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**THE CONTRIBUTION OF AGRICULTURAL DEVELOPMENT BANK (ADB)
TO THE GROWTH OF THE POULTRY SECTOR: A CASE STUDY OF
DORMAA MUNICIPALITY**

By

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DECLARATIONS

I hereby declare that this submission is my own work towards the CEMBA and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

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ABSTRACT

The study principally looked at the contribution of Agricultural Development Bank (ADB) to the growth of poultry sector; a case study of Dormaa Municipality in the Brong Ahafo region between 2006 and 2010. The study established that poultry farmers in Dormaa municipality have knowledge of banking practices and access to credit. The analysis of the data revealed myriads of challenges farmers faced in accessing and repaying agricultural credit from ADB. These included delays in loan disbursement, inadequate collateral security or guarantor, rigid loan documentation process and refusal to grant the requested amount. On the factors influencing repayment of agricultural credit, the farmers identified sudden collapse of market demands and prices, reduction of production due to diseases and disasters, sudden increase in price inputs, pilfering, thief or fraud, overstocking of birds and diversion of funds. The trend of poultry credit in ADB Dormaa branch as a whole shows a positive slope for disbursement as against negative slope for recovery over the period under examination. However, poultry credits to farmers were considered generally beneficial by both the farmers as well as officials of ADB. The results from the study revealed the enormous impact that poultry production has had on farmers in the municipality by skewing their response toward strongly agree as shown in Fig.4.9. These positive effects include expansion of farms, increase profit margins, providing employment, enhanced commercial activities in poultry- related activities and status, improved living standards and banking culture.

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KNUST



DEDICATION

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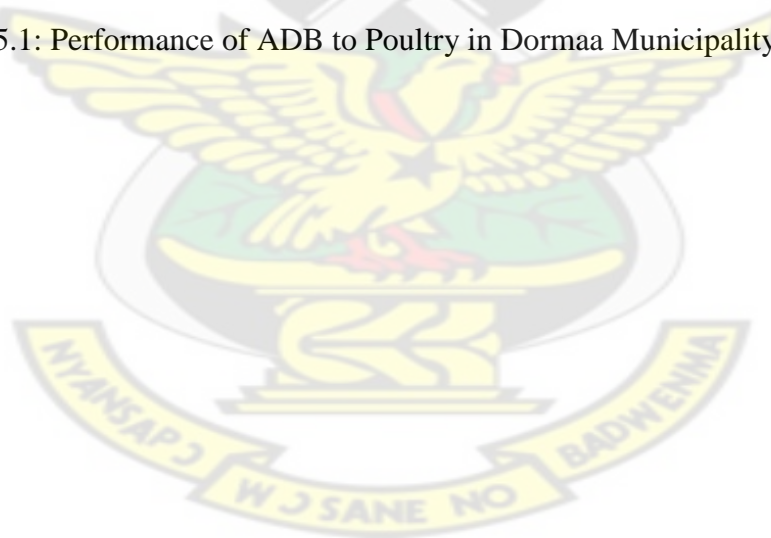
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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Ghana's recent development process is characterized by balanced growth at the aggregate economic level and the continued importance of agriculture as the backbone of the economy is still very paramount (Okanta et al, 2009). The agricultural sector plays a vital role in the socio-economic development process of most countries. This is particularly true where the majority of the people depend heavily on agricultural production and its related activities for their livelihoods. The daunting challenge confronting most developing countries is how to provide the food supply requirements of their people without devoting a greater percentage of their foreign exchange earnings to food imports.

There is a strong relationship between agricultural development in which poultry farming is a subsector and the socio-economic development of developing countries. Poultry farming has proven to be very lucrative; hence you might have been tempted to start one as a form of business and a source of income. Poultry component serves as safety net which provides vital sources of cash for emergency needs. Poultry is a category of domesticated birds kept by humans for the purpose of collecting their eggs, or killing for their meat and/or feathers. Poultry farming is the practice of raising poultry, such as chickens, turkeys, ducks, guinea fowl and geese, as a subcategory of animal husbandry, for the purpose of producing meat or eggs for

food. Poultry comes from the French/Norman word, poule; itself derived from the Latin word 'Pullus', which means small animal. Wikipedia (2011).

The Dormaa Municipality is located at the western part of the Brong Ahafo Region. It lies within longitudes 3° West and 3° 30' West and latitudes 7° North and 7° 30' North. It is bound by the Jaman District on the north, on the east by Dormaa East District, in the South and South-East by Asunafo and Asutifi Districts respectively, in the South-West by Western Region and in the West and North-West by La Cote d'Ivoire (ghanadistricts.com). The Municipal Capital is Dormaa Ahenkro, located about 80 kilometres West of Sunyani the Brong Ahafo regional capital.

The Municipality has a total land area of 917 kilometres square, which is about 3.1 of the total land area of Brong Ahafo Region and about 0.52 percent of the country. In terms of poultry farming in the municipality, the concentration is specifically on table eggs production which is on large scale (www.ghanadistricts.com, 2006).

The fact that modern agriculture is capital-intensive and highly market oriented also raises the critical issue of finance. The financial sector of every country (especially the banking industry) is the main source of credit for most activities. According to Badu (1994) the banking sector is "the backbone of a developing country's economy and plays an important role by providing money and credit that sustain any country's economic activities. It plays a major role in promoting business through provision and creation of credits." The financial sector is thus, an important promoter of modern agriculture as well as providing livelihood sustainability for the country.

