

Edward Attah-Botchwey et. Al

An Assessment of Credit Management Among Cotton Farmers in the North-Eastern Zone of Ghana: The Case of Farmers at the Bunkpurugu Zone and RMG Cotton Ghana Limited

## An Assessment of Credit Management Among Cotton Farmers in the North-Eastern Zone of Ghana: The Case of Farmers at the Bunkpurugu Zone and RMG Cotton Ghana Limited

Edward Attah-Botchwey<sup>1</sup>, David Mensah Awadzie<sup>2</sup>, Richmond Agyarkoh<sup>3</sup>, Nana Ekua Edwin Yorke<sup>4</sup>, Kofi Koduah Sarpong<sup>5</sup>

<sup>1</sup>University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana.

edward.attah-botchwey@upsamail.edu.gh, ORCID: 0000-0003-1140-5786

<sup>2</sup>Accra Institute of Technology (AIT), Department of Business, Accra, Ghana.

davidawadzie@gmail.com, ORCID: 0000-0001-5532-2152

<sup>3</sup>University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana.

[10115650@upsamail.edu.gh](mailto:10115650@upsamail.edu.gh)

<sup>4</sup>University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana.

[10106228@upsamail.edu.gh](mailto:10106228@upsamail.edu.gh)

<sup>5</sup>University of Professional Studies Accra, Department of Accounting, Accra, Ghana.

kksarpong@hotmail.com

### ABSTRACT

**Access to credit facilities remains a critical issue in the agriculture sub-sector of Ghana's economy. It remains a major challenge that requires the attention of the stakeholders in the sector. In Ghana, there has been significant involvement of companies and corporate organisations in the area of credit access to farmers. In the cotton sector of the agriculture sub-sector for instance, there had been several companies participating in the credit advancement to farmers but could not sustain their operations and ended up folding up. Against this backdrop, the study sought to explore the management of credit among cotton farmers. It among other things examines the compositions of credits advanced to farmers, measures taken to monitor credits, challenges in credit management and the impact of credit on farmers'endeavours. The population targets for the study consist of farmers who are the majority, RMG Cotton staff/management, as well as MOFA district Officer at Bunkpurugu. The simple random sampling method was used to select farmers through, structured interviews with the MOFA official. Purposive sampling was used on RMG cotton staff/management. Descriptive statistics: percentages and frequencies were used for analysing quantitative data while thematic analysis was employed for the qualitative data. The findings from the study indicate that all inputs are supplied to farmers on credit by the companies and repayment is**

Edward Attah-Botchwey et. Al

An Assessment of Credit Management Among Cotton Farmers in the North-Eastern Zone of Ghana: The Case of Farmers at the Bunkpurugu Zone and RMG Cotton Ghana Limited **through seed cotton purchases during the marketing period. It was also found that even though there has been training and monitoring, the issue of default was rife among the farmers. It is therefore recommended that stakeholders engage in rigorous training and education of farmers on the use and application of credits in the sector.**

**Keywords:** Ghana's economy, Management, Qualitative, Stakeholders

**Tob Regul Sci. <sup>TM</sup> 2023;9(1): 924-951**

**DOI: [doi.org/10.18001/TRS.9.1.65](https://doi.org/10.18001/TRS.9.1.65)**

**Corresponding author(s):**

**David Mensah Awadzie**

**[davidawadzie@gmail.com](mailto:davidawadzie@gmail.com), ORCID: 0000-0001-5532-2152**

**Accra Institute of Technology (AIT), Department of Business, Accra, Ghana.**

## 1.1 Introduction

Agriculture has played a significant part in the growth of Ghana's economy. Ghana's population is expanding annually at a pace of 2.19%, and there are 77 people per square kilometre on average. (SRID,2001). 52% of the labour force in the nation works in agriculture, 29% in services, and 19% in industry. According to estimates, women make up 39% of the farm labour force (FAO 2021). In 2019, agriculture made up 19.83% of the nation's GDP (2020 Budget Statement). Given that 52% of the population works in agriculture, it makes sense that agriculture provides the majority of people's income. It is a sector that makes a significant contribution to reducing poverty and ensuring food security, particularly in rural areas. According to the Directorate of Agricultural Extension, agriculture is crucial for economic development, food security, poverty reduction, rural development, and environmental protection (Green et al 2005).

The country's agriculture sector has transformed and grown over the past few years to include a variety of sub-sectors. The production of cotton is one sub-sector that has grown and endured over time in the northern region of the nation. Cotton production is a thriving industry in the northern regions of several nations, including Ghana, and it provides the indigenous population with one of their main sources of income. Since the Northern Hemisphere countries produce more than 90% of the world's cotton, the contribution of cotton production is more widely recognised (Godfrey, 2007). In a related study, Baffes (2004) asserts that emerging nations like Ghana provide more than two-thirds of the world's cotton production. The sector's output doubled from 10.2 million to approximately 20 million tonnes between 1960 and 2001. The need to enter the cotton industry has been recognised by numerous nations around the world. China, India, Turkey, Pakistan, and Greece are among the nations that have contributed to cotton production, according to Baffes (2004). For instance, the report claims that Australia, which in 1960 produced barely 2,000 tonnes of cotton, boosted its output to an average of 65,000 tonnes per year by the late

1990s. There is a need to implement various managerial techniques to secure the industry's increasing interest to make it profitable and productive. Credit management methods are one approach that various nations have implemented in this area.

A supervisory board was established in Ghana's Cotton Development Board in 1968 to oversee the cotton sub-sector (GCCL Agro Economic Survey, 2002). The businesses that showed interest in the sector and were heavily involved were still in charge of financing cotton growing. The businesses pre-finance the farmers' activities as part of their duties. The companies' pre-finance activities include, among other things, loan facilities, and the provision of fertilisers, pesticides, insecticides, and cotton seeds. In total, cotton firms assume around 95% of the production risk (Ghana Cotton Company Business Plan, 1996). However, cotton farmers can also get loans on their own from the formal and unofficial sectors, which is quite handy for them. The companies' collapse occurred around 2011, as a result of problems with the management of their credit facility. As a result of the collapse, the industry was legalised, and the Ghanaian government then introduced three commercial corporations to rebuild the sector. Olam Cotton operates in the North/Western Zone, Armajaro Cotton operates in the Central North, and RMG Cotton Ghana Limited operates in the North Eastern Zone. These companies—Olam Cotton, Armajaro Cotton, and RMG Cotton Ghana Limited—were granted licences by the government and have been given distinctive and separate operational zones.

## 1.2 Problem Statement

Access to credit facilities is still essential for conducting business in many nations throughout the world. Credit facilities and farmers' access to them play a significant role in the agricultural sector's ability to sustain, grow, and increase productivity. Studies have indicated that despite the profitability of higher-yielding crop varieties, farmers continue to use older crop types because they lack access to financial facilities (International Food Policy Research Institute (IFPRI) 2002). They claim that development is widespread, especially in underdeveloped nations. In Ghana, the topic of farmer credit has not entirely disappeared from the conversation. It is still important since having access to the facility in any way influences productivity, spurs interest in farming, aids in increasing output, and facilitates financing for rural agriculture. According to studies, one of its biggest challenges is finding financial facilities to help grow the industry and spark consumer interest in its products.

