGP. When we attend meetings, they will promise us of bringing aggregators to buy our produce on time but even when they end up bringing them very late, these aggregators offer very low prices that cannot pay for our cost of production. We end up not selling on time and in many instances not getting any higher price for our produce'.

For those under the Masara N'Arziki, 55.8% (19) of respondents indicated they were satisfied with the market prices and its arrangements. The remaining 15 (44.2%) respondents attributed their dissatisfaction to the volume of produce which is usually supplied as repayment for the credit, an issue which feeds directly into the efficiency of the scheme. Again, there was a general feel of ineffectiveness of the NRGP in marketing as compared to Masara N'Arziki.

Having an effective credit scheme is one thing, and being efficient another. The study examined the efficiency of the credit schemes by measuring the cost of the credit relative to the returns/yields farmers got from accepting the credit. For the 2014 season under the NRGP, where as every acre of credit received by a farmer cost GH¢ 241.00, repayment was GH¢ 284.42. In the case of Masara N'Arziki, whereas cost of credit in the form of inputs



received per acre of maize in same year amounted to GH¢ 480.00, repayment was 22mini bags per acre amounting to GH¢ 616.00. A key informant under the Masara N'Arziki who was hesitant to provide detailed information, indicated that the reasons for the high cost of credit could be attributable to the quality of inputs supplied to the farmers. It was however admitted that because Masara N'Arziki was purely commercial, higher fees could be charged in order to cover for other operational cost of the scheme. For the NRGP, key informants indicated the cost of credit was low due because farmers were not paying for operational cost of implementing agencies except for the interest rate charged by the bank. Again, it was confirmed that because it involved a wider range of value chain actors, farmers got the best offers from these actors as the actors were seeking to build sustainable business relations.

From the field survey and the discussions so far, it can be realised that out of the five objective areas used to measure effectiveness of both schemes, Masara N'Arziki was rated more effective as compared to NRGP. It can thus be concluded that generally, Masara N'Arziki is more effective in meeting the credit needs of the farmers as compared to NRGP. On the other side however, NRGP was seen to be more efficient as compared to Masara N'Arziki. This was due to the fact that cost of credit under Masara N'Arziki was generally high coupled with the stringent repayment mode in produce only. A farmer during a focus group discussion recollected how they were left to buy maize from the open market to supply Masara when their yields were low. It can thus be concluded that the Masara N'Arziki is effective but not efficient and NRGP is efficient but not effective. This is consistent with Karlaftis (2004), who maintained that, although an agricultural credit project or scheme is managed effectively, yet, due to the poor operational management, it will be performing inefficiently (Karlaftis, 2004).



4.5 Strengths of Masara N'Arziki and NRGP agriculture credit schemes

This section discusses the strengths of the two credit schemes as recorded from the field survey.

Table 4. 9: Strengths and Weaknesses of Masara N'Arziki and NRGP

	Masara N'Arziki	NRGP
Strengths	<p>1. Credit Delivery through groups system</p> <p>Credit is delivered to farmer groups and not as individuals and this promotes high loan repayment as group members are jointly liable for the credit of one another.</p>	<p>1. Credit Delivery through groups system</p> <p>Credit is delivered to farmer groups and not as individuals and this promotes high loan repayment as group members are jointly liable for the credit of one another.</p>
	<p>1. Reduction in credit diversion</p> <p>Credit is received only for the purpose for which it was meant and farmers are better able to apply these inputs to their crops other than diverting it to other social responsibilities such as funerals, marriage ceremonies and festivals among others.</p>	<p>2. Transparency in credit terms and conditions</p> <p>The credit terms and conditions are explained to the farmers are before the loan is disbursed to them. Farmers can easily calculate the interest by themselves using the agreed interest rate with the bank.</p>
	<p>3. Supply of farm inputs</p> <p>Credit is provided in the form of</p>	<p>4. Reduction in credit diversion</p>



	<p>farm inputs basically fertilizers and chemicals</p>	<p>Credit is received only for the purpose for which it was meant and farmers are better able to apply these inputs to their crops other than diverting it to other social responsibilities such as funerals, marriage ceremonies and festivals among others.</p>
	<p>5. Credit delivery at the door steps of farmers</p> <p>Credit in the form of inputs is delivered to the farmers in their various communities thereby reducing the burden of the farmers have to travel to the district capital to purchase inputs.</p>	<p>6. Comprehensive package besides credit</p> <p>The scheme in providing other services such as credit education, capacity building in good agronomy and other relevant topics</p>
	<p>7. Timely delivery of inputs</p> <p>Inputs are delivered at worst first week of June and this allows farmers to prepare adequately for their farm activities</p>	<p>8. Collaboration with other actors</p> <p>As a value chain facilitation programme, there is collaboration with other value chain actors to create strong linkages for sustainable relationships</p>



	<p>9. Involvement of court system in contract signing</p> <p>All contracts of the scheme with farmers are backed by the district magistrate courts and this compels farmers to repay on time to avoid any legal sanctions</p>	
Weaknesses	<p>1. Limited credit education</p> <p>There is no credit education given to farmers. There is also no financial education on even managing the loans carefully to repay their debts</p>	<p>1. Weak monitoring of credit utilization</p> <p>Credit providers are not able to carry out regular monitoring of the credit after disbursement and this negatively affects repayment</p>
	<p>2. Stringent measures on mode of repayment</p> <p>Repayment is only through supply of maize. This is disadvantageous to the farmers with some reported occasional suicide cases.</p>	<p>3. Delays in credit disbursement</p> <p>Disbursement of credit usually in July in an erratic rain fed agricultural economy also negatively affects repayment.</p>
	<p>4. Lack of transparency in credit systems and conditions</p> <p>Farmers do not understand how much is the loan principal and how is</p>	



	<p>interest. Farmers are only told how much they would have to repay at the close of the season but are not previewed to how that figure was arrived at.</p>	
	<p>5. Limited collaboration with other value chain actors compromising sustainability</p> <p>The scheme has very limited collaboration with other value chain actors. Farmers are thus not linked to other actors that can be of support even when the scheme is no more.</p>	

4.5.1 Credit Delivery through Group System

One of the major strengths of both credit schemes is the delivery of credit through the group system. They both draw on the joint liability concept using the groups as collateral for the loans. Farmers always access credit only when they are in a group. The group system promotes high loan repayment as group members are jointly liable for the credit of one another. It was reported that, the group system adopted by Masara N’Arziki has contributed to over 90% credit recovery rates of the scheme in the district since its operation. During a key informant interview with Wa Branch Manager of Nandom Rural Bank, she indicated that the group system adopted by NRGF has helped increased both their agricultural loan portfolio and beneficiaries since recovery of group loan always turn out to be better than individual loan due to the group solidarity. From the perspective of the credit scheme



providers, it's also easier to work with farmers in groups compared to individuals as it reduces cost of operations.

In the perspective of the farmers however, this is not always an advantage to them as they have had to pay for the debts of some group members. It was noted that, the group system puts a high level of caution to accept only trusted members; people they know are serious and committed to repaying debts as group members. From the focused group discussion with farmers in Kuzie, members reiterated how they have always been careful in selecting their group members just because they don't want any default in these words;

Going for the loan is not the problem, but who you go with for the loan is what matters more. Sometimes, you will do your very best not to default, but somebody may just lazy around and you will be asked to pay for his or her debt, so we are very careful to choose trust worthy and hardworking people as group members just to avoid any credit defaults.