Comptroller, 1998 noted that “financing supplied by banks over the years has been essential to many individual farm operators and to the development and use of new agricultural technologies and techniques .As with all forms of lending, agricultural credit presents the banker with a unique set of risks”

1.2 Statement of the Problem

The importance of the agricultural sector to the growth and development of the economy of Ghana cannot be overstated. The sector has since independence consistently constituted over 50 percent of the Ghana’s Gross Domestic Product. It has also been the main foreign exchange earner for the country. In addition, the agricultural sector employs over 60 percent of the country’s workforce (Bank of Ghana, 2008).

The Ghanaian economy is based largely on agriculture, which accounts for 41 percent of Gross National Product (GNP). About 60 percent of the labour force is engaged in this sector, most operating a crop farm or mixed crop and livestock/poultry farming. According to a recent survey (MOFA/DFID, 2002) the livestock/poultry component serves as a ‘safety net’, providing an important source of ready cash for emergency needs. Thus even though livestock and poultry contributes only 7 percent to the agricultural GNP (FASDEP, 2002) their role in rural livelihoods and food security is enormous, if intangible (Aning, 2006).

More farmers in the rural areas and Dormaa Municipality do have problems in dealing with the universal banks, rural banks or the credit unions. Some of these problems include preparing viable business proposals and collateral securities that

the banks do demand. Meanwhile, majority of the farmers are not well educated in order to plan or write their own business proposals. In addition, it becomes very difficult for the farmers to secure loans because of the collateral securities demanded by the banks. Some of the banks even look at the scale of the farm before granting loans.

To be able to perform the critical role of providing the domestic food supply required, create employment and earn foreign currency for the nation, the agriculture sector needs to be injected with financial resources.

The poultry sector is not a standalone industry but involves value chain. The category of actors in the poultry value chain includes the input suppliers, the producers, marketing and transporters of poultry and poultry products. Consequently, the growth of the poultry sector triggers growth in the auxiliary industries and other sub-sectors that depend largely on the sector. The need to advance credit to the poultry sector is therefore key to the development of the economy. However, studies have shown that most banks in Ghana are unwilling to provide credit to small business enterprises particularly the poultry sub-sector. The situation is attributed to the unusually high risks associated with financing such businesses (Tham-Agyekum & Appiah, 2010).

The poultry sub-sector is constrained by credit. Most poultry farmers in their quest to establish or expand their farms seek credit from sources that have high risk collaterals attached. Most banks that could have served as alternative and more reliable sources for funding hardly respond to the demands of farmers. According to the Bank of Ghana (2008), “the share of credit to the commerce and finance sector inched up by 1.2 percentage points to 33.3 percent in January 2008 relative to same

period in 2007 whilst the share (manufacturing declined by 5.3 percentage points to 12.9 percent in January 2008 over the same period. The share of credit to the services' sector also increased by 4 percentage points to 22 percent while that of the agricultural sector declined by 1 percentage point to 4.3 percent over the same period".

Antwi (2008) of Third World Network lamented that most of the banks in the country have shifted to commercialized banking; a situation that was making it difficult for farmers to access loan from the banks because of the high interest rate charged. Similarly, Nana Asamoah Sabreku of Dormaa Poultry Farmers Association (2010) during an interaction with the Ghanaian media mentioned some challenges facing the poultry industry in the area, as lack of credit facilities, insufficient maize for feed and the importation of poultry products. He said that the banks do not want to give loans to the poultry farmers in the country (Modern Ghana, 2010).

In the advancement of credit to borrowers, both lenders and borrowers are exposed to numerous risks though there are a lot of constraints as identified above. Nevertheless, it is the interest of the researcher to investigate into the contribution of the Agricultural Development Bank (ADB) to the growth of the poultry sector, a case study of Dormaa Municipality.

1.3 Objectives of the Study

The main objective of the study is to assess the contribution of ADB to the growth of the poultry sector, a case study of Dormaa Municipality of the Brong Ahafo Region between 2006 and 2010.

The specific objectives are to:

- evaluate poultry farmers' knowledge on banking services and access to credit;
- ascertain the trend of poultry credit from ADB's loan portfolio in Dormaa Municipality;
- identify challenges that poultry farmers in Dormaa Municipality face in repaying loans advanced to them by ADB
- assess the impact of agricultural credit on poultry production in the Dormaa Municipality.

1.4 Research Questions

The following research questions were addressed by the study:

- what knowledge of banking services and access to credit do poultry farmers in Dormaa Municipality have?
- what is the trend of poultry credit from ADB's loan portfolio to poultry farmers in the Dormaa Municipality?
- what are the challenges facing poultry farmers in Dormaa Municipality in their loan repayment?
- how does agricultural credit affect poultry farming in the Dormaa Municipality?

1.5 Significance of the Study

The significance of the study will be manifested in a number of ways. In the first place, findings from the study will be useful to the stakeholders in the poultry subsector such as farmers, banks, the Municipal Assembly, Non Governmental Organisations and other institutions to strategize on new and best ways to financing the poultry industry in the Municipality.

Secondly, the research findings will be useful to ADB in particular as it will bring out some of the key issues related to how the bank's portfolio on poultry is being utilised.

The study would provide guidelines to help poultry farmers to source maximum financial gains from the banking sector. This information would also help contribute to knowledge mobilization in academia.

Lastly, findings from the study will add to the existing body of knowledge on financing poultry farming in Ghana. This will serve as a platform for further research into issues related to the growth and development of poultry farming in the country.

In recent times, ADB bank expanded its functions to include universal banking activities. The study will therefore reveal whether ADB is performing its primary role or not. The results will further give an indication to the bank as to whether it could review its policy on the poultry sector.