According to Philippe (2011); MoA and MoTI final report (2011), among other things, unfavourable terms and conditions of the cotton-producing companies, inadequate credit to cotton farmers, unfavourable government zoning policies, poor coordination and regulatory framework for the cotton sector, and infrastructure deficits are some general causes of the country's declining cotton production levels. In light of this, Ghana's successive administrations have made several measures to increase farmer access to and availability of loans. One step made to improve access to credit facilities in the nation was the creation of the Agricultural Development Bank and Rural

Banks. Despite these initiatives, there still seems to be a problem with farmers' access to loans. Interactions with several farmers have brought to light several additional pressing issues, including the onerous loan conditions and high-interest rates that make it hard for the farmers to repay the loan. Since the Cotton Development Board was established in 1968, there have been several partnerships between the board and some private businesses. In certain instances, the cotton businesses provide inputs in the form of credit made available to the farmers, while the farmers supply the land and labour. To recoup the credit value advanced to the farmers throughout the season, these businesses in exchange purchase the seed cotton produced by the farmers. This type of contract had been accepted practice in the region.

The cotton board, however, ran into trouble around 2011. In response, the Ministry of Agriculture rezoned the cotton-producing regions into three. To take over for private investments, private businesses including Armajaro Cotton, Olam Cotton, and Wience Cotton Ghana Limited (now RMG Cotton Ghana Limited) were hired. Armajaro Cotton folded up at the start of the 2013–2014 growing season, and afterwards Olam Cotton did as well. The production portion of RMG Cotton Ghana Limited has been transferred to Masara N'Arzike, a sister company under the parent firm "RMG Ghana Limited," as part of a significant reorganisation that has shifted the company's focus to cotton processing. However, due to Masara N'Arziki's bankruptcy, production has been transferred under RMG Cotton Ghana Limited beginning with the 2019–2020 growing season. Although the exact reason for these repeated crises in these organisations' management is unknown, it is clear that difficulties with credit management may be a significant contributing factor. We've learned from our readings that there hasn't been much research done on the cotton business or, more significantly, the North Eastern Zone of the area. In light of this, the purpose of this study is to look into how farmers in the North Eastern Zone handle their credit. The main objective is to examine the farmers' credit management strategy and compare it to other credit management strategies to develop efficient agrarian credit management systems and strategies in Ghana.

### 1.3 Objectives

The study's main goal is to examine the credit management tactics used in the cotton sector and how well they work there. The following secondary goals will be taken into account to fulfil the primary goal.

1. To examine issues with credit management among cotton industry players.
2. To evaluate the makeup of loans made to farmers.
3. To assess the effects of the loans made to farmers for their agricultural endeavours.
4. To identify the type of strategic management procedures used to administer the loans made to farmers.

### 1.4 Research Questions

1. What difficulties do parties involved in managing credits in the cotton industry face?

2. What exactly do the loans given to farmers consist of?
3. How does the credit that has been advanced affect the farmer's work?
4. What strategic techniques are used to control the credits?

### 1.5 Significance of the Study

The corpus of information on credit management in the cotton industry might benefit from this study's addition. Therefore, it would be beneficial for the stakeholders to comprehend the difficulties that come with managing the credit facility for the management of cotton and how to overcome them. Additionally, this research would aid in the development of appropriate credit management policies by policymakers, allowing for the sustainability of the sector.

## 2.1 Literature Review

### 2.2 Theoretical Literature

Asymmetric Information Theory and Transactions Cost Theory will serve as the foundation for this investigation's theoretical framework. The three proponents of the asymmetric theory are Joseph (1961), Akerlof (1970), and Spence (1973). According to the hypothesis, managers or business owners typically have a better understanding of their company's prospects and hazards than do lenders (PWHC, 2002; referenced in Eppy) (2005). It defines a situation in which none of the parties to an agreement is aware of crucial information. Information asymmetry develops in a debt market when a borrower who accepts a loan typically has greater knowledge of the potential risks and returns connected to investment projects for which the funds are designated. On the other hand, the lender lacks sufficient knowledge of the borrower (Edwards and Turnbull, 1994). The hypothesis holds that in these marketplaces, the borrower is more aware of his financial situation than the lender. This leads to market failure. The parties do not experience market failure of information in an ideal market environment when both parties have access to flawless and free information and there are no ambiguities regarding the present and future trade conditions.

Perceived information asymmetry, according to Binks et al. (1992), causes two significant issues for credit facilities or financial institutions: moral hazard (monitoring entrepreneurial conduct) and adverse selection (thus making errors in lending decisions). According to this theory, it is difficult for many financial institutions, including banks, to resolve these issues because it is generally not economical to allocate resources to appraisal and monitoring in cases where the transactions involved are not significant or large, as is typically the case for the majority of cotton farmers. It is also largely because these institutions lack sufficient or available data to screen credit applications and monitor farmers to determine their creditworthiness. Asymmetry In order to analyse the issue of credit facilities in the cotton sector about credit management, which may be the reason for the companies' insolvency, information is essential to this task. This theory would be applied to investigate the informational link between cotton growers and private businesses regarding credit availability and related services. It would assist in shedding light on the issue of

information asymmetry in the cotton industry's credit management in the areas where it manifests itself: acceptance of a loan application but at an interest rate that is higher than risk-adjusted; acceptance but with stringent collateral requirements; outright rejection of the loan application (Bester, 1987; Stiglitz, 1981).

### 2.2.1 Transactions Costs Theory

This theory, which was first put forth by Schwartz (1974), contends that suppliers may have an advantage over conventional lenders in determining a client's actual financial situation or creditworthiness. The theory holds that Suppliers typically can enforce and monitor credit repayment. It is expected that suppliers will out-cost financial institutions thanks to these capabilities. Petersen and Rajan (1997) categorised the following three sources of cost advantage: information acquisition, buyer control, and salvaging value from existing assets. The creditworthiness of the farmers and the methods by which the corporations can obtain this information should be investigated in the cotton industry in light of this notion. This is based on the premise that sellers or suppliers may acquire information about buyers (in this case, farmers) more quickly and inexpensively because it can be done so during regular business operations. The buyer's order frequency and volume give the credit facilities a sense of the client's circumstances. Additionally, the farmer's rejection of discounts for early payment may be a sign that the credit facility or the supplier needs to take additional measures to assure prompt servicing of the credit due to the buyer's (farmer) creditworthiness's waning strength or weakening.

## 2.3 Empirical Literature

### 2.3.1 Credit Management and Its Process

The Latin word "credere," which means "to believe," is where credit gets its name (Domestic Credit Private Sector, 2005). The term refers to the trust and loyalty that a party assumes when it agrees to "provide resources to another party where that second party does not immediately reimburse the first party (thereby generating a debt), but instead arranges either to repay or return those resources or other materials of equal value at a later date." In a typical transaction between two parties, one party acting as a creditor or lender and possessing any kind of valuable materials or goods provides those to the other party who expresses interest and needs them (borrower or debtor). Credit is always predicated on the notion that the debtor or borrower will make good on their assurances of payment, fulfilment of promises, or returns. In the context of financial agreements, a loan, present use of funds, or another type of measurable credit facility is given to a party with an interest with the promise that it would be repaid in the future in accordance with predetermined schedules. The concept of credit is relevant in barter economies based on the direct exchange of goods and services, which suggests that credit should not always require money. Credit does not always require money; it may also be used in barter economies, which operate on the principle of direct exchange of products and services (Ingham 2004). The credit facility may

involve any type of transfer of services, goods, loans, or money from an institution in possession of the same and willing to release the same to the other party (farmers) who also show interest and in need of it to satisfy their zeal for a successful harvest. This is true for both the agricultural sector and the cotton industry. The temporary transfer is performed for an amount known as interest, which varies according to the risk involved and the supply and demand for the credit (Yehuala, 2008).