4.5.2 Reduction in credit diversion

Another major strength that was common to both schemes is the reduction in credit diversion which was achieved through the delivery of credit in-kind to farmers. With the Masara N'Arziki scheme, this takes the form of inputs and other basic farm equipment such as weedicides, hybrid seed, fertilizers, and in some cases knapsack sprayers and cutlasses. The NRGP approach differ's a little as it rather facilitates the farmers to access the credit from the bank but in which case the farmers are not given cash but service providers are contracted to supply the inputs to the farmers and the bank then makes payment to the services providers. All four key actors (the FBO, MOFA, ACDEP and the service provider) usually certify the delivery of the services before the bank makes payment to the service provider. In both cases however, credit is received only for the purpose for which it was meant and farmers are better



able to apply these inputs to their farm crops for an increased yield other than other social responsibilities such as funerals, marriage ceremonies and festivals among others. Farmers indicated they were satisfied with this as it helps improve their ability to repay all of the credit advanced to them. Besides, it also reduces the high risk of theft or misplacement from the point of picking the cash to the point of buying or paying for the inputs/services.

4.5.3 Supply of Farm Inputs

Farm inputs such as fertilizers, insecticides, and weedicides and hybrid seeds are often limited in supply in the open market. Where they are even available, the prices are always sky rocketing that not many farmers can afford to buy. However, farmers under the Masara N'Arziki credit scheme are usually confident of their inputs for farming once they have been considered for the credit. NRGP does not deliver inputs to farmers directly but farmers are equally supplied inputs when the credit is approved by the bank except for the delays in the whole NRGP approach. Thus, farmers have high chances of accessing farm inputs for their farm business compared to if they were to buy them by themselves. Farmers' perspective on this was one of high satisfaction as it reduces their burden of haven to engage input dealers/service providers for these services. They indicated it also reduces the high risk of theft or misplacement as keeping cash on them exposes them to all other such risks.

4.5.4 Credit Delivery at Farmers' Door Steps

A remarkable strength of the Masara N'Arziki scheme is the delivery of the inputs at the door steps of the farmers. During the household survey, 80% (27) of respondents who are members of the Masara N'Arziki indicated that they are clients of Masara N'Arziki credit scheme due to this factor. Usually after all credit applications have been approved, the field officers of the credit scheme are responsible for ensuring that the farm inputs so applied for have been delivered to the farmers. Cargo tracks usually transport these inputs to the farmers



in their various communities on days that were communicated earlier to the farmers. On such days, a matching meeting of all groups is organized for the distribution of inputs to groups. What this means to the farmers is that, the cost of transportation they would have incurred going to the nearest market to buy the inputs is taken off. Again, the danger of being attacked by unknown people is also taken off. As such, farmers have a piece of mind sitting at home to receive all these services at their door steps. When asked during the household survey whether credit scheme providers were not charging them for that, a farmer remarked; *even if they are charging us for bringing the inputs to our communities, it is still better than going through the risk of attacks in trying to do this by ourselves.*

4.5.5 Timely Delivery of Inputs

The usefulness of inputs to farmers for the season is also dependent on the time at which the inputs are received. As a heavily rain fed agricultural country, and Wa West District for that matter, timely distribution of the inputs to farmers helps in the timely application of these inputs to the crops. The scheme has always delivered inputs to farmers early to enable them also apply the inputs at the right time.

From the household survey, all 34 respondents confirmed that it usually doesn't take more than a month between the time of sending in their credit application and the time of disbursement. The key informants also confirmed that latest by middle of April, all inputs are distributed to farmers ahead of the season to enable them time to plan and carry out the farm activities. This has therefore helped farmers avoid the rush of running helter-skelter at scheme providers at the eleventh hour or at the start of rains looking for these inputs for their crops. This therefore helps reduce the incidence of crop failure that would have arisen from the unavailability of inputs at that critical need point. Farmers are thus confident and satisfied that once their credit applications have been approved, they will receive these inputs on time



for the intended purpose and this has also remained another key strength of the Masara N'Arziki credit scheme.

4.5.6 Involvement of Court System in Contract Signing

Another key strength but peculiar to the Masara N'Arziki credit scheme is the involvement of the court system in signing the contracts with its farmers. Prior to the disbursement of the inputs after the applications have been approved, the farmers are made to enter into contract with the scheme on all the credit terms and conditions. As a legal backing to the contracts, these are usually taken to the District Magistrate courts for witnessing. The farmer group keeps a copy of the contract whilst the scheme providers also keep one.

The effect of this is that, it puts seriousness into the farmers, knowing that if they fail to repay their credit, they will be dragged to the court where the signing of the contracts was witnessed. As such, farmers put in all their efforts in taking proper care of their farms so that they can get enough yield and thus in turn pay for their credit. This has since contributed significantly towards the credit repayment since they fear being dragged to court. A key informant with the credit scheme also confirmed this position, adding that it had seriously helped to get their farmers repay their credit.

4.5.7 Transparency in Credit Terms and Conditions

The NRGP model has a very transparent system in its credit delivery scheme. Leaders of the FBOs often meet with the bank officials and all the loan terms and conditions such as processing fee, interest rate and loan duration among others explained to them. The leaders then in turn also relay all such terms and conditions to their entire membership. As shown in the table below, all 42 farmer respondents under NRGP responded 'yes' to a question on whether they were aware they usually pay interest and processing fee for the loans they take



from the bank, and this points to the transparency of the credit terms and conditions under the scheme.

Table 4. 10: Farmers' Awareness on Credit Charges

Charges	No. of respondents who said they pay charges		Total
	NRGP	MASARA N'ARZIKI	
Interest	42	10	52
Processing fees	42	10	52

Source: Field Survey, 2014

It needs to be mentioned that the terms and conditions of credit are decided by the DVCC. The DVCC with representative of farmer groups meet to discuss and agree on interest rate, duration of loan, inputs requirement per acre and marketing price of produce. As a result, farmers are convinced that the terms and conditions agreed upon (even if they are not too satisfied with them), are a true reflection of what they themselves have been part of and that there was no manipulation of the system. As the system is transparent, farmers trust that whatever the paid was what they were really supposed to pay and that no credit officer has cheated the farmer.

4.5.8 Comprehensive Package besides Credit

NRGP modeled on developing the maize, soya and sorghum value chains, has a comprehensive package for its farmers and not just credit alone. Credit is key but the scheme also delivers other services such as market linkages and trainings on various relevant models for farmers such as group dynamics, knowledge about the supply chain, financial management and lobbying and price negotiation. In all of its activities and trainings, NRGP's key message for the FBOs is for them to take farming as a business and practice farming just as any other business venture and not as a tradition handed over to them, a way of life.



NRGP further facilitates the registration of these FBOs with the Department of Cooperatives as legal cooperative societies that can do business with any other group or individual. This has given the FBOs legal backing to engage other service providers and organizations on any business transaction they so wish. This has therefore given the FBOs several opportunities beside the credit they are able to access from the bank.