1.6 Scope of the Study

The study focuses on the contribution of Agricultural Development Bank to the growth of the poultry sector in the Dormaa municipality. The period of assessment has also been limited to 2006-2010. This is to ensure that the result reflects the current trend of agricultural financing in the poultry sector of Dormaa Municipality particularly hen layering production and as well as its impact on agricultural production in Ghana. Poultry consists of varieties of birds that are domesticated but for the purpose of this study the concentration will be on chickens.

1.7 Limitations of the Study

Due to financial, logistic and time constraints the sample chosen for the study is very small in relation to the entire population of poultry farmers in Ghana. Majority of the poultry farmers have difficulty reading and writing and this may add an additional burden on the researcher since he would have to read and document many of their responses. Some farmers may not provide fair information to the questionnaires due to lack of formal education or fear of disclosure of finance.

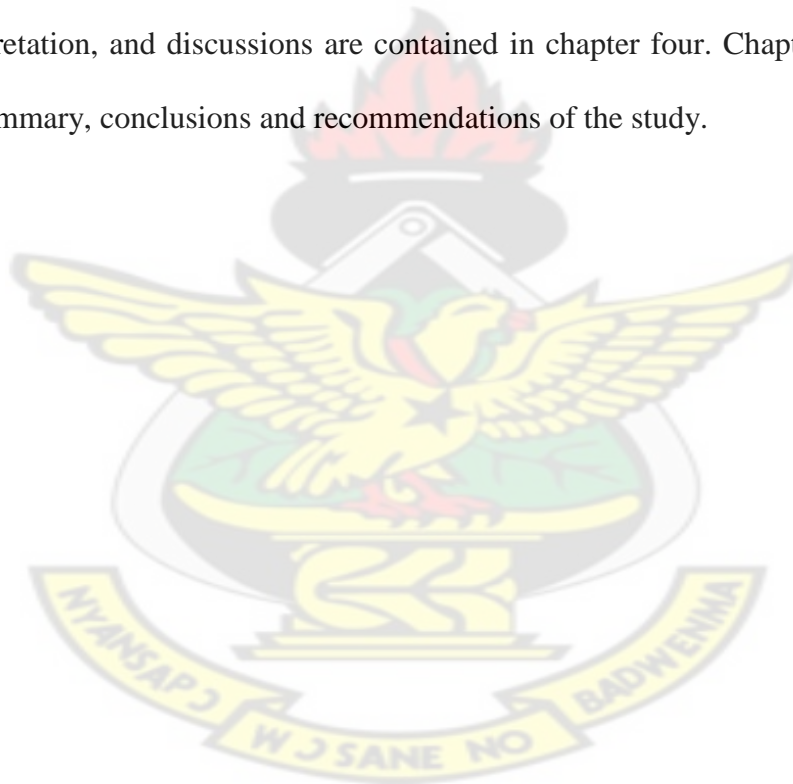
1.8: Organization of the Study

The study is organized in five chapters. The first chapter is made up of the background of the study, the statement of the problem as well as the research

question, objectives, the significance of the study, scope and limitation of the study and the organization of the study.

Chapter two reviews literature on the Ghana's banking sector, the ADB and its credit portfolios and perspectives on poultry production in Ghana as well as the challenges facing the industry.

Chapter three describes the research methodology and profile of study area. Here, the target population, the sample size and sampling technique, the research instrument and data collection procedures are outlined. The data analysis, interpretation, and discussions are contained in chapter four. Chapter five provides the summary, conclusions and recommendations of the study.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of existing literature related to the research problem. For the purpose of the review, the chapter is divided into the following sub-headings: evolution of banking; origin of banking in Ghana; Ghana's structure of the banking industry; perspectives on the Agricultural Development Bank of Ghana; the concept and definitions of poultry; origin of poultry domestication; commercial poultry breeds; poultry production in the Dormaa Municipality; benefits of poultry production and; challenges facing the poultry industry.

2.1 Evolution of Banking

The name "bank" originates from the Italian word "*banco*" meaning "desk" or "bench," which was used by Renaissance Florentine merchants to conduct their transactions. The origins of the word is traced back to the Ancient Roman Empire, where money lenders would set up their stalls in the middle of enclosed courtyards called *macella* on a long bench called *bancu*, from which the words *banco* and *bank* are derived. (Wikipedia, 2011).

The modern banking system operating in all countries has its origins in Mediterranean Europe, particularly in Italy and later spread to Northern Europe. In England for instance, the goldsmith were very influential in the evolution of modern

banking in the country during the mid-seventh century. Similarly in Iran, modern banking began to emerge in the mid-nineteenth century and in 1925 the first Iranian owned bank known as the Bank Pahlavi Qoshun was established in the country (Badu, 1994). Enew et al, (2007) concluded that commercial banking started developing significantly from the 19th century onwards.

Banking was introduced to Africa by the early European traders in the last three centuries (Badu, 1994). “Trade between the Europeans and the developing countries (then colonies) was carried out by means of a barter system” (Badu, 1994). However, with the introduction of money, as a medium of exchange not only did trade between the Europeans and their African partners improve but trade and banking sustained each other.

Modern banking in African countries started with the attainment of independence by these countries; for example, soon after independence in 1957, Ghana established its Central Bank. This was followed by the establishment of state-owned commercial, development and investment banks (Badu, 1994).