### 2.3.2 Credit Management

Credit management is still crucial for any institution, according to Hettihewa (1997), because extending credit is seen as an investment in the consumer. The process of lending or advancing a facility to an interested party (borrower) beginning with investigating possible borrowers and concluding with collecting the amount granted is referred to as credit management (Shekhar, 1985). Advancement of credit typically involves tasks like application, loan appraisal, loan approval, monitoring, and recovery of non-performing loans. Any firm that wants to expand its operations must pay attention to credit management, crucial as it is for any financial institution. The goal of the process and the principle is to make sure that customers will pay for the goods or services that are supplied to them. Credit management, according to Myers and Brealey (2003), is the process through which a financial institution ensures that it is maintaining an appropriate level of credit and managing it well. Credit analysis, credit rating, credit classification, and credit reporting are the four main pillars of the concept. According to Nelson (2002), credit management refers to the methods by which a business controls its credit sales. He further argued that it is still a requirement for financial institutions engaging with credit transactions of any kind because there can be no credit or default risk zero.

It is essential to ensure the institution's expansion. According to Nzotta (2004), credit management has a significant impact on whether commercial banks and other financial organisations succeed or fail. This is due to the fact that the quality of loan decisions and, consequently, the quality of the risky assets, both have a significant impact on deposit banks' susceptibility to collapse. Further, Nzotta (2004) stated that credit management acts as a key determinant of the credit portfolio quality of deposit banks and financial institutions. One essential component of credit management is the institution's capacity to effectively, efficiently, and deftly handle customer credit limits. It is crucial to make sure the institution limits its exposure to bad debt phenomena, over-reserving, and bankruptcies, as well as their ensuing closures or folding up. In order to efficiently evaluate and authenticate the client for the reception of the facility, a variety of criteria are consequently taken into consideration in the credit management operations. The variables include, among other things, acquiring information on a potential customer's present financial situation, including but not limited to credit history, which reveals a customer's propensity for fulfilling obligations, and collateral value. Additionally, take into account will be the current ratio of income to the outstanding debt. In order to avoid entering into unsustainable and irredeemable commitments

and debt obligations, Mirach (2010) believes that credit management should not only aim to safeguard the financial institution but also provide some level of protection to the consumer.

### 2.3.3 Credit Management Variables

In credit management, the five Cs are recognised as important factors used in the appraisal of the applicant's basic creditworthiness. The five C's of credit were defined by Lawrence (1997) as Character, Capacity, Capital, Collateral, and Conditions.

1. Character: This refers to the applicant's track record of upholding previous financial, contractual, and moral obligations. The applicant's character would be assessed based on their payment history as well as any pending or resolved legal judgments against it.
2. Capacity: The ability of the borrower to repay the credit sought. Analysis of financial statements, with a focus on liquidity and debt ratios
3. Capital: The applicant's financial ability as shown by its ownership status. The debt-to-equity ratio and profitability ratios of the applicant are widely used to determine its capital.
4. Collateral: The value of the applicant's properties that can be used to secure the credit. The greater the number of available assets, the more likely a company can recoup its losses.
5. Conditions: The present economic and business environment, as well as any unusual circumstances involving one or both parties to the credit transaction. If the company has a surplus inventory of the goods the applicant wants to buy on credit, for example, the company might be willing to sell on more advantageous terms or to applicants with less credit. An examination of the general economic and business environment, as well as an Analysis of the general economic and business conditions, as well as special circumstances that may affect the applicant or firm is performed to assess conditions.

In this approach, the first two Cs—Character and Capacity—receive serious consideration. They serve as the very fundamental criteria taken into account before offering a credit facility to a potential applicant. However, the final three Cs—Capital, Collateral, and Conditions—are the crucial factors taken into account for the complete credit management structure. When granting credit to cotton producers, the 5Cs should be taken into account because they are crucial. The credit scoring model is a method of categorising applicants for credit into "good" or "poor" credit risk classifications using information obtained from application forms to create new or extended credit lines (Constantinescu et al., 2010). According to Inkumbi (2009), the two main barriers that entrepreneurs face when trying to obtain financing are capital (equity contributions) and collateral (the security that lenders need). This is particularly true for young business owners or those without assets to use as collateral for a loan or without money to invest as equity. Any endeavour to increase financial access must take into account the difficulties in obtaining capital and collateral. Putting some form of collateral upfront for a loan is one technique to ensure that the borrowed funds or facilities will be recovered. Concepts and pertinent concerns relating to women in administrative positions in education will be reviewed. These would comprise, among



other things, the idea of agricultural credit, agricultural financing and credit, various forms of rural credit, access to formal credit by farmers, and agricultural credit policy.

## 2.4 Types of Credit and Rural Accessibility

March (2010) provides four basic types of credit:

1. Service credit: The typical manner of payment for utilities including telephone, gas, electricity, and water is a monthly bill. The user is typically required to pay a deposit or a late fee if their payment is delayed. In the case of agriculture, a farmer may enter into credit agreements with these service providers and use the Ghana Water Company's water for irrigation purposes as well as energy to pump water.
2. Loans: A loan can be for a significant sum of money and for short, medium, or longer repayment periods based on the demands of the farmer or the interested party and the ability and arrangement of the crediting institution. The majority of the time, as well as depending on the agreements made between the two parties, loans can be repaid in full or in monthly payments. You can get secured or unsecured loans.
3. Instalment credit: This can be compared to making on-time purchases, obtaining store financing, or using an easy payment plan. The borrower receives the items in return for a commitment to pay them back later. Typically, this module is used to purchase automobiles, appliances, and furnishings. With this structure, it is possible to purchase farming inputs, machinery, or other items in the case of agriculture. It usually involves signing a contract, sometimes making a commitment, and promising to pay the remaining balance in a specific number of equal instalments in accordance with an established instalments system.
4. Credit cards: These are issued by certain retail establishments, banks, or companies. If you pay off your credit card balance in full at the end of each month, using one can be compared to taking out an interest-free loan (<http://www.urbanext.illinois.edu/ww1/04-03.html>).

However, (Yehuala2008) simplified the types of credit that are available in rural areas as the dual rural credit market encountered in developing countries: formal and informal credit. Through the mediation of depositors and lenders, market institutions provide formal credit at a relatively low rate of interest that typically receives some sort of government subsidy. Formal financial institutions offer formal credit. The Bank of Ghana (BoG) issues licences to formal financial institutions that are organised under the Companies Act 2019 (1963) (ACT 992) and the Banking Law 1989 (PNDCL 225); the financial institutions (non-banking) law 1993. (PNDCL 328). Private individuals, professional moneylenders, traders, commission agents, landlords, acquaintances, and relatives are all part of the informal credit market institution, and they all lend money to people who have expressed a clear desire in doing so (Yehuala 2008). In some situations, the formal and casual styles can be substituted for one another. When formal credit is accessible and available, informal credit decreases, yet it is not entirely abolished (Yehuala, 2008). This

implies that depending on accessibility, interest, or the transfer of resources between people, the two types of credit serve distinct purposes.