4.5.9 Collaboration with Other Actors

The survey confirmed that NRGPs collaborate with several other actors in the value chain in its credit delivery. Key actors such as tractor service providers, input dealers, aggregators and end buyers are engaged in the scheme. Other support service value chain actors such as the Department of Cooperatives (DoC), National Board for Small Scale Industries (NBSSI), District Assemblies, MoFA, and ACDEP are all essential collaborators under NRGPs. What this means is that chances of sustainability are high since these farmers' capacities are being built from these linkages coupled with the trainings delivered. As such, farmers can still link up with any of these actors for any service even if NRGPs were not in existence any longer. The lead farmer in Daku from the Sungbaala FBO had this to say;

As at now, I can go to the bank any time I want to find out about anything concerning our loan. Even if NRGPs should stop linking us to credit, but the bank knows us and we have good relationship with them and so can continue to do business with them. MOFA knows of our operations and we can link up to any of the service providers when the time comes.

The Upper West NRGPs Regional Schedule Officer also confirmed this when in a discussion he noted that NRGPs were focused on enhancing relationships among value chain actors with farmers at the centre. This has therefore stood out as one of the key strengths of the NRGPs scheme.



4.6 Weaknesses of Masara N'Arziki and NRGP agriculture credit schemes

4.6.1 Masara N'Arziki

4.6.1.1 Limited Credit Education

Credit education to farmers under the Masara N'Arziki scheme was found to be limited if not almost absent. The scheme does not target any credit education as part of its package to the farmers. Farmers therefore resort to their own mindsets about how to utilize the loans to pay back when the time comes. This adds up to the struggles that farmers go through in the event of a crop failure in order to repay their loans.

4.6.1.2 Stringent measures on mode of Repayment

Per the design of the Masara N'Arziki model, farmers repay their loans with the produce that they were supported to cultivate, which is usually maize. The scheme insists on repayment of credit only with the produce and this has brought serious hardships and psychological pressure to farmers in the event of a crop failure. Farmers have been compelled to buy produce from the open market to settle their indebtedness to the scheme when their crops did not do well. Though in the Wa West District there was no incidence of deaths, farmers however mentioned one suicide case in the Sissala East district in 2013 when he could not stand the psychological pressure and possible humiliation if dragged to court. This therefore limits the mode of repayment available to farmers and this affects farmers when there is crop failure.

4.6.1.3 Lack of Transparency in Credit Terms and Conditions

The scheme is further limited in its inability to be transparent on the credit terms and conditions. Farmers are unaware of the rate of interest that is charged on the loan they contract. Exactly what the cost of the inputs alone without adding interest, farmers were



unaware. What they are however aware of is that they would pay a certain number of bags of produce for the credit they were given, thus the formula used in calculating the number of bags to be paid is not open to the farmers. Again, whether or not there is anything like processing fee as part of the cost of the credit, the farmers were unaware.

4.6.1.4 Limited Collaboration with Other Value Chain Actors Compromising

Sustainability

The Masara N'Arziki scheme has very limited involvement of local actors unlike NRGP. The scheme makes all the arrangements for the inputs by itself from outside the district. Farmers are thus not linked to any actors as done by NRGP and so farmers wholly rely on the scheme providers for the inputs. What this points to is that the scheme is highly unsustainable as farmers will be left in the middle of the road when the scheme ends or exits. Farmers are not being modeled to develop relationships with local actors in the district for such services even when the scheme ends. This therefore compromises the sustainability of the programme.

4.6.2 NRGP

4.6.2.1 Weak Monitoring of Credit Utilization

Monitoring of credit utilization is key in addressing credit diversion. It also gives immediate feedback from the field on crop performance and even farmers attitude towards their farm businesses. NRGP is however limited in monitoring credit utilization by its farmers. Scheme providers are unable to constantly monitor credit utilization. During the field survey, 34 (81%) out of the 42 farmers responded that scheme providers on average visits once a month. This placed limited opportunity to monitor how credit was being utilized. Weak monitoring on credit utilization has ripple effects on credit repayment as the years go by.



4.6.2.2 Delays in Disbursing Credit

Timely disbursement of agricultural credit in a heavily rain-fed agricultural region undoubtedly affects production. NRGP credit delivery, however, has been characterized by delays in disbursement. From the field survey, 41% (17) of farmers indicated that it takes more than 6 weeks between the time of credit application and the time of credit disbursement.

Discussants further confirmed that credit is usually disbursed in late June when ploughing and sowing would have commenced. Farmers expressed their dissatisfaction with issues and added that that was the major problem they had with the scheme.

4.7 Challenges Encountered in Credit Delivery of Masara N'Arziki and NRGP Credit Schemes

4.7.1 Challenges Encountered by Scheme Providers

4.7.1.1 Limited Number of Staff

The ability of credit scheme providers to maintain close contact with credit beneficiaries is partly dependent on the staff strength of the scheme providers. This has been a challenge to the Nandom Rural Bank Wa Branch, the bank that finally advances the credit to the farmers under NRGP as recruiting more would increase the cost of administering the scheme. The bank has thus been unable to closely monitor credit beneficiaries on credit utilization. Credit officers were thus unable to spend quality time with credit beneficiaries as farmers affirmed during the survey. As this weakens the relationship between the bank and the farmers, rate of repayment in subsequent years is likely to be negatively affected.

4.7.1.2 Scattered Nature of Beneficiary Communities

Credit providers also expressed the challenge of reaching out to beneficiaries in scattered communities. The scattered nature of communities required more resources to be able to



reach out to beneficiaries. As credit providers have to visit communities during assessment, inputs delivery, crop performance monitoring, the cost of these visits puts a high cost of the delivering the credit to the farmers. The Nandom Rural Bank for example, indicated that processing fee of 5% and interest of 24% per annum was partly due to this factor. This had also contributed to the bank's inability to monitor the farmers more than they have always done.

4.7.1.3 Farmers' Request for Loan Cancellation during Recovery

Scheme providers also raised the challenge of farmers requesting for their loans to be cancelled during recovery. This was particularly common with the NRGP facilitated farmers in situations when farmers got low yields from their farms. Though farmers are usually educated on the credit policy terms and conditions even before they access the loan facility, they usually will tend to portray themselves as suffering from abject poverty, a situation will would not allow them to get money from any other source to pay for the credit. This has thus delayed farmers' ability to make loan repayments within the agreed loan duration. Even when farmers are still willing to pay, they do so reluctantly, and this affects the rate of returns since time is a crucial factor in all financial transactions.

4.7.2 Challenges Encountered by Credit Beneficiaries

4.7.2.1 Late Credit Disbursement

The timeliness of services for a rain-fed agriculture is key in not only ensuring good yields but also enabling farmers' ability to repay credit on time. This was the singular most challenging factor that farmers lamented over in their access to credit. Farmers particularly those under the NRGP credit scheme, complained of the delays on the part of the scheme providers in releasing disbursing credit to them. This was particularly confirmed during the field survey when 57% (24) of respondents under NRGP indicated that it took more than four



weeks between the time of their credit application to the bank and the time of disbursement. In fact even the remaining 43% (18) indicated it took between two to four weeks before credit was disbursed. From the financial institution's point of view, this was not viewed as such since every loan application would have to go through a process before it is approved and officers felt they were only going by the banks policies.

4.7.2.2 High Fees charged on Credit

Another challenge that the farmers encountered was the high fees that were charged on the credit they received. The 5% processing fee and 24% interest rate kept more pressure on farmers to make more than 30% returns from the farms to be able to also recover the credit from the bank. Where sales from the harvest fetched less than 30% returns, farmers would usually struggle to repay and in some cases would even run into debts, forcing them to sell other property to repay the credit. The scheme providers try to justify that several reasons including the high risk in agricultural credit, rain-fed agriculture and loan defaults accounted for the high interest charged on the loans. Justifications notwithstanding, farmers still bore the hardship of having to pay high fees for the credit, partially the reason why some also defaulted.