In recent decades, however, privately owned commercial banks have been established in Ghana. The industry has grown steadily over the years in size, structure and functions to its current vibrant state. The promulgation of the Banking Act of 2004 (Act 673) has further enhanced banking in the country by creating a level playing field for all banks to carry out banking business in all sectors of the economy (Bank of Ghana, 2008). This has blurred the distinction between commercial, development and investment banks. Even though some banks in the country still bear “commercial”, “development”, or “investment” as part of their names, these differences exist only in their identities without any significant

implication in their core functions (Bank of Ghana, 2008). With significant improvement in the banking system, there is no doubt that the sector is in a better shape to play an effective role of harnessing financial resources for a sustainable economic growth of the country.

2.2 Origin of Banking in Ghana

The tremendous concern for investigation of the recent developments in the banking sector is closely connected with the notion that most of the new financial products and technological changes are taking place in this industry. Study by Ncube (2007) show that the financial sector in Africa is largely dominated by the banking sector. It will therefore be appropriate to discuss the origin of the banking industry in Ghana and some innovations that have occurred over the years.

The foundations of the financial system in Ghana were laid in the later years of the 19th century when the British introduced silver coins to circulate in the West African region. Some economic historians believe that the reason for the introduction of the coins was to make the collection of taxes from the colonies easier. With the economy partially monetized, a Government Savings Bank was set up in the Gold Coast in 1888 (Sowa, 1997). About a decade later, the first commercial bank, a branch of the British Bank of West Africa (BBWA) (now Standard Chartered Bank-Ghana) was established in Accra. In 1917 the Bank of West Africa (BWA) was joined by the Colonial Bank (now Barclays Bank-Ghana). It is believed that these two banks by their activities helped to monetize the economy of the then Gold Coast (Sowa, 1997). It was however blatant that the collateral

requirements of these two banks made credit virtually inaccessible to the indigenes and led to agitation among the nationalists.

Following the passage of the Bank of Gold Coast Ordinance in October 1952 the first branch of the Bank of Gold Coast opened its doors to the public in 20th May 1953. Sir Cecil Trevor's report (1952) outlines the business that the bank may be authorised to carry generally in line with any typical commercial bank as follows:

1. the accepting of money on deposit, either with or without interest, from and the collection of money for the Government, local authorities, banks and any other persons.
2. the purchase, sale and **rediscount** of bills of exchange and promissory notes bearing two or more good signatures and maturing within six months from the date of such purchase of rediscount; or within nine months in the case of bills for the purpose of financing seasonal agricultural operations or the marketing of crops.
3. The purchase and sale of foreign exchange.
4. the making of loans and advances payable on demand or on expiry of fixed period not exceeding six months against certain specified securities (i.e. stocks, gold, silver etc)
5. The issue of demand drafts made payable at its own offices or agencies.
6. The purchase and sale of securities.
7. The acting as agent for the Government and local authorities or any other persons

8. The acting as agent or correspondent of a bank incorporated in any country outside the Gold Coast.

Sowa (1997) indicated that after independence, a number of banks were established to fulfil certain developmental goals of the new State. Thus, the National Investment Bank (NIB) which started operations in 1964 was charged with the main object of assisting Ghanaian entrepreneurs in the establishment and expansion of their enterprises. The Agricultural Development Bank (ADB) which originally was part of the Bank of Ghana Rural Credit Unit was formed in 1965 with the aim of reaching small-scale farmers. In addition, the Bank for Housing and Construction (BHC) was established by the state in 1972 to cater for the building and construction industry.

It is important to note that the period of the establishment of these banks coincided with the “controlled regime” when the State arrogated to itself the power to make all economic decisions and allocations, to the exclusion of the private sector. However, that power was taken away through the liberalization of the financial market as part of the Structural Adjustment Programme that the country pursued in the 1980’s (Huthcful, 2000). The result saw five private banks established with three of them in 1995. By 1996 the total number of banks in the system included five commercial banks, seven merchant banks and three development banks. In addition a number of rural banks were established.

Currently several private banks have sprung up in the country all undertaking various banking practices.

2.3 Ghana's Structure of the Banking Industry

The structure of the banking industry in Ghana went through a revolution with the passage of the Banking Act, 2003, (Act 673) and its amendments Banking Act, 2007, (Act, 738). Prior to the enactment of these Acts, the major banks operating in the country were classified into three groups according to the functions they played (Badu, 1994). These were commercial banks, development banks, and merchant/investment banks. Commercial banks specialized in serving the depository and short-term credit needs of commerce. Merchant/investment banks limited their operations to capital market activities while development banks provided loans for the development of the country.

Since the enactment of these Banking Acts, the three pillar banking structure in the country has been replaced with a universal banking system where there are no barriers in the business areas of commercial, merchant, and development banking. The Acts have levelled the playing field in the banking sector and also opened up the system to competition, product innovation, and entry (Bank of Ghana, 2008).

The past few years have seen a phenomenal growth in the Ghanaian banking sector. Ghana's financial sector, according to the Bank of Ghana (BoG) is well capitalized, very liquid, profitable and recording strong asset growth. The total assets of the banking industry at the end of the first quarter of the 2010 witnessed a growth of GH¢ 11,240.0 million, representing a growth of 39 percent as compared with GH¢10,692.0 million, a growth of 37.2 percent in December 2009. The banking sector has emerged from severe financial and reputational damage resulting from economic recession and government debt in the 1980s and 90s, when Ghanaian

banks and other financial institutions stopped lending to the private sector (Kunateh, 2009).

The banking sector has seen major capital injection partly because of the political stability, attainment of micro and macro-economic stability and the government's desire to make Ghana the "financial hub" of the Sub-region. The Central bank has promoted the enforcement of statutory requirements, more stringent supervision and increasing capital requirements. The Bank of Ghana has licensed twenty three banks to operate in the country. In addition to the 23 banks, the sector also comprises a range of non-bank financial institutions, including several community banks established to mobilize rural savings. The ARB Apex Bank is the umbrella bank for Rural Community Banks and supervises 123 such banks throughout Ghana (Bob-Miller, 2007).