When businesses cannot obtain a formal loan in a competitive financial market, they will substitute informal financing (Aryeetey, 1998). However, it is observed in the literature that when given to rural residents and farmers, informal lending facilities can result in extortion and the charging of exorbitant interest rates. Financial institutions' provision of institutional credit facilities in developing nations with agricultural sector economies aims to end the extortion and exploitation of small farmers by charging them exorbitant interest rates (Adams, 1984), as mentioned in (Yehaula, 2008). In Ghana, the rural financial systems can be divided between formal and informal lending facilities (Aryeetey, 1998). The two credit facilities (in the formal and informal sectors) coexisted as the primary sources of agricultural financing, notwithstanding accessibility inequalities.

The only distinction is that informal businesses don't always adhere to the rules and guidelines that conventional financial institutions impose on farmers (Singh, 1993). All transactions, loans, and deposits of unofficial finance take place outside of the control of a central monetary authority (Aryeetey, Hettige, Nissanke, and Steel, 1997). The discussion that has come before implies that the formal sector is still essential for financing agriculture in the nation, particularly in rural areas. However, it is also impossible to completely rule out the contributions of the unorganised sector. The semi-formal category, which includes institutions like savings and loans, microfinance, susu, and credit unions, is another rising kind that the experts neglected to mention. These are useful in the majority of communities, particularly cotton-growing regions where farmers can easily utilise these facilities.

## **2.5 Farmers' access to formal Credit in Rural Communities and Challenges.**

Access to financial institutions, such as banks—commercial banks in particular—is difficult in the majority of rural communities. Accessibility concerns have not been entirely addressed, despite the idea of rural banks having been introduced to cover the gaps. According to Levitsky (1993), referenced by Khalid (2003), most commercial banks view small- and micro-business owners as hazardous borrowers. The banks claim that it is still difficult to extend credit to these businesses since doing so puts the financial institutions in a risky situation and could result in them suffering irrecoverable losses. Additionally, it is noted as a hurdle since the banks' efforts to advance loans to small farmers like cotton producers in the northern region are significantly hampered by the interest rates. Most farmers would not benefit from receiving modest loans due to the processing costs, hence financial institutions would not be able to give appropriate interest rates (Bottomly, 1975), as noted in (Khalid, 2003).

Famers occasionally face difficulties such as the need for collateral and hefty loan rates. According to Mchujuko (1991), farmers are deterred from obtaining loans from formal institutions because

of some of the institutional structures they must navigate when requesting a facility. Collateral, formal application procedures, addresses, contacts, and the worry of a poor harvest that could affect repayment and its repercussions are just a few of the conditions that discourage farmers from obtaining loans from established financial institutions. Due to excessive farmer exploitation, official loans tend to be more reasonable and affordable than informal loans, but farmers still run the risk of ending up in an informal credit institution, which comes with its challenges. In light of the formal facilities-controlled framework, it is prudent to remark that farmers must be encouraged to use the facility and that attempts must be taken to reduce the facility's rigorous accessibility requirements.

## 2.6 The Concept of Agricultural Credit

Agricultural credit is the practice of securing control over the usage of money, products, and services in the present in exchange for a promise to repay at a later time, according to Adegeye and Ditto (1985), as mentioned in Adebayo et al. (2008). In order to command another person's capital for agricultural purposes, agricultural credit is the present and temporary transfer of purchasing power from a person who owns it to a person who wants it. However, it must be done with confidence in the latter party's willingness and ability to repay the capital at a specific future date with or without interest (Nwaru, 2011), as stated in the previous sentence (Ugwumba et al, 2013).

In many nations, the development of agriculture is still influenced by credit. The widespread use of credit has been a major factor in the development of agriculture (Nouman, Siddiqi, Asim and Hussain, 2013). A crucial component in the growth and modernization of agriculture is considered to be agricultural loans. Utilizing financial facilities in the agricultural industry contributes to high productivity by, among other things, ensuring an adequate flow of inputs (Nouman et al, 2013). Nouman (2013) reiterates that financing gives farmers enough support to enable them to use current technologies and create excellent yields. Therefore, it makes sense that agricultural financing aids in the sector's modernisation and helps it move away from an overreliance on conventional farming practices and processes. Credit placed in the hands of poor farmers will allow them to benefit from economies of scale, find new, inexpensive products, create demand where none previously existed, provide utilities to satisfy a wider market, and inspire determinism and optimism in the farmers to pursue new fields (Ijere, 1998 as cited in (Fakayode, Adewumi, Salau, and Afolabi, 2009). Agricultural financing helps small-scale farmers break the cycle of poverty, increasing output and raising standards of life (Adebayo and Adeola, 2008).

### 2.6.1 Agricultural Credit in Rural Development

The productivity and net farm profit of farmers are claimed to be significantly impacted by agricultural finance, particularly in agrarian countries. Microcredit is a notable credit source that comes from some financial institutions. It is viewed as a rural development intervention that aims

to change access to small loans for the poor, who are frequently ignored by banks, and it enables the farmer to invest in improving their income (Anderson et al. 2002). According to Ahmed (2011), finance lets smallholder farmers buy a variety of inputs, hence it has a positive link with output. Credit for the agricultural sector, according to Akudugu (2012), is a tool for empowerment that is used to unlock the potential of rural economies and change the perceptions of the rural poor. Credit is viewed as an input in production and an essential condition to boost improvement in rural livelihood, according to the research's findings. Therefore, households need to obtain a sizable amount of credit and make good use of it.

## 2.7 History of Cotton Production in Africa

In Cotton Journey (2003), cotton is depicted as a plant that grows wild in many locations on earth, yet has been domesticated and used for ages by humans from many different regions. According to Cotton Journey, 2003, scientists and historians have discovered fragments of cloth or literary references to cotton that dates back at least 7,000 years. The oldest discovery was uncovered in a cave in Mexico, where archaeologists found fragments of cotton fabric and bolls.

Additionally, research has shown that cotton production began in 1938 intending to assist Portugal's developing textile sector (Nadio, 2011). In this regard, peasants were urged to cultivate cotton on a specific number of hectares in specific, worth-producing zones. Cotton is a significant cash crop in the majority of sub-Saharan Africa, although research has not yet pinpointed the precise moment or timeframe when cotton production began in Africa. The majority of cotton in sub-Saharan Africa is produced in Burkina Faso, with Mali producing the second most, according to a strategy document from the OECD/AFDB (2006). In some African nations, cotton production is being increasingly recognised as a critical crop for reducing poverty, ensuring food security, and fostering economic growth (IFDC Report, 2013). Cotton has frequently been referred to as "African white gold" (Moseley, 2008; Ahwoi in Ghanaian Chronicle, March 2, 2011). Burkina Faso, Benin, Chad, and Mali were included as some of Africa's main cotton-producing nations in Baffes (2003) and the IFDC Report (2013). The Cotton-Four (C-4) countries are what the literature refers to as these nations.

According to (Kaminski et al., 2009), the production of cotton is still a political and economic activity in West Africa. (It continues to be the main cash crop traded for other items) (Schwartz, 1996). Despite the relatively small quantities that were linked with African nations, cotton's growth as an internationally traded crop under the colonial era was noted by Bassett (2001) and the World Bank (2004). The perspectives presented above underline that cotton production has a long history and should be effectively managed with a strong credit facility to maintain sustainability. According to Tschirley et al. (2009), cotton has historically provided the primary means of revenue production for more than two million impoverished rural households, and it continues to be a significant source of foreign exchange for more than fifteen Sub-Saharan African nations. However, according to Kaminski et al. (2009), cotton production in Africa increased

significantly from 1960 to 2000. Again, cotton cultivation is not only a source of money for the rural population but also the nation as a whole.