4.7.2.3 Inability of Credit Schemes to Meet Credit Request of Farmers

Another challenge faced by the farmers is the credit schemes' inability to meet the credit requests that are made to the bank. This was a key challenge expressed mainly by farmers under the NRGF credit scheme. This usually starts with scheme officers cutting down their loan request during the vetting process with explanations bothering on farmers' capacity to repay the loans. Even when this is sent to the bank, there are further cuts with explanations bothering on trust and the high risk associated with a rain-fed agriculture. The scheme providers however affirmed that the reason for not approving the farmers' entire request were



because the request were either too huge compared to the capacity of the farmers to repay, or it was for the fear of the uncertainty in a typically rain-fed agriculture. A maximum of 2 acres (amounting to GHc 482.00 in 2014) support per farmer was given under NRGF with a total amount repaid per every 2acre support of GHc 568.84). Under Masara N'Aziki however, a minimum of 5 acres support per farmer is usually given with exceptional farmers receiving support for more acreages as per their capacity but in multiples of five. Repayment however was 110 mini bags (equivalent to GHc 3080.00) per every 5acre support.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the key findings of the research that was conducted on the strategies, effectiveness and efficiency and challenges of agricultural credit schemes of the Northern Rural Growth Programme and Masara N'Arziki Agricultural Credit Schemes in Wa West District. It further presents the conclusions and recommendations to the findings. These are elaborated in the headings that follow.

5.2 Summary of Findings

The summary of the research findings are as follows;

5.2.1 Masara N'Arziki and NRGF agriculture credit delivery strategies

- ❖ **Eligibility for credit:** The two credit schemes operate through FBOs rather than individual farmers because members of the FBO provide guarantee for each other. Whilst group size ranges from 10 to 25 for NRGF with the ultimate aim of registering with DoC, that for Masara N'Arziki ranges from 5 to 25. In each of the credit schemes, credit is only given to active FBOs. The study was not conclusive as to how the size of a group could be either a strength or a weakness. It was however a condition that before an individual can get credit from NRGF or Masara N'Arziki that individual must belong to a farmer group.
- ❖ **Credit approval and disbursement:** Masara N'Arziki usually approves and renders credit application of FBOs latest by the end of May whilst under the NRGF, loans are approved and disbursed as late as June although applications may be submitted before May. From the survey, whilst 100% (34 respondents) of farmers under the Masara N'Arziki confirmed they received their loans within four weeks after sending in their



application, only 42% (18 farmers) alluded to this under the NRGP scheme. The maximum repayment duration of both Masara N'Ariziki and NRGP credit are 9 months and 10 months respectively. Default rates for 2013 loans as at May 2014 stood at 9% and 0% for NRGP and Masara N'Aziki respectively. It can be seen that because of the group lending scheme there was virtually no default in the repayment of the credit given to farmers under both credit schemes.

- ❖ **Credit Terms and Conditions:** the interest rate charged on credit under both NRGP and Masara N'Ariziki agricultural credit schemes is always subject to review based on the prevailing economic circumstances. The interest rate that the bank charged under NRGP from 2012-2014 was 24% per annum and this is usually done with the consent of NRGP District Value Chain Committee with farmers inclusive. This ensured that the rates were not too high for the farmers making them able to repay within the stipulated time. It also meant the rates were also acceptable to the lenders also making the scheme a sustainable one. In the case of Masara N'Ariziki interest is paid in the form of a specified quantity of farm produce usually determined and reviewed by management of Masara N'Ariziki. In the 2014 repayment period, per every acre support received, a total of 22 mini bags of maize were supplied amounting to GHc616.00 Mode of repayment of credit in the Masara N'Ariziki scheme is solely through the produce that the farmer was given credit for. Ideally under the NRGP scheme, repayment was also to take the same form, but due to the challenges with getting buyers for the farmers, cash repayment is accepted through the loan account of the FBO at the bank. In both schemes, the form of credit delivery is *in-kind*, taking the form of ploughing services and inputs provision (specifically weedicides, insecticides, seeds and fertilizers).



- ❖ **Collaborations with Partners:** NRGP collaborates with other value chain actors in the delivery of in-kind credit to farmers such as FIs, MoFA, tractor service providers, farmers/FBOs, input dealers and buyers with each actor having a specific role. Unlike NRGP, the level of collaboration between Masara N'Arziki and other actors in the agricultural value chain is limited. The scheme virtually delivers all the services within the value chain to its farmers, similar to contract farming. When it comes to provision of other services, it was uncovered that, NRGP has a wide range of services aside the in kind⁴ credit they provide to FBOs some of which include: marketing services, education, provision of farm machinery and marketing though access to these services by FBOs is limited. Masara N'Arziki also provides education to farmers on best farming practices though the services are infrequent or limited.

5.2.2 Effectiveness and Efficiency of Masara N'Arziki and NRGP Credit Schemes

The study revealed that in all four objective areas of measurement of effectiveness, Masara N'Arziki was rated effective as compared to NRGP. It was readily available to farmers in the required volumes, at the right time, usually by April each year and delivered at the door steps of farmers. Again in terms of access to time and acceptable market prices, Masara N'Arziki was rated more effective as there was always ready market for farmers' produce at acceptable prices. On efficiency however, NRGP was rated more efficient as the cost of accessing the credit relative to the output/yields of farmers was lower as compared to Masara N'Arziki. In terms of the cost of providing credit by the scheme providers to the farmers relative to the supplies from the farmers, NRGP encountered a relatively lower cost as it was not run as a purely commercial enterprise as in the case of Masara N'Arziki.

⁴Ploughing services and inputs



5.2.3 Strengths and Weaknesses of Masara N'Arziki and NRGF

The study uncovered two strengths that are common to both credit schemes- reduction in credit diversion and credit delivery through the group system. As a result of the fact that credit is delivered in-kind to farmers coupled with the regular credit monitoring, it reduces the risk of farmers using the credit for other purposes particularly if the credit were in cash. This is similar to the credit schemes of the Northern Region branch of Stanbic Ghana funded by the AGRA, MiDA where farmers were to either be in group (FBOs) or be part of an out grower system in order to qualify them for credit. The advantage is that the group solidarity is stronger and members would ensure that their credit is repaid. On the other hand, a farmer who might not have had access to any form of credit is afforded the opportunity to also get some form of credit simply because they belong to a farmer group. The credit they received can be used to improve their farming activities, leading to more inputs, better yields, higher profits and subsequently a better standard of living.

For the beneficiaries, the group solidarity concept is sometimes useful as members were able to support one another in times of poor yield to repay their credit. It however sometimes becomes a disincentive when some members want to unduly take advantage of that and lazy around, knowing that the other group members will support in paying off the debts.

One other strength of the Masara N' Arziki scheme as revealed by the study was the involvement of the court system in signing the contracts with its farmers. This contributed significantly to the high recovery rates recorded by the scheme as farmers fear being dragged to court.