A distinguishing feature of the Ghana's banking sector is the level of ownership by the private sector, directly or through the capital market when compared with the level of state ownership seen in the financial sector in other African countries. Further, a large number of these new banks are owned and managed by Africans, and the sector boasts of a number of highly skilled and experienced bankers. The new banks are trying to revolutionise access to banking services, denied the population by the imperialist banks. Several banks have already made determined effort to roll out the use of internet banking, smartcard technology, mobile phone banking and the use of biometric technology to cover all their operation areas.

The Bank of Ghana has increasingly exercised its power as a regulator in line with internationally accepted norms, and has implemented a series of tough supervisory measures (Bob-Miller, 2007). More recently, there is growing

introduction of new products by the banks unto the market. Banks that hitherto served the interest of the few elites and concentrated on investment banking are now facing an increasing competition from new banks which are opening their doors to the poor in the Ghanaian society. The new banks are now serving all sectors of the Ghanaian society and not an elite few. Currently, the banks are taking banking to the doorsteps of the populace and a major revolution has occurred in the sector.

Key players in the industry include the following banks: Standard Chartered Bank Ghana Limited; Ghana Commercial Bank Limited; SG-SSB Limited; The Trust Bank Limited; BPI Bank Limited; International Commercial Bank Limited; UniBank Ghana Ltd; National Investment Bank Ltd; Agricultural Development Bank Limited; Prudential Bank Ltd; Merchant Bank(Ghana) Limited; CAL Bank Limited; HFC Bank Ltd; United Bank for Africa(Ghana) Ltd.; Stanbic Bank Ghana Ltd; Bank of Baroda (Ghana) Limited; Zenith Bank (Ghana) Limited; Guaranty Trust Bank (Ghana) Limited; Fidelity Bank; First Atlantic Merchant Bank Ltd; Amalgamated Bank Ltd; Intercontinental Bank Ghana Limited; Barclays Bank of Ghana Ltd.; ARB Apex Bank; Citibank N.A. Ghana Rep. Office; Ghana International Bank plc. Other supporting institutions include Bank of Ghana; Securities and Exchange Commission; ARB Apex Rural Bank; National Insurance Commission; Association of Rural Banks; Ghana Cooperative Credit Unions Association; the Ghana Microfinance Institutions Network.

2.3.1 The Banking Sector in the Era of the Economic Recovery Programme (1983-1997)

Ayensu (2007) postulated that the economic event that will long be remembered by the Bank of Ghana in particular and by many Ghanaians is the

Economic Recovery Programme (ERP), launched in March 1983. The ERP was essentially an economic stabilization programme drawn up by the PNDC government and the International Monetary Fund (IMF) in an attempt to arrest an unprecedented economic decline in the country during the late 1970s. The overall stabilization programme was implemented in four phases:

1. the Economic Recovery Programme, 1983-86
2. the Structural Adjustment Programme, 1986-88
3. the Financial Sector Adjustment Programme, 1988-92
4. liberalization of the financial system, 1992-96

By mid-1986, the rapid decline in the economy had been arrested through the implementation of the austerity monetary and exchange rate policies, as well as an injection of foreign resources to help improve the balance of payments. The relative success of the ERP then set the stage for the implementation of the second and main phase of the stabilization effort, the Structural Adjustment Programme (SAP). The dominance of public and state enterprises was to give way to a free market system through restructuring the regulatory and institutional framework for effective implementation of liberal monetary and exchange rate policies and restructuring the money and foreign exchange markets.

The second FINSAP (Financial Sector Adjustment Programme) was launched in 1989. In line with its policy of liberalizing the financial sector by reducing the State's direct involvement in the operation of the banking system the Government embarked on a policy of divestiture and privatization of State-owned banks.

According to Aning (2000), the period 1983-1996 was characterized by positive economic development and acted as a magnet for new banking institutions to establish in Ghana. The main characteristic of these new entrants was their common objective of specializing in and offering corporate and financial services in Ghana. The new banks offered the following range of banking and financial services: International trade financing, commercial and corporate lending, corporate advisory services, foreign exchange dealing, management of foreign currency accounts, treasury services and deposit management, stock broking, investment management services, project financing and syndication.

2.3.2 The Functions of Universal Banks

Banks deliver a wide variety of services within economies of both developed and developing countries. These do not differ very much in nature from country to country. However, the quality of these services is expected to be of higher in some countries especially the developed economies. Generally, the focus of banking services is geared towards facilitating smooth economic activities in the country.

The banking system performs two vital functions in addition to the provision of credit. These are maturity transformation, and risk transformation. By maturity transformation, money deposited by customers in their current accounts becomes liabilities to the bank. The bank lends this money to other customers for a specific period of time, thus making the deposits to go through maturity. Risk transformation by banks involves the reduction of risks of associated with lending money through the banking system as opposed to the greater associated with individuals lending

money directly to people (Badu, 1994). These processes enable people who have funds to transfer them to those who need extra funds.