## 2.8 Cotton Production and Economic Development in Ghana

The entrance of cotton into Ghana as a possible industrial crop, however, was seen in 1968, when the cotton development board was founded. Cotton production in Ghana predates the arrival of the colonial overlords because it serves as a traditional farming practice (Ghana Cotton Company Business Plan, 1996). The board, a state-owned organisation, was established and given the task of promoting all facets of cotton production in order to supply raw materials to nearby textile manufacturers as well as for export. In the early years of the industry's liberalisation (1985–1994), all cotton production enterprises used a "free input system" (Ghana Cotton Company Business Plan, 1996). The "free input system," a type of credit management arrangement, was built on an understanding wherein corporations agreed to give inputs to farmers in exchange for a fixed price for their cotton seed. The price of the inputs would be subtracted from this, and the farmers would receive the residual value.

Cotton growing requires several inputs that the majority of smallholder farmers cannot purchase without using financing (Delpuch and Vandeplas, 2011). Due to a supposedly high risk in supporting economic operations whose outputs depend so much on natural conditions that are frequently very difficult to foresee with precision, access to credit for smallholders is critically important in the production of cotton. Through a series of connected transactions known as "contract farming" or "out-grower schemes," cotton is produced using inputs that are provided on credit by cotton-producing corporations. Similar to how cocoa and the other cash crops are suited to and grown in the south, cotton is a major industrial crop whose production is compatible with the ecological conditions of Northern Ghana. As a result, investment in its production with a similar commitment as that of cocoa and other cash crops can help reduce the poverty levels of the north of Ghana. Thus, if the management and links efficient between production and consumption, it has the potential to help many impoverished people escape the poverty quagmire. This point was made clear in the GSGDA I (2010), which underlined that significant efforts were needed to revitalise the cotton industry's existing processing infrastructure in order to assist poverty reduction and economic growth in the five northern areas.

## 3. Mythology

### 3.1 Research Design

This study adopts the case study research design and is descriptive (Creswell, 2014). Analyses of individuals, occasions, choices, actions, policies, institutions or other systems that are investigated holistically are part of the case study methodology (Prashant, 2013). Because it offers the chance

to investigate and elicit in-depth information from both the farmers and the lending companies, it was chosen for the study. Both quantitative and qualitative methodologies were used in the study's data collection and analysis, which is known as a mixed-method approach. The combination of the two allows for cross-checking of the data acquired and prevents the incidence of data gaps from respondents within the area of the study. It was founded on the idea that both methodologies have their respective related flaws and strengths.

### 3.2 Target Population

RMG Cotton Extension Officers, MoFA Officials, and Cotton Farmers in the Bunkpurugu Zone of the North Eastern zone of Northern Ghana make up the study's population. The nine cotton farming stations in the area are its intended goal. The population that needs to be reached consists of 1,391 farmers. This information is taken from the 2014 RMG Cotton Production data. In the zone, there were 1,061 cotton growers overall in the 2011–2012 season, 2,119 in the 2012–2013 season, and 1,391 in the 2013–2014 season (RMG Cotton Production data, 2012, 2013) The target population includes ten (10) Cotton Extension Officers and one district Ministry of Agriculture Office (MoFA).

### 3.3 Sample Size Determination

With the assistance of Cotton Extension Officers and MoFA, a purposive sample of eight (9) cotton-producing towns was chosen for this study. 1,391 farmers were located using the list of current cotton growers provided by MoFA and RMG Cotton Production Data. With a 95% confidence level and a 5% margin of error, the sample size was calculated using the Raosoft online sample size calculator. By dividing the total number of farmers by the sample ( $1,391/302=4$ ) and repeatedly selecting the fourth name from the list until the desired total sample of 302 was attained, a sample of this size was generated. The nine communities chosen for the study were also given pieces of this sample. This indicates that 33 farmers from each village were chosen. The 33 farmers from each community were then further selected using a table of random numbers, whereby numbers were chosen at random about the community lists until the appropriate sample size was attained. In order to identify all institutions in the study districts and communities that the study believed had a stake in the cotton production chain and were better positioned to assist in shedding light on the research questions raised in this study, the research adopted the purposive sampling technique for the institutional surveys. In the end, 302 cotton growers from the Ministry of Food and Agriculture and nine (9) extension officers as well as one District Officer participated (MoFA).

### 3.4 Sampling Technique

Approaches such as simple random, stratified, and purposeful sampling were used to choose study participants. In a purposive sampling technique, a sample is purposefully selected from a population that is thought to be representative of the population. Purposive sampling was used in this study to choose the research site, which resulted in a geographically diverse sample and

respondents having a stake or interest in cotton growing, in keeping with the study's purpose. This is done to make sure that the study is carried out in the area where cotton cultivation is still going on, hence the northern region, and that only stakeholders with a stake in the area and who may contribute useful information to the study do so. Therefore, following this method, the staff of RMG Cotton Ghana Limited, cotton growers, the cotton farmers Association, and the Ministry of Food and Agriculture were chosen. To enable the systematic selection of responders without bias, a simple random sampling procedure was used. It was used to remove bias in the selection process and provide responders with an equal chance to be picked. By numbering the numerous farmer associations in the tested community located in the Bunkpurugu zone of northern Ghana, farmer associations were also selected using this method. The associations would be numbered, and then a number would be chosen at random, followed by the 'nth' number in that order.

### 3.6 Instruments for Data Collection

This involves asking a sample of respondents several questions. This mostly went after employees of the MoFA and RMG Cotton Ghana Ltd. Within the research timeframe, the questionnaires were distributed and returned at the respondents' convenience. The questions were standardised to make sure that all respondents would be subjected to the same observational procedure in order to aid in examining data from other enterprise stakeholders. Desk Review: The study looked at pertinent secondary data (information) that was available and relevant to the topic at hand. This contains books, journals, reports (including data on RMG Cotton Ghana production), and other researchers' work in related fields.

### Data Analysis Techniques and Procedures

According to the established research questions, theme analysis was used to examine participant narratives using transcribed qualitative interview data (Creswell, 2014). The Statistical Package for Social Sciences was used to analyse the quantitative data (SPSS). The results of the data were displayed using descriptive statistical techniques, such as graphs, frequency tables, and percentages.

### 4.1 Introduction

The analysis and discussion of the results are the key topics of this chapter. The analysis is based on primary information gathered from respondents via surveys and interviews. Analysis of the data was done following the study's objectives. The analysis has been divided into three sections in accordance with the questionnaires: Part A deals with the respondents' biographical information; Part B examines the makeup of credits advanced to farmers; Part C examines the difficulties in managing credits among stakeholders; Part D examines the effects of advanced credits on farmers' productivity, and the final section evaluates the efficiency of strategic management procedures in managing the credit. In this chapter, meanings have been derived from the data and inferences have been drawn.

## 4.2 Socio-Demographic Characteristics of Respondents

The purpose of this part was to identify the respondents' demographic characteristics. We asked for details on sex, education level, marital status, and other things. This made it easier to identify patterns and differences among respondents and to understand how these demographic factors affected cotton production and credit access in the sector. A total of 312 questionnaires were sent to participants in the study in the field. Nine (10) key informants and nine (9) cotton-producing organisations from different localities were part of this. Based on their extensive knowledge and experiences in the activities of cotton as well as credit management, several groups of people were approached as key informants.