With respect to the NRGF credit scheme, the study revealed that one of its major strengths was the very transparent system in place. Leaders of the FBOs often met with the bank officials and all the loan terms and conditions such as processing fee, interest rate and loan



duration among others explained to them. Again, the study uncovered that the NRGP scheme had a comprehensive package, modeled on developing the maize, soya and sorghum value chains and not just credit alone. The scheme thus, delivered other services such as market linkages and trainings on various relevant models such as group dynamics, knowledge about the supply chain, financial management and lobbying and price negotiation. It further facilitated the registration of the FBOs with the Department of Cooperatives as legal entities. The other strength of the NRGP scheme that was observed by the research is linking farmers to other stakeholders/partners including the NBSSI, DoC, MoFA, DA and other value chain actors such as FIs, IDs, MSPs, and Aggregators amongst others.

5.2.4 Challenges Encountered in Credit Delivery of Masara N'Arziki and NRGP Credit Schemes

5.2.4.1 Limited Number of Staff

Limited number of staff has been a challenge to the Nandom Rural Bank Wa Branch, the bank that advances the credit to the farmers under NRGP, making the bank unable to closely monitor credit beneficiaries on credit utilization. Credit officers were thus unable to spend quality time with credit beneficiaries as farmers affirmed during the survey and this contributes to their inability to recover all credit advanced to farmers.

5.2.4.2 Scattered Nature of Beneficiary Communities

The scattered nature of communities has also posed a challenge for both Masara N' Arziki and NRGP in reaching out to beneficiaries regularly with the limited resources available. As credit providers have to visit communities during assessment, inputs delivery, crop performance monitoring, the cost of these visits puts a high cost of delivering the credit to the farmers. The Nandom Rural Bank for example, indicated that processing fee of 5% and



interest of 24% was partly due to this factor. This had also contributed to the bank's inability to monitor the farmers more than they have always done.

5.2.4.3 Farmers' Request for Loan Cancellation during Recovery

Though the yield from their farms can always be used to pay for the loans, there have been a few reported incidences where some farmers try to see if their loans can be cancelled. Scheme providers said they have been cases where some farmers request them to cancel their loans particularly when their yields are low. This therefore sometimes poses a challenge for them during loan recovery. Farmers however will tend to portray themselves as suffering from abject poverty, a situation which would not allow them to get money from any other source to pay for the credit though they are usually educated on the credit policy terms and conditions even before they access the loan facility. However, because the Banks policies do not permit that, such loans cannot be cancelled just like that. The farmers therefore pay up when they realize that there is no way out for them.

5.2.5 Challenges Encountered by Credit Beneficiaries

5.2.5.1 Late Credit Disbursement

The late disbursement of credit on the part of scheme providers particularly under NRGP is one such challenge that seriously affects credit repayment. During the field survey, 57% (24 respondents) of respondents under NRGP indicated that it took more than four weeks between the time of their credit application to the bank and the time of disbursement. In fact even the remaining 43% (18 respondents) indicated it took between two to four weeks before credit was disbursed. Though the bank tried to justify that this was as a result of the procedures as per policy, it was clear that loans usually were approved late and officers felt they were only going by the banks policies.



5.2.5.2 High Fees charged on Credit

The interest rate in Ghana is currently about 28% and the interest rate charged these farmers is below the national interest rate. However, the farmers say the interest is high for them. The perceived high cost of borrowing for the farmer came out clearly as another challenge. In the case of the NRGP, the 5% processing fee and 24% interest rate charged meant that farmers could only remain in business if they got the maximum yields or sell the produce at very high prices. As a rain fed agricultural area and where producer prices are determined by the invisible hands of demand and supply, farmers are unable to make high profits. In the case of Masara N' Arziki, farmers complained the twenty (20) mini bags per acre that they had to supply for the 2013 season was too costly. In both schemes, the high fees charged on credit contributed to farmers' inability to repay all credit within the agreed credit duration.

5.2.5.3 Inability of Credit Schemes to Meet Credit Request of Farmers

The inability of the bank under NRGP credit scheme to meet the volume of credit requests of farmers has been the other challenge to farmers. The scheme providers affirmed that the reason for not approving the farmers' entire request was because the request was either too huge compared to the capacity of the farmers to repay, or it was for the fear of the uncertainty in a typically rain-fed agriculture. This has made some farmers unable to expand production beyond the level of the credit approved by the bank.

5.3 Conclusions

It was discovered that the two (2) organizations disburse their credit to groups and not individuals. This allows the organizations to be able to recover their credit easily as it was difficult for a group to default in their payment as compared to a single individual. The time that the two organizations disburse their credit to farmers is also seen to be relatively late as they do so either in May or June. Also, the time from application to disbursement takes four



weeks or more, which can affect the productivity and planning of some farmers. The loans given to farmers are also expected to be repaid in less than a year. Also, though the credit delivery to the farmers is in kind, credit recovery is either in kind or in cash for the two organizations. Comparatively, NRGP provides a wider range of services to farmers than Masara N'Arziki.

With regards to the strengths of the credit schemes, it was discovered that the ability of the schemes to provide credit in kind to farmers has almost eliminated the cases where credit is diverted to other purposes. The other strength peculiar to Masara N'Arziki is its ability to advance large amounts of credit to farmers who are in groups. Comparatively, Masara N'Arziki is able to send the credit to the farmers in their various communities whilst NRGP is not able to do so. Masara N'Arziki also involves the courts in the signing of their contract documents which therefore seem to deter a lot of the farmers from defaulting in their repayments. Also, it is said that NRGP is more transparent in their activities as they try to play a facilitative role between the farmers and the Bankers.

On challenges facing the schemes it was discovered that the banks that disburse the loans were not having officers who are wholly responsible for such loan schemes and who could monitor and ensure that the credit given out was used appropriately. Also, farmer groups who benefited from such credit schemes were seen to be scattered all around the Wa West District making proper monitoring of their activities very difficult. Another challenge that was observed is that some farmers after agreeing to the terms of the credit schemes later try to find ways not to pay back the credit by sometimes even asking for their loans to be cancelled. The time that the credit is sometimes disbursed to the farmers can be very late and often times not very useful to the farmers. Besides the interest of about 24% on the farm loans seem too high as it might mean some farmers might become worse off if their products did



not do well or if their harvest was not plentiful. The amount of loan also given to farmers is also seen not to be substantial enough to be able to improve the economic conditions of the farmers.

On the basis of the all the above, it can be said that the Masara N'Aziki scheme is more effective in addressing the credit needs and aspirations of its farmers as compared to NRGP. This is not to say that it is not without edges to be smoothed. The area of transparency and involvement of farmers in decision taking is key to improve on the success of the scheme. Though farmers feel satisfied with the scheme, they are not aware that this comes at a much higher cost which is basically because repayment is through supply of produce. Whilst the NRGP credit linkage is more transparent and sustainable, it still does not translate into getting farmers the credit at the right time, which for the farmers is the most important result they are looking out for. Masara N'Arziki is more effective as compared to NRGP but NRGP is more efficient as compared to Masara N'Arziki.

5.4 Recommendations

Based on the conclusions of the study, the following recommendations are made for the consideration of Policy makers, credit schemes, farmers and researchers interested in this area of study.

For Policy makers such as the Government, the Ministry of Finance, MoFA and the Bank of Ghana, it is recommended;

1. The Bank of Ghana could consider setting a lower interest rate to be applied by all financial and lending institutions for agricultural production in the country. In this way, credit scheme providers could also reduce their interest rate charged on such production credit since this applies to a group of farmers who are basically subsistent farmers. They also depend on the weather for their yields. This will help reduce the



burden on such farmers whilst helping improve their crop yield and standard of living as they receive more inputs at a lower cost. This way, they could eventually become commercial farmers who will contribute more to the growth of the Ghanaian economy. Hence if the interest charged on such schemes is reduced it will protect and eventually empower such groups of farmers.