Commercial banks engage in several activities and perform several roles. These include: Processing of payments by way of telegraphic transfer, internet banking and other means, issuing bank drafts and bank cheques; accepting money on term deposit; lending money by way of overdraft, instalment loan or otherwise; providing documentary and standby letter of credit, guarantees, performance bonds, securities underwriting commitments and other forms of balance sheet exposures; safekeeping of documents and other items in safe deposit boxes, currency exchange; Sale, distribution or brokerage, with or without advice, of insurance, unit trusts and similar financial products as a “financial supermarket”(www.wikipedia.com, 2011)

Lending or granting of credits or loans to individual customers and corporations or large organizations is perhaps the most important role performed by commercial banks. The major types of loans granted by commercial banks are:

- Secured loans: a loan in which the borrower pledges some asset e.g. a car or property as collateral or security for the loan.
- Mortgage loan: a type of debt instrument used to purchase real estate. The banks are however, given security – a lien on the title to the property until the mortgage is fully paid. The bank would have the legal right to repossess the property and sell it to recover sums owing to it, if the borrower defaults on the loan.

- Unsecured loan: these are monetary loans that are not secured against the borrower's asset i.e. no collateral is involved. These loans may be available from financial institutions under many different guises or marketing packages: credit card debt, personal loans, bank overdrafts, credit facilities or lines of credit, corporate bonds, etc.

Enew *et al.*, (2007) contend that “banks grew in response to the need for services such as loans, safe deposit and financing of consignments of exported and imported goods” (P.24). The services rendered by banks can be grouped into two broad headings: (i) lending and credit, and (ii) saving and investing.

Consumers face an enormous array of loan and credit management from their banks and maintain that the provision of loans is one of the oldest financial services, dating back thousand years. “In simple terms, a loan represents the granting of a specific sum of money to an individual or organization for them to spend personally in respect of some specific, previously agreed item. Credit, on the other hand, refers to a means of financing an item or items of expenditure whereby the funds are transferred to the product provider directly by source of credit. In this way, the consumer receiving the goods or services financed by the credit undertakes to reimburse the credit provider for the principal sum plus any interest that may be due” (Enew *et al.*, 2007: 32).

Loans serve as facilitator of income smoothing by enabling consumers to enjoy current consumption from future earnings. Loans are especially more desirable for this purpose during periods of expectations of future income surplus. It also enables the purchases of essential goods/services whose cost are well beyond current income e.g. residential property. However, difficulties may arise in the

management of loans if there is a mismatch between current consumption expectations and future income surplus. This raises the major issue of affordability of credit. In addition to affordability, there is also concern on the relationship between the timescale of the consumption experience and the repayment of loan the associated loan-credit (Enew *et al.*, 2007). It is within the context of lending that banks grant credit to the agricultural sectors of their host countries.

The traditional view has been that there should be consistency between the purpose of loan (in terms of timescale of consumption experience) and the duration of the repayment period. Therefore, short term loans and credit such as for 12 months duration, should apply to short-terms forms of consumption, such as paying for a holiday, paying for clothing. Similarly, long-term loans, such as 25 years should be granted as mortgage to fund home purchases. The traditional practice of consistency between the consumption and repayment periods of loans have been seriously weakened principally by individuals being granted long-term loans for short-term consumption (Enew *et al.*, 2007).

Saving and investing are the reciprocal of lending and credit. Saving and investing concern the sacrificing present consumption in order to provide for some future event or requirement. The term “savings” is used to describe a process associated with the accumulating of a larger fund through regular contributions, while the term “investment” is used to describe the process of managing a lump-sum for the purpose of income or for the capital growth (Enew *et al.*, 2007).

2.4 Agricultural Development Bank of Ghana

The Agricultural Development Bank (ADB) of Ghana was established in 1965 by an Act of Parliament (Act 286) under the name Agricultural Credit and Co-operative Bank primarily to finance, promote and modernize the agricultural sector and allied economic activities through appropriate financial intermediation. It initially concentrated on the agricultural sector in the early years of its establishment. In 1967, the name of the Bank was changed to the Agricultural Development Bank. Its functions were further broadened by the passage of the Act of Parliament 1970 (Act 352).

The Bank took advantage of the Banking Law (PNDC Law 225) to broaden its corporate mission from the provision of agricultural credit and management projects to undertake the entire range of financial intermediation without sacrificing its primary function. With respect to ownership, the Government of Ghana has 51.83 percent stakes with the remaining 48.17 percent held by Financial Investment Trust on behalf of Bank of Ghana.

The mission of ADB is committing itself to building a strong customer-oriented bank, run by knowledgeable and well-motivated staff, providing profitable financial intermediation and related services for a sustained and diversified agricultural and rural development. The bank performs a number of functions including the following:

- (i) The provision of credit facilities for the development and/or modernization of agriculture and allied industries.

- (ii) The identification and promotion of agricultural enterprises in Ghana, whether single or jointly, with persons or institutions, both local and foreign.
- (iii) The initiation of or participation in, the conduct of research and training designed to promote agricultural development in general.
- (iv) The mobilization of financial and human resources to meet the country's development needs in agriculture.
- (v) Investment in processing and transportation of agricultural produce.
- (vi) Operation of current, savings and fixed deposit accounts
- (vii) Financing of cottage industries
- (viii) Management of special funds and loans granted to the Government of Ghana by other governments and international organizations
- (ix) Undertake international banking

2.4.1 Provision of Credit Facilities for the Agricultural Sector

The basic goals of the ADB in granting credit to the agricultural sector are: to strengthen domestic food security; to generate sustained increases in foreign exchange earnings; to generate productive employment and poverty reduction; and to promote profitable value-addition to agricultural produce through investment in agricultural marketing and processing.

The types of agricultural credit granted by bank are often distinguished by duration of maturity and by scale and beneficiary and include short-term, medium-

term and long-term loans. In addition, small-scale individual scheme, small-scale group loan scheme, medium/large-scale/ business loan scheme and special project financing scheme are provided to the range of customers of the bank. In particular, the short term loan and small scale individual schemes are accessed by poultry farmers to undertake their activities.