### 4.2.1 Gender of Respondents

Table 4.1 depicts the Gender of the respondents surveyed

Details	Male		Female		Totals	
	Freq.	Per cent	Freq.	Per cent	Freq.	Per cent
Farmers	290	96	12	4	302	100
RMG	3	100	0	0.00	3	100
MOFA	7	100	0	0.00	7	100
Totals	300		12	4	312	100%

Farmers who were men made up 96% of the sample, whereas farmers who were women made up only 4%. This shows that cotton farming is a largely male-dominated industry and that, in the Bunkpurugu Zone of Northern Ghana's North Eastern Zone, women typically assisted their husbands in growing cotton, making them inactive cotton farm owners. This could be further justified on the basis that female farmers may not have the same amount of time for farming as their male counterparts because they also handle other home and economic tasks like housekeeping and marketing agricultural products. Additionally, some women frequently assist with their husbands' farms rather than starting their own, most likely due to a lack of resources like land and other inputs. This conclusion supports recent findings, such as those from Awonyo-Vitor et al. (2016) and earlier studies, such as Amankwah (1996), indicating men predominate in farming in Ghana.

### 4.2.2 Age Distribution of Respondents

The study's respondents' age distribution is displayed in Table 4.1. The responders (farmers, management-RMG, and MoFA officials) are all between the ages of 18 and 65, it was discovered. All the selected age groups are fairly represented in the study. According to the study, 35.1% of respondents are between the ages of 18 and 35, 43.2% are between the ages of 36 and 45, 16.3% are between the ages of 46 and 60, and just 5.4% of respondents are over the age of 60.



Table 4.2.2: Age Distribution of the Respondents

Age	Farmers		Management (RMG)		MOFA		Totals	
	Freq.	Per cent	Freq.	Per cent	Freq.	Per cent	Freq.	Per cent
18-35	100	27.0	3	8.1	0	0.0	13	35.1
36-45	170	37.8	1	2.7	1	2.7	16	43.2
46-60	30	13.5	1	2.7	0	0.0	6	16.3
60 above	12	5.4	0	0.0	0	0.0	2	5.4
Totals	312	83.7	5	13.5	1	2.7	37	100%

Source: Field Survey (Dec 2020)

According to the report, the majority of farmers producing cotton fall into the 35.1% and 43.2% active youth age groups, which correspond to the early and late youth years of 18 to 35 and 36 to 45, respectively. Aside from this, some older people who are still active and vivacious work in profitable cotton cultivation.

#### 4.2.3 Educational background of respondents

Table 4.2.3 below shows the educational level of the respondents.

Educational Level	Staff RMG		Farmers		MOFA		Totals	
	Freq	Per cent	Freq	Per cent	Freq	Per cent	Freq	Per cent
No formal education	0	0.0	180	60	0	0.0	180	57
Primary/JHS/SHS	0	0.0	100	33	0	0.0	100	32
Certificate/Diploma	4	57	20	7	0	0.0	24	8
HND/1 <sup>st</sup> Degree	3	43	2	0.6	3	100	8	3
Others	0		0	0	0	0.0	0	0.0
Totals	9	100	302	100	3	100	312	100%

Source: Field Survey (December 2020)

The data reveals that all of the management personnel (RMG and MoFA staff) have some form of schooling. This suggests that they are in a better position to understand credit management difficulties and provide the necessary replies to resolve the complicated issues under consideration. 180 out of 302 respondents (farmers) or 60% do not have any formal education, according to the

survey, which demonstrates that the majority of farmers lack formal education. However, a sizable portion of farmers—122 out of 302—have received various levels of education, from BECE to a degree. This result supports a 2015 study by Zongoma et al. that found the majority of smallholder maize farmers lack formal education. Regardless of education level, all farmers received assistance in responding to the interview questions and offering insightful comments.

#### 4.2.4 Duration of working with the company (RMG and MoFA) and on Farm

According to the responses obtained through the questionnaires and interviews, the employees of RMG and MoFA had been with those organisations for at least two years, and the farmers had at least three years' worth of experience producing cotton. Table 4.6 below shows how these data are represented.

**Table 4.4 Duration of working with the company/Farm**

Number of years	Frequency	Percentage (%)
Less than 1 year	0	0.00
1 year exactly	0	0.00
2 years	85	27
3 years	100	32
4 years	105	34
5 years	22	7
Total	312	100

**Source: Field Survey (December 2020)**

According to table 4.2.4 above, the majority of respondents (27%–34%) have between two and four years of experience working for RMG, MoFA, or on their farm. It is telling that responders with these degrees of experience can speak from personal knowledge about local cotton production and credit management problems.

#### **Challenges in managing credit among the stakeholders in the cotton sector.**

The study has identified certain difficulties with credit management in the cotton industry. Farmers' viewpoints were that one of the biggest challenges in the credit management value chain continues to be the pre-financing of cotton output by businesses, whose terms are frequently unfavourable. A staggering 89% of farmers said that the lending policies of banks and businesses involved in the cotton industry make it impossible to obtain financing. They contend that both extenuating circumstances and interest payments have an impact on loan repayments, sometimes leading to default. Another issue seen through the eyes of the farmers is the distribution by businesses of unprocessed and incompatible varieties of cotton seeds to farmers as inputs.

According to the respondents (farmers), this frequently resulted in poor cotton growth and yields. Again, nearly all of the respondents (299 out of 302) agreed that such events have an impact on credit servicing and thus cause the majority of farmers to default in some circumstances.

The study also reveals that chemical inputs are supplied late. On this subject, farmers (95%) observed that it occasionally happens that the inputs are delivered after the disease-carrying bug has already wreaked havoc, which has a significant impact on production and yields. 100% of the MoFA staff members who worked together indicated that the phenomena have an impact on loan production and servicing. The main informants (MoFA staff) disclosed that some farmers frequently use cotton inputs for other crops while others sell produced cotton to other businesses. According to respondents, this strategy restricted the sector because cotton companies couldn't produce at the levels they had planned. According to the management's (RMG) viewpoints, the high default rates frequently linked with cotton production contributed significantly to lenders' reluctance to finance cotton production or even other agricultural sectors.

In order to achieve this goal, the study asked farmers for their opinions on what makes up the credits given to them. The main objective was to learn what types of finance were offered to cotton farmers. The analysis's sample size of 312 farmer opinions served as its foundation.

**Table 4.5 Form of credit supplied to farmers**

Form of Credit	Frequency	Percentage
Cash	0	0.0
Inputs	302	100
Others	0	0.0
Total	302	100

**Source: Field Survey (December 2020)**

The answer to the query that aimed to ascertain the type of credit that is provided to the farmers by the companies is shown in Table 4.5 above. In answer, all 302 respondents (farmers), or 100%, claimed that the company solely provided them with inputs and that cash did not constitute a portion of the credit received.

### **Types of Inputs**

The researcher aimed to learn from the respondents, who are farmers, about the particular kinds of credits that are given to them. The purpose of this question is to find out from the replies whether they have the choice of the inputs offered by the companies. This would guarantee farmers the opportunity to get what they want depending on their expectations and desires at the time.

Table 4.6 show the type of credit that is advanced to farmers.

Types of Inputs	Frequency	Percentage
Fertilizer	302	100
Chemical	201	64
Herbicides/Weedicides	185	61
Others	25	8

Source: Field Survey (September 2020)

The data shows that all 302 respondents, or 100%, said they receive fertilisers as part of the inputs they receive from the cotton company. Regarding the other inputs, 201 (64%), 185 (61%), and 25 (8%), respectively, confirmed receiving pesticides, herbicides, and other inputs.