2. Not all peasant farmers in Ghana benefit from such farmer credit schemes, it will therefore be good if the government through the Ministry of Food and Agriculture gives more support to the agricultural sector by providing more subsidies to farmers, particularly support in kind. Since in kind assistance to farmers are not easily diverted to other purposes. This will ensure such support is appropriately utilized.
3. The Ministry of Food and Agriculture through its district agricultural units should also continue to provide the enabling environment and keeping a check on all agricultural credit schemes' operations in the districts. This will avoid unnecessary concentration of credit schemes in some few areas but ensure a wider spread to cover several other farmers. It will also avoid farmers overburdening themselves with taking credit from several schemes and eventually being unable to repay on time. The more farmers that the schemes cover, the more their productivity will increase and the more they gain financially. This could eventually lead to the improvement of their standards of living.
4. The Ministry of Food and Agriculture should also provide large scale irrigation facilities in rural communities so that farmers could be guaranteed of regular source of water supply for their farming activities. Where this is provided, farmers can rely on the irrigated water for their crops in the event of poor rainfall and as such avoid crop failure due to poor rainfall. Besides, proceeds from dry season gardening can be used to complement any low yields from the farms and as such help in repayment of



credit received. This would go a long way to help improve the living standards of the farmers and their families.

For the direct stakeholders such as those who directly provide credit to the farmers and the farmers themselves, it is recommended that;

5. The credit schemes should also be able to disburse the credit to the farmers well before the start of the farming season begins as this will help farmers to plan appropriately on how to use the credit they have requested for. When credit is disbursed when the farming season is already on, it does not help in prior planning. Since the credit is given in kind, the likelihood that the credit would have been diverted if given early is also minimized.
6. The organizations which provide the finance to the farmers should redesign the loan calendar to start early by each year. Application deadlines from farmers to the scheme providers should be set and the scheme providers would also have to finish all processing by March each year. Scheme providers would also have to fast track the time it takes them to disburse credit to farmers from about four weeks or more to less than two weeks. This will help reduce late disbursement and also increase farmer confidence in their operations.
7. The time given to farmers to repay the credit should be extended from about nine months to one year. This is because immediately after harvest, food prices would normally go down but around the time of farming, prices normally peak. Hence if farmers are allowed to delay repayment until the peak season, they would be able to make better profits.



8. The credit scheme operators should also enhance their human resources and man power to be able to monitor and retrieve all the credit that they give out. This could be done by either engaging some volunteers or giving some in-service training to their staff with relation to such credit schemes.

For further research, the recommendation is that;

9. Further research should be conducted on the profitability to farmers and the profitability to the organizations offering the credit schemes to farmers. This could help ensure that farmers are not cheated through high interest rates and the credit scheme operators do not make losses due to high default in repayments.



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APPENDIX 1: Semi-structured key informants interview guide

UNIVERSITY FOR DEVELOPMENT STUDIES

SCHOOL OF GRADUATE STUDIES

MASTER OF PHILOSOPHY IN DEVELOPMENT MANAGEMENT

Topic: A comparative Study of the Northern Rural Growth Programme and Masara

N’Arziki Agricultural Credit Schemes in the Wa West District of the Upper West Region

Hello, my name is Fidelis Naapaneh. My colleagues and I are currently conducting a study on agricultural credit schemes and how they are benefit farmers in their farm business. The goal of the study is to learn how to make agricultural credit schemes more beneficial to farmers. You have been selected to respond to this questionnaire because you are a key stakeholder in the credit scheme of NRGF credit facilitation/Masara N’Arziki credit scheme. The results of this survey will be kept confidential. Please be assured that the information you will provide through this questionnaire is solely for academic purposes and will be accorded the necessary confidentiality that is deserved. Thank you in anticipation of your cooperation in responding to this questionnaire.

Questionnaire Code.						Date:		Start Time:			
Enumerator’s Code								End Time			
District Code								Town Code			
Name of Respondent (optional)				Sex of Respondent		M <input type="checkbox"/>		F <input type="checkbox"/>		House No.	



Type of key informant

Title of key informant.....

Credit Scheme Affiliated with.....

1. How long have you worked on this credit scheme?

2. What is the credit scheme about?

.....
.....

3. What motivated your organization to start the scheme?

.....
.....

4. What are the specific objectives of the credit scheme?

.....
.....
.....

5. What are the target groups?

.....

6. How does the scheme operate?

.....
.....

7. Who qualifies to benefit to from your credit scheme?

.....



.....

8. What are the requirements to qualify one to receive credit?

.....

.....

9. How do you contact your credit beneficiaries?

____ Phone

____ Home visits

____ Field visit

____ At organized meetings

____ Others (specify)

10. How often do you contact them?

____ Weekly

____ Forth -Nightly

____ Monthly

____ Quarterly

____ Others (specify)

11. Do you give any form of education to beneficiaries? ____ Yes ____ No

12. If yes, on what?

.....

.....

.....

.....



13. Which farm activities does your credit support farmers with?

.....
.....
.....

14. What are your strategies in delivering credit to your beneficiaries?

.....
.....
.....

15. Are your beneficiaries satisfied with the credit scheme? Why

.....
.....
.....

16. Do you think the credit scheme is effective in meeting farmers credit needs? Why?

.....
.....
.....

17. What has been the recovery rate of the credit scheme over the last two years?

.....

18. What do you think accounts for the recovery rate as in above?

.....
.....
.....



19. Using a scale of 1-5 rank the effectiveness of the credit scheme in meeting your credit needs

_____5=Excellent (All expectations are met)

_____4=Very Good (8 out of 10 expectations are met)

_____3=Good (6 out of 10 expectations are met)

_____2=Fair (4 out of 10 expectations are met)

_____1=Poor (2 out of 10 expectations are met)

20. What are the key strengths of this credit scheme?

.....
.....
.....

21. Can you cite any examples of success stories as a result of your credit scheme and the factors responsible for the success?

.....
.....
.....
.....

22. What challenges confront the scheme in delivering credit to farmers?

.....
.....
.....

23. Can you cite any examples of failure stories as a result of your credit scheme and the factors responsible for the failure?



.....
.....
.....
.....

24. What is done to address these challenges?

.....
.....
.....

25. Who are the other actors in your credit scheme?

.....
.....
.....

26. What will you recommend to be done to improve agricultural credit for farmers?

.....
.....
.....



APPENDIX 2: Questionnaire for Beneficiary Farmers

UNIVERSITY FOR DEVELOPMENT STUDIES

SCHOOL OF GRADUATE STUDIES

MASTER OF PHILOSOPHY IN DEVELOPMENT MANAGEMENT

Topic: A comparative Study of the Northern Rural Growth Programme and Masara N'Arziki Agricultural Credit Schemes in the Wa West District of the Upper West Region

Informed consent

Hello, my name is Fidelis Naapaneh. My colleagues and I are currently conducting a study on agricultural credit schemes and how they are benefit farmers in their farm business. The goal of the study is to learn how to make agricultural credit schemes more beneficial to farmers. We have chosen to come to your village because you benefitted from the NRGF credit facilitation/Masara N'Arziki credit scheme. The results of this survey will be kept confidential. I need to write your name and address on this form so that the lead researchers can verify I visited your household. However please notice that this form is being kept separate from the main part of the survey – your name will not appear anywhere on the main survey. We would like to talk to the head of household (and/or the spouse of the head of household) about the credit scheme and your household. This is to assure you that the information you will provide through this questionnaire is solely for academic purposes and will be accorded the necessary confidentiality that is deserved. Thank you in anticipation of your cooperation in responding to this questionnaire.