In terms of agricultural lending, the bank provides financial support to projects by holding equity and providing credit. The bank grants credit to various categories of customers including individuals, sole-proprietorship ventures, partnership enterprises, limited liability companies, large corporate organizations, registered co-operative societies, and organized groups involved in agricultural and related activities. Applicants are required to operate/maintain an account with a Branch of the Bank. Where an applicant does not have a relationship with any branch of the Bank, the credit proposals are submitted at the Head Office for consideration.

2.4.2 Costs and Risks of Agricultural lending

There are several risks associated with agricultural lending. These include: moral hazard risks, production and yield risk, price and market risk, lack of diversification, lack of collateral, political risk, credit risk, liquidity risk, transaction risk, reputation risk, and weather risk (Comptroller, 1998; Savescu, 2008). These risks affect both farmers and the institutions involved in agricultural lending.

However, whether a funding source exposes a financial institution to high or low risks depends principally on the conditions of the loan portfolio (Tham-Agyekum &

Appiah, 2010). The relationship between risks of funds and use of funds causes important difficulties with regard to agricultural lending. This is a key challenge facing the ADB mainly because of its involvement in agricultural lending. In particular, production and disaster risk as well as price and market risk which are common with the poultry industry in Ghana tend to obstruct the capacity of the ADB to adequately finance poultry production (Aning, 2006). Market instability resulting from competition from foreign poultry products has made most banks in the country unwilling to provide credit to poultry farmers.

In addition to the above risks, the ADB usually advance short-term credit to poultry farmers as most of these farmers undertake poultry production in small-scale. However, short-term credit have a medium interest rate risk and liquidity risk, since it remains unknown as to whether refinancing in the future will enjoy the same favourable conditions as before (Aning, 2006). Thus, the ADB is unable to adequately predict the outcome of short-term credit given to the poultry farmers which poses as a risk to the bank.

Time deposits are usually raised for longer periods and are therefore less interest rate risk sensitive, can serve as alternative to short-term credit. However, many rural financial institutions including the ADB are faced with the problem that their clients are reluctant to commit their funds for long periods. It is hardly possible to convince the farmers to invest in time deposits as a way of securing funds to undertake poultry production. Even then it will be difficult to undertake such a venture as most poultry famers do not have enough funds to commit into time deposits.

Savescu (2008) notes that there is a general problem of moral hazard associated with agricultural lending just as with any lender-borrower relationship. Moral hazards are problems associated with the specific personal characteristics and decisions of each individual borrower. Farmers do not differ from any other borrower group in terms of information, incentives, monitoring and enforcement problems associated with the lending process. Savescu (2008), suggest ways in which moral hazard related risks can be reduced. These include the following measures:

Client education: Clear information on the financial conditions of loans and loan repayment obligations such as interest rates and fees, and collateral requirements should be given to borrowers during the lending process. The objective of client education is to promote a positive credit culture and to foster mutual respect between the lender and the borrower.

Co-signing of loan contracts: Sometimes, it may be necessary for both husband and wife sign the loan contract. This can be an effective means of enhancing good credit discipline since it extends the lender-borrower relationship to the whole household thus deepening the sense of obligation by the borrower.

Close contacts between the loan officers and the borrower create conducive atmosphere of mutual trust between the lender and the borrower. This improves credit discipline.

Partnerships with agricultural products processors and producers can be used to reduce the risks and costs of rural lending. Processors' field agents who know the producers can make a pre-selection of lenders based on their personal knowledge of

the producers' morality and ability to repay loans. This contributes greatly to reducing the intermediation expenses for the lender. In order to ensure that the pre-selection process done by the agro-processors is done seriously, it is preferable that they carry a portion of the risk.

2.5 The Concept and Definitions of Poultry

Poultry is a category of domesticated birds kept by humans for the purpose of collecting their eggs, or killing for their meat and/or feathers. These, most typically are members of the super order Galloanserae (fowl), especially the order Galliformes (which includes chickens, quails and turkeys) and the family Anatidae (in order Anseriformes), commonly known as "waterfowl" (domestic ducks and domestic geese). Poultry also includes other birds which are killed for their meat, such as pigeons or doves or birds considered to be game, like pheasants.

Poultry farming is the practice of raising poultry, such as chickens, turkeys, ducks, and geese, as a subcategory of animal husbandry, for the purpose of farming or producing meat or eggs for food (Kingori, Wachira and Tuitoek (2010). More than 50 billion chickens are reared annually as a source of food, for both their meat and their eggs. Chickens farmed for meat are called broilers, whilst those farmed for eggs are called egg-laying hens. Some hens can produce over 300 eggs a year. Chickens will naturally live for 6 or more years. After 12 months, the hen's productivity will start to decline. This is when most commercial laying hens are slaughtered. In total, the United Kingdom alone consumes over 29 million eggs per day (Food and Agriculture Organisation [FAO], 2010).

Poultry production is a very important source of livelihoods for most rural communities. This is because it provides ready cash for emergency needs (Tham-Agyekum & Appiah, 2010), supplies the fast-growing human population with high quality protein, contributes significantly to food security, poverty alleviation and ecologically sound management of natural resources (Guëye, 2002). Since there is a continuing rise in the cost of production of cattle, sheep and goat meat consumer preferences have shifted now for poultry meat (white meat) given the ecological, economic, social and health advantages it has over the other types of meat (red meat) (Onuekwusi, 2001).