#### Inputs Supplied and Sufficiency.

The sub-theme seeks to determine whether the inputs supplied by the company (RMG) are adequate or not and whether they have the potential to produce a high output or not. In order for the two parties (RMG and Farmers) to be able to fulfil their respective agreements, it was important to determine whether or not a bad or inadequate crop could be attributed to the company's inadequate input.

Table 4.7: Table showing the adequacy of inputs supplied to farmers.

Inputs	Frequency	Percentage
Adequate	125	41
Inadequate	135	45
Indifferent	42	14
Total	302	100

Source: Field Survey December 2020)

Table 4.7 shows that 135 respondents (45%) believed the company's inputs were insufficient, while 125 respondents (41%) thought they were appropriate. 42 of the remaining people, or 14%, are unconcerned.

#### Composition of Inputs: Management (RMG) Perspective

The management was questioned in this subsection about the type and nature of input support given to farmers. Inputs such as fertilisers, chemicals, and weed/herbicides are supplied to the farmers, according to 100% of the respondents from RMG. What the farmers claimed to have gotten from the enterprise is amply supported by this.

## An Assessment of Credit Management Among Cotton Farmers in the North-Eastern Zone of Ghana: The Case of Farmers at the Bunkpurugu Zone and RMG Cotton Ghana Limited

### Other forms of Support

The researcher asked the management what additional assistance they had given to the farmers would help with improving productivity and making efficient use of the credit that had been given to them for improved returns and servicing. There were the following replies:

### Training of farmers

4.8 All the respondents, 7 (100%) asserted that farmers are provided training in diverse forms.

Training	Frequency	Percentage (%)
Financial training	7	100
Record keeping	7	100
Others	7	60

As seen in table 4.8 above, 100% of the respondents agreed to have offered training in accounting, record keeping, and other topics including fertiliser application and other farm management techniques. The types of training and responses are listed in the table above in both absolute and percentage terms.

### Credit Management among Cotton Farmers: Farmer's Perspective Training on Inputs application for effective credit Management.

The purpose of the question was to gauge the farmers' managerial skills in terms of effective input consumption and targeted application of inputs provided to them. The goal was to determine whether the farmers had adequate training to use the resources provided to them in a way that would benefit both them and the business. The responses from farmers to the questions are shown in Table 4.15 below.

Table 4.9: Training on inputs application

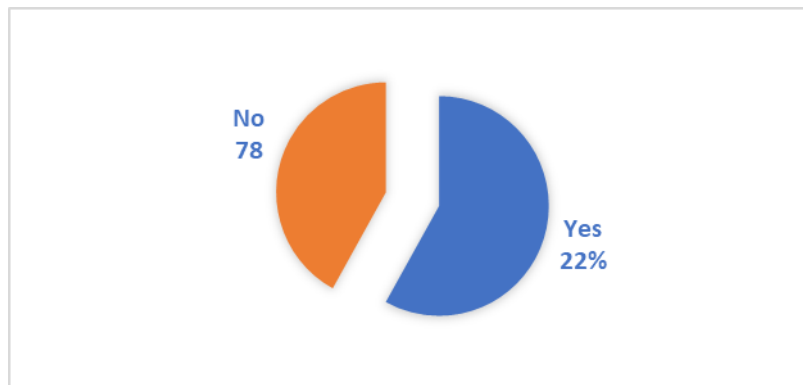
Education/Training	Frequency	Percentage
Yes	201	67
No	101	33
Totals	302	100

### Field Survey, December 2020.

According to the results shown in table 4.9 above, the majority of respondents, 201 (67%) claimed to have gotten training on how to use and apply the inputs, while 101 (33%) claimed they had not (RMG).

### Disclosure of capacity to receive credits advanced and service it on scheduled period.

The study wanted to know how well the farmers could service and receive inputs. Its main goal was to determine whether or not the farmers were compelled to provide this information before extending credit to them. The enquiry was consistent with Lawrence's (1997) five Cs, which included capability as one of the elements.



According to the response from the table, 78% of farmers were not asked by any form, as part of the condition's precedent, to identify their capacity to receive and service the credits when advanced, whilst 21% believed otherwise.

### Credit Management among Cotton farmers: Management (RMG) Perspective

Regarding credit management, this component of the analysis adopts the management of RMG Cotton's perspective. It aimed to investigate the methods management uses to guarantee efficient credit management.

#### Monitoring of credit to farmers

The purpose of the study was to determine whether management at RMG Cotton oversees how the farmers use the credit they extended to them. Table 4.10 displays the management's degree of credit advance to farmers under observation.

Table 4.10 Monitoring of credit to farmers

Monitoring	Frequency	Percentage
Yes	7	100
No	0	0.00
Totals	7	100

Source: Field Survey (December 2020)

According to table 4.10, 100% of the respondents advised that they keep an eye on how the inputs given to farmers are being used.

**4.6.2 Inputs application compliance**

The researcher wanted to know if farmers were applying inputs following management recommendations. It was shown that 71% of respondents claimed that farmers follow any recommendations that are given to them, while 29% said that farmers do not follow them. The responses are shown in the table below.

**Table 4.11: Inputs application compliance**

Compliance	Frequency	Percentage
Yes	5	71
No	2	29
Total	7	100

Source: Field Survey (September 2020)

**Credit repayment**

The goal of the study was to determine whether farmers could repay the credit that had been given to them. The responses from the respondents are displayed in the table.

**Table 4.12: Credit repayment**

Credit Repayment	Frequency	Percentage
Yes	2	29
NO	5	71
Totals	7	100

Source: Field Survey (September 2020)

According to table 4.21, the respondents believe that farmers are unable to repay their loans. While 21% of respondents claim that farmers can repay their credit, 71% of respondents agree with this. Further to the 71% of respondents who said that farmers are unable to return the credit extended, the researcher tried to comprehend why the farmers are unable to fulfil their credit payback duty. Among the explanations given include farmers diverting inputs to other crops, farmers selling the inputs, incorrect input applications, and falsifying the number of units registered.

**Cotton Companies continue to provide credit to Farmers**

The goal of the study was to determine whether Cotton Companies should keep giving farmers credit even though most of them don't repay it.

Table 4.13: Cotton companies continue to provide credit to farmers

Continue with the credit policy	Frequency	Percentage
Yes	2	29
No	5	71
Totals	7	100

Source: Field Survey (December 2020)

The company's management, which is represented by 715 of its members, is highly opposed to businesses continuing to extend credit to farmers, as shown in table 4.13, whereas only 29% of management members agree. The researcher wanted to determine why 71% of respondents believed that cotton firms shouldn't extend financing or inputs to farmers. The farmers' inability to pay back the loan, which caused enormous losses to the firms, was the only explanation they offered.

#### Measures to ensure payment of credit by farmers

The researcher requested information from the company's management regarding steps that may be taken to make sure farmers can repay their debts. The following are some recommendations made based on the replies received.

- Farmers should stop diverting inputs to other crops and also they should stop selling the inputs particularly the fertilizers
- Inputs applications should be as directed by the management of the company
- Farmers should disclose exactly the number of units intended to use for the production of cotton in order to get the exact number of inputs required.
- Allowing farmers to use their management practices

#### Farmers' technical knowhow in credit management: MOFA Perspective

The study wanted to see if farmers in the MOFA official district had the technical know-how to manage the inputs that were given to them. In his statement, he claimed that farmers had little formal education in applying for, using, and managing credit. Although he believes that farmers are doing their best to manage their credit, he advises that loan providers can do more to help the farmers.