Survey Identification Data

Questionnaire Code.		Date:		Start Time:	
Enumerator's Code					
District Code				Town Code	
Name of Respondent <i>(optional)</i>			Sex of Respondent	M <input type="checkbox"/>	House No.
				F <input type="checkbox"/>	

A. PROFILE OF RESPONDENT

1. Marital status:

_____Single _____Married _____Divorced _____Separated _____Widowed

2. Level of education:

_____None _____Primary _____JHS/Middle school _____SHS/technical
 _____Tertiary _____Non-formal

3. Do you engage in any other economic activity apart from farming?

_____Yes _____No

4. If yes, what are they

_____Trading _____Artisan/craftsmanship
 _____Salaried employee _____Other (specify)

5. What type of farming do you do?

_____Subsistence (farming for household consumption only)
 _____Commercial (farming purposely for sale)



_____Peasant (farming for both household needs and also for sale but on a small scale)

6. For how long have you been farming?

7. What crops do you cultivate and how many acres?

Crop(s)	Acreages

8. Which farm implements do you use in your farm business?

.....
.....

9. Which agricultural credit schemes have you benefited from

_____Masara N' Arziki _____NRGP
_____Block Farm _____ Others (Specify)

10. How many farming seasons have you benefited from the credit scheme(s)?

_____Once _____Twice _____Three Times _____Four Times _____Five & above



<p>11.1</p>	<p>Please tell me how much per month on average your household spends on the following items.</p> <p><i>(Record amount for each category and add up total expenses for part p).</i></p>	<p>_____ Food</p> <p>_____ Water</p> <p>_____ Electricity</p> <p>_____ Phone Service</p> <p>_____ Housing</p> <p>_____ Transportation</p> <p>_____ Health of children</p> <p>_____ Health of adults</p> <p>_____ Liqueur, cigarettes, and lottery</p> <p>_____ Education (including daily expenses for travel and for food in school for all kids in school)</p> <p>_____ Clothing including school uniforms for children</p> <p>_____ Clothing for other members of the household</p> <p>_____ Church</p> <p>_____ Funerals</p> <p>_____ Household Savings</p> <p>_____ <i>TOTAL OF AVERAGE MONTHLY EXPENSES</i></p>
<p>11.2</p>	<p>Your total monthly expenses are _____. Does that sound about right? <i>Revise total if needed.</i></p>	<p>GHS.....</p>

<p>11.3</p>	<p>Household Assets. Can you tell me if anyone in</p>	<p>_____ Radio</p>
--------------------	---	--------------------

	<p>this household owns any of the following items?</p> <p><i>Enumerator: Record the number of items owned.</i></p> <p><i>If they do not own, write a '0'.</i></p>	<p>___ Clock</p> <p>___ Wristwatch</p> <p>___ Bicycle</p> <p>___ Mobile Phone</p> <p>___ Television</p> <p>___ Bed</p> <p>___ Room Furniture</p> <p>___ Fan</p> <p>___ Motorcycle</p> <p>___ Automobile</p> <p>___ Tractor</p> <p>___ Other (specify)</p>
<p>11.4</p>	<p>Total No. of Animals (<i>Note number of animals of each type; If they do not own, write a '0'.</i>)</p>	<p>___ Sheep</p> <p>___ Cows</p> <p>___ Guinea Pigs</p> <p>___ Chicken & Ducks</p> <p>___ Pigs</p> <p>___ Donkeys</p> <p>___ Goats</p> <p>___ Other (<i>specify</i></p>

B. STRATEGIES EMPLOYED BY CREDIT SCHEME IN CREDIT DELIVERY

12. Did you go through any selection process before you were given the credit?

_____Yes _____No

13. What were the conditions to qualify one for credit?

- _____To belong to a farmer group
- _____To be a resident farmer in the community for the past three years
- _____Operating an active accounts with a financial institution
- _____To get at least two witnesses in the community to testify to all three above
- _____Others (specify)

14. What were you required to do before you were finally given the credit?

- _____To sign a contract with the scheme
- _____To pay membership registration fee
- _____To present a valid photo identity card
- _____To use some personal assets as collateral
- _____Others (specify)

15. What was the form of the credit you were given?

- _____Cash _____In-kind _____Others (specify)

16. What charges did you have to pay for the credit?

- _____Processing Fee _____Interest _____Others (specify)

17. What was the cost of the above charges?

Charge	Cost GH¢
Processing Fee	
Interest	
Others(specify)	



--	--

18. Which areas of your business did the credit support?
 Ploughing Weed Control (Chemicals) Seed
 Fertilizers Others (specify)
19. After receiving the credit, did the officers of the scheme visit your farm?
 Yes No
20. How many times was this done in the last farming season?
 1 Time 2 Times 3 Times 4 Times 5 Times
 More than 5 times
21. Does the credit scheme provide market for your produce?
 Yes No
22. Is it compulsory to sell to that market? Yes No
23. If No to 18 above how did you repay your credit?
 Cash Gave out personal assets to scheme
 Others (specify)
24. Were you satisfied with the market conditions in the last season?
 Yes No
25. If No to 19 above, what were you not satisfied about?
 Price of produce
 No storage facility for produce
 Late picking of produce from community
 Not weighing immediately after harvest



_____Others (specify)

26. Did you receive any credit education from the scheme? _____Yes _____No

27. What was the education on?

_____Credit Application procedures _____Credit Utilization

_____Financial Management _____Others (specify)

28. Were you satisfied with the education from the scheme?

_____Yes _____No

29. What were you satisfied /dissatisfied with?

.....
.....
.....

30. What other credit education do you require?

.....
.....
.....

31. Did the scheme provide storage facility for your produce?

_____Yes _____No

32. If No to 23 above, how did you store your produce

.....
.....

33. Were you satisfied with the storage facility?

_____Yes _____No



34. What about the storage facility were you satisfied/dissatisfied with?

.....

.....

.....