#### Impacts of Credits on Farmer's Endeavours.

The purpose of this objective was to determine how the credit that farmers got affected how their work was progressing. To what extent do credits affect farmers' activities in the cotton sector was the question. The following table 4.14 indicates the response:



Table 4.14

Credit Impact	Frequency	Percentage
Yes	289	96
NO	13	4
Totals	302	100

Field Survey: (December 2020)

According to the table, the vast majority of 289 respondents, or 96%, agreed that credits have an impact on farmers' work, while 13 respondents, or 4%, disagree.

Table 4.15 Specific Benefits of Credits

Benefits	Frequency	Percentage (%)
Increase in inputs access	302	100
Increase in productivity	302	100
Cost of labour	302	100

Field Survey (December 2020)

According to the table, 100% of the respondents believed that credits help them in areas like having access to inputs, increasing production, and being able to pay for labour costs. According to the responders, the benefit is that they have quicker and more effective access to inputs like labour, fertiliser, and improved seeds.

Credit "is very crucial for the farmer to experience greater productivity," according to MOFA personnel. He believes that using credit is important. A farmer will want credit for everything from land preparation through harvest and product selling. In addition, a farmer said that using credit offers a chance to address issues of poverty and substantially close the income gap between the poor and the rich in the neighbourhood. This is true both in terms of access to farming inputs and income from the goods. This claim is in line with Ledgerwood's (1999) thesis that the introduction of credit acts as a different economic instrument that targets the poor by offering flexible credit services in an effort to fight poverty. According to Fernando (2005), sources of funding have become one of the key motivators for attaining the MDGs, particularly concerning the goal of reducing severe poverty and hunger by 2015.

**How Inputs get to the farmers and their impact on the farming activity.**

According to the survey, RMG Cotton advances credit to Farmers in an organised manner. A company representative known as a cotton production assistant (CPA), who is the initial point of

contact for the farmers at their stations, registers the farmers and asks them how many units they plan to farm as the first step in the process. These CPAs are subordinate to a Cotton Technical Officer (CTO) at the Zonal level who has a higher or supervisory position. The zonal officer sends their zonal reports to the area manager, who then gives them to the production manager as an intern will do. The area manager, the zonal officer, and the station officer are given the real quantity needed for the field based on the compilation of all the area reports, and they in turn deliver it to the farmers. In a survey, 89% of respondents said they thought the process was onerous and had a big impact on what they did before applying for financing.

## Conclusion

Based on the data and the description of the study's specific goals, the following conclusions are taken. The majority of the cotton producers in the area are men with little formal education. High degrees of cotton-producing farming experience are possessed by the farmers. They are mostly rather young. Failure to repay loans, diverting inputs to support other productions and a lack of managerial procedures all contributed significantly to the difficulties in managing credit in the Bunkpurugu Zone's cotton cultivation. Although the company made great efforts to ensure that the inputs, they provided to farmers represented real value for money, managing credit has primarily been regarded as an issue for the company. The farmers, on the other hand, are aware that they are unable to pay back their credit, but this isn't because they misuse the inputs or can't control it; rather, it's because the inputs were diverted to help with the growth of food crops.

The supply of inputs, which can include fertilisers, cotton seeds, chemicals, herbicides/weedicides, and in certain cases land preparation for the farmers, also provides some support for the country's cotton output. The beneficial influence concerning access to the farm input contributes to production, it is concluded regarding the effect of credit use on cotton farmers' endeavours. Farmers' use of credit has been found to level the playing field between the rich and the poor; poverty reduction is correlated with farming, and access to credit boosts agricultural productivity. The company arranges training for the farmers as part of the Farmers Business School project with assistance from GIZ to improve credit utilisation and support the farmers in their business endeavours.

## Policy Recommendations

The following suggestions are offered for better management of cotton credit advanced in Ghana based on the study's findings.

## Review of Credit Policy

The researcher suggests that the business gather records and data on the farmers to show how the prior financing was used before extending any credit to them. This will primarily act as a check on the theft of farm inputs given to farmers.

## An Assessment of Credit Management Among Cotton Farmers in the North-Eastern Zone of Ghana: The Case of Farmers at the Bunkpurugu Zone and RMG Cotton Ghana Limited Monitoring

To reduce the likelihood of inputs being diverted, misappropriated, or in certain circumstances sold into the open market, cotton firms should intensify their surveillance of cotton growers.

### Education/Training

Farmers should receive ongoing education and training to keep their knowledge of farm management and finances current. should be increased to dispel the false belief that cotton farming is unfit for the production of crops.

### Stakeholder Engagement

For the farmers to understand the truth of the cost of the inputs and to feel equal as though they are in business without benefiting the corporations, the method of input distribution and pricing should be decided upon by both the firms and the farmers. Farmers should receive more credit education from agricultural industry stakeholders. Due to this, smallholder farmers will have access to official institutions' credit. Since farm management practices are factors affecting farmers' access to finance, the government, NGOs, and private practitioners in the agriculture business should incorporate strategies for encouraging farmers to adopt better farm management practices in their programmes for raising public awareness.

### REFERENCE.

1. Akerlof, G. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism.
2. The Quarterly Journal of Economics, 84(3), 488. doi: 10.2307/1879431
3. Baffes, John. (2004). "Cotton: Market Setting, Trade Policies, and Issues." Policy Research
4. Working Paper, no. 3218, February. The World Bank, Washington, DC
5. [www.econ.worldbank.org](http://www.econ.worldbank.org).
6. Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approach (4th ed.). California: SAGE Publications Inc. Flick, U. (2006). An introduction to qualitative research. London: Sage.
7. Godfrey Mahofa (July 2007), Economic Analysis of Factors Affecting Cotton Production in Zimbabwe: Master Thesis to the Department of Agricultural Economics and Extension Faculty of Agriculture, University of Zimbabwe
8. IFPRI Washinton D. C. 2006, USA, [www.Ifpri.cgiar.org](http://www.Ifpri.cgiar.org) and The Hague, the Netherlands, [www.isnar.cgiar.org](http://www.isnar.cgiar.org)
9. Prashant, K. A. (2013). Qualitative research designs: A conceptual framework. International Journal of Social Science & Interdisciplinary Research, 2(1), 118-124.
10. World Bank (2012) Agribusiness indicators in Ghana, report number 68163 GH 1818 H Street NW Washington DC 20433

11. Cotton journey 2003 the history of cotton, [www.cottonjourney.com](http://www.cottonjourney.com) P. O. Box 811, Hansford CA 93232 [admin@cottonsjourney.com](mailto:admin@cottonsjourney.com)
12. OECD/AfDB (2006), the cotton Sector in Mali: Realizing its growth Potential, [www.oecd.org/dev/insights](http://www.oecd.org/dev/insights).
13. Creswell, John W. (2009) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches – 3rd ed. SAGE Publications, Inc. Thousand Oaks, California.
14. Data Department RMG Cotton Ghana Limited (2012) end-of-season report for management analysis
15. Data department RMG Cotton Ghana Limited (2014) end of season Report for management analysis
16. Owolabi J.O., Abubakar B.Z., and Amodu M.Y. (2011), assessment of farmers (women)' access to agricultural extension, inputs and credit facility, Department of Agricultural Engineering, Institute for Agricultural Research, Ahmadu Bello University Zaria, Department of Agricultural Economics and Extension, UsmanuDanfodiyo University Sokoto, Nigeria Journal of Basic and Applied Science 19(1): 87-92 [www.ajol.info/index.php/njbas/index](http://www.ajol.info/index.php/njbas/index)