35. Using a scale of 1-5 rank the effectiveness of the following strategies of the credit scheme to your repayment

Strategies	Ranking						Reasons for Ranking
	0	1	2	3	4	5	
Credit education							
Credit Conditionality							
Market Arrangement							
Storage facilities							
Transparency from officers							
Personal relations with officers							
On-farm visits							
Others(specify)							

Effectiveness: 5=Excellent (All expectations met) 4=Very Good (8 out of 10 expectations met) 3=Good (6 out of 10 expectations met) 2=Fair (4 out of 10 expectations met)



expectations met 1=*Poor (2 out of 10 expectations met)* 0=*Not Applicable*
(Strategy not used)

C. STRENGTHS OF THE CREDIT SCHEME IN CREDIT DELIVERY

36. What kind of relationship exists between credit scheme and farmers?

- Only on credit issues
- Not only on credit issues but sometimes on farm business
- On credit issues, farm business and on personal issues such as family and general welfare

37. At what location(s) were you given the credit?

- In my community
- At a central point in another community
- At the bank
- In the office of the Credit Officer
- Others (specify)

38. Are you satisfied with this credit scheme?

- Yes No

39. If NO to 3 above, what are you not satisfied with?

- Late disbursement of credit
- Inability of the scheme to meet all of my credit request
- Credit Officers demanding for other favours
- High fees charged on credit
- Lack of transparency on credit information
- Repayment plan



Others (specify)

40. If YES to 3 above, what about the scheme are you satisfied with?

____ Early disbursement of credit

____ Ability of scheme to meet all my credit request

____ Very good personal relationship with credit Officers

____ Credit Officers regular visits to my farm

____ Trainings and other education received

____ Awards given to farmers at the end of every season

____ Transparency in all credit transactions

____ Good repayment plan

____ Others (specify)

41. How long does it take between the time of submission of your application and the time of disbursement of the credit?

____ 0-2 weeks

____ More than 2 weeks up 4 weeks

____ More than 4 weeks up to 6 weeks

____ More than 6 weeks up to 8 weeks

____ More than 8 weeks to 10 weeks

____ Others (specify)

42. How do credit scheme officers contact you?

____ Phone

____ Face to face meeting

____ Farm Visits

____ Home Visits



_____Others (specify)

43. How often do credit scheme officers contact you?

_____Weekly

_____Monthly

_____Bi-monthly

_____Forth-nightly

_____Other (specify)

44. Are you able to repay all your credit on time? _____Yes _____No

45. If No, what happens?

_____The credit is rescheduled for the next season

_____Other property are sold to repay

_____The court system is used to get me to pay

_____The debt is written off

_____Others (specify)

46. Using a scale of 1-5 how will you rank the effectiveness of the credit scheme to meeting your credit needs

_____5=Excellent (All expectations met)

_____4=Very Good (8 out of 10 expectations met)

_____3=Good (6 out of 10 expectations met)

_____2=Fair (4 out 10 expectations met)

_____1=Poor (2 out of 10 expectations met)

D. CHALLENGES CONFRONTING CREDIT DELIVERY UNDER THE SCHEME



47. What challenges confront you in accessing credit under the scheme?

- _____Late disbursement of credit
- _____Inability of the scheme to meet all of my credit request
- _____Credit Officers demanding for other favours
- _____High fees charged on credit
- _____Lack of transparency on credit information
- _____Others (specify)

48. Have you complained about these challenges? _____Yes _____No

49. What was done to address the challenge?

Challenge	Action to address challenge	Outcome of the action
Late disbursement of credit		
Inability of scheme to meet all of credit request		
Credit Officers demanding favours		
High fees charged on credit		
Lack of transparency on credit information		
Others (specify)		



E. ALTERNATIVE STRATEGIES TO IMPROVE UPON CREDIT DELIVERY

50. Considering the challenges in 38 above, what solution will you recommend?

Challenge	Recommended Action to address challenge
Late disbursement of credit	
Inability of scheme to meet all of credit request	
Credit Officers demanding favours	
High fees charged on credit	
Lack of transparency on credit information	
Others (specify)	

51. In your opinion, what should be done to improve upon agricultural credit delivery?

.....
.....

52. What concrete thing in your household can you attribute to the credit?

.....
.....



Thank you

End time:



APPENDIX 3: Focused Group Discussion Guide

UNIVERSITY FOR DEVELOPMENT STUDIES

SCHOOL OF GRADUATE STUDIES

MASTER OF PHILOSOPHY IN DEVELOPMENT MANAGEMENT

Topic: A comparative Study of the Northern Rural Growth Programme and Masara

N’Arziki Agricultural Credit Schemes in the Wa West District of the Upper West Region

Hello, my name is Fidelis Naapaneh. My colleagues and I are currently conducting a study on two agricultural credit schemes and how they are benefit farmers in their farm business. The goal of the study is to learn how to make agricultural credit schemes more beneficial to farmers. We have chosen to come to your village because you benefitted from the NRGF credit facilitation/Masara N’Arziki credit scheme. The results of this survey will be kept confidential. Please be assured that the information you will provide through this questionnaire is solely for academic purposes and will be accorded the necessary confidentiality that is deserved. Thank you in anticipation of your cooperation in responding to this questionnaire.



Questionnaire Code.						Date:		Start Time:			
Enumerator’s Code								End Time			
District Code								Town Code			
Name of Respondent <i>(optional)</i>				Sex of Respondents		M <input type="checkbox"/>		F <input type="checkbox"/>		House No.	

Name of Group:

Community:

Membership: Male..... Female.....

Date and Year group was formed:

Rationale for forming the group:

.....
.....
.....

1. Which credit scheme(s) has your group benefited from?

____Masara N'Arziki ____NRGP
____Block Farm ____Others (specify)

2. How many farming seasons have you benefited from the credit scheme(s) above

____Once ____Twice ____Three Times ____Four Times ____Five and above

3. Did you go through any selection process before you were given the credit?

____Yes ____No

4. What were the conditions to qualify one for credit?

____To belong to a farmer group
____To be a resident farmer in the community for the past three years
____Operating an active accounts with a financial institution
____To get at least two witnesses in the community to testify to all three above



_____ Others (specify)

5. What was the form of the credit you were given?

_____ Cash

_____ In-kind

_____ Others (specify)

6. What charges did you have to pay for the credit?

<i>Charge</i>	<i>Cost (GH¢)</i>
Processing Fee	
Interest	
Others(specify)	

7. Which areas of your farm business was the credit support given for?

_____ Ploughing _____ Seed _____ Weed Control _____ Fertilizer

8. Using a scale of 1-5 rank the effectiveness of the following strategies of the credit scheme to your farming business

Strategies	Ranking						Reasons for Ranking
	0	1	2	3	4	5	
Credit education							
Credit Conditionality							
Market							



Strategies	Ranking						Reasons for Ranking
	0	1	2	3	4	5	
Arrangement							
Storage facilities							
Transparency from officers							
Personal relations with officers							
On-farm visits							
Others(specify)							

Effectiveness: 5=Excellent (All expectations met) 4=Very Good (8 out of 10 expectations met) 3=Good (6 out of 10 expectations met) 2=Fair (4 out of 10 expectations met) 1=Poor (2 out of 10 expectations met) 0=Not Applicable (Strategy not used)

9. Are you satisfied with the credit scheme? Why

.....

.....

.....

10. Do you think the credit scheme is effective in meeting your credit needs? Why?

.....

.....

.....



11. Using a scale of 1-5 rank the effectiveness of the credit scheme in meeting your credit needs

_____5=Excellent (All expectations met)

_____4=Very Good (8 out 10 expectations met)

_____3=Good (6 out of 10 expectations met)

_____2=Fair (4 out of 10 expectations met)

_____1=Poor (2 out of 10 expectations)

12. Will you say the objectives for applying for the credit has been achieved and why?

.....
.....

13. What concrete benefits have members derived from the credit- examples of success stories as well as failure stories and factors responsible?

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.....
.....
.....

14. Will you say the rationale for establishing the group has been achieved and why

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.....

15. What challenges confront you in accessing credit under this credit scheme?

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16. What is done to address these challenges?

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.....

17. What will you recommend to be done to improve agricultural credit for farmers?

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.....
.....

18. What documentation of activities of the credit scheme do you have in place?

.....
.....
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