2.6 Origin of Poultry domestication?

Recent research suggests there may have been multiple origins in distinct areas of South and Southeast Asia, including North and South China, Thailand, Burma and India about 8000 years ago (Dessie and Olga, 2010; Tham-Agyekum & Appiah, 2010). The history of chickens (*Gallus domesticus*) is a bit of a puzzle. They were first domesticated from a wild form called red jungle fowl (*Gallus gallus*), a bird that still runs wild in most of southeast Asia, likely hybridized with the grey jungle fowl (*Gallus sonneratii*). (www.wikipedia.com, 2011)

Recent evidence suggests that domestication of the chicken was already under way in Thailand, Vietnam and the South East Asian jungles over 10,000 years ago, and spread into neighbouring regions to the east such as China, and towards the west in India where it was conventionally thought to have been domesticated (Kingori, Wachira & Tuitoek ,2010). Fowl had been known in Egypt since the 18th

Dynasty, with the "bird that lays every day" having come to Egypt from the land between Syria and Shinar, Babylonia. (www.wikipedia.com, 2011)

Another school of thought believes that the domestic fowl originated from the wild jungle fowl that is still found in the jungles of some parts of South East Asia. The wild jungle fowl, *Gallus gallus* (there are a number of sub-species) was first domesticated in the foothills of the Himalaya Mountains approximately 5000 years ago. They were probably first kept in captivity to supply food for their owners, for sport and to satisfy a desire to own. (www.wikipedia.com, 2011)

As time passed, the practice of keeping fowls spread through Persia to the Mediterranean countries in the west and through Asia to China in the east. Owners in close proximity to each other selected their breeding stock for particular characteristics in their birds and so there developed in these different localities a type of bird based on appearance that was peculiar to a locality. These groups of birds with the same characteristics became known as breeds, the breed name usually being the name of the region of their development e.g. the leghorn breed was developed originally in the Leghorn district in Italy. (www.wikipedia.com, 2011)

2.6.1 History of Poultry Farming

The start of the poultry industry was most likely based on the village flock where ownership was more on a communal basis with the birds running free by day and perching in trees as a protection against predators at night. It was but a short step to confine the birds to an enclosure at night for protection. In many developing countries today the typical village birds forage for their nutritional needs and are given household scraps if these should be available. This same situation exists with

farmyard flocks. Over time and as the domestic fowl spread to other cultures, it became the forerunner of today's poultry industry. (www.wikipedia.com, 2011)

2.6.2 Commercial Poultry Breeds

There are many breeds of fowls, but only a small number are used for commercial production. In commercial poultry production all over the world there are two types of birds- the egg and the meat type (Guëye, 2002). These are so described not because they are restricted to producing one or the other product but because they produce either eggs or meat more efficiently.

2.7 Poultry Production in the Dormaa Municipality

Poultry production in the Municipality first started in 1970 in a community called Yaakrom which shares boundary with La Cote d'Ivoire. It was started with 50 layers from Pomaze Farms in Kumasi. According to Dormaa Poultry Farmers Association (2009), the registered poultry farmers are currently two hundred and eighty-seven (287) of which ten (10) are women. Notwithstanding the registered figures from the association, there are still over six hundred (600) farmers who are not part of the association but operate poultry farms.

All the poultry farms in the municipality are privately owned which emphasise the belief that the private sector in the municipality is an engine of growth. Few poultry farmers in the municipality have received Regional and National Farmers' Awards. The Municipality has a hatchery called St. Charles Farms Limited in Masu and an egg tray factory own by Janak Industries Limited. These facilities have worked to boost the sustainability and survival of the poultry industry.

2.8 Benefits of Poultry Production

Commercial production of poultry comes along with a number of benefits. The ability of poultry to adapt to most areas of the world, the low economic value per unit; the rapid growth rate of poultry and the rapid generation time; all make poultry an ideal starting point for beginning animal agriculture and a rich source of animal protein for human food (Gueye, 2002).

Besides, poultry is a convenient livestock for small farms and for family subsistence, because of the relatively small size of individual birds. Eggs in their natural state are less perishable than meat and dairy products, and may be processed in many ways for safe storage and transportation.

In addition, poultry meat and eggs are highly nutritious. The meat is rich in proteins and is a good source of phosphorus and other minerals, and of B-complex vitamins. Poultry meat carries an advantage over red meat (beef and mutton) in having less percentage of fat than either beef or mutton, and is therefore, termed as non-fattening and good dietary source for the prevention of hardening of arteries--a common ailment (Tham-Agyekum & Appiah, 2010). Poultry meat is economical, quick and easy to prepare and has a number of desirable nutritional and organoleptic properties (Nazri, 2003). Currently, China with the largest economy in the world has increased its consumption in animal protein of which poultry meat is part (Kingori, Wachira and Tuitoek, 2010).

2.9 Challenges Facing the Poultry Industry

It is generally accepted that poultry production is a key source of livelihood to most rural communities in Ghana. However, the industry is confronted with a number of challenges. The major challenges facing the poultry industry include lack of credit facilities, insufficient maize for feed and competition from imported poultry products (Modern Ghana News, 2010).

Alam & Khan, 2000 also identify some challenges facing poultry farmers in Ghana as uncompetitive interest rate, lack of high subsidizing cost of maize production and tariffs to enable poultry farmers to compete with influx of imported poultry products which threaten their jobs and employment generation for the youth.

Studies conducted by Tham-Agyekum & Appiah, 2010 concluded that most banks in the country are unwilling to finance poultry production. In the view of Tham-Agyekum & Appiah, 2010 the ADB is the main bank that has supported poultry farmers through the provision of credit and animal husbandry training. Even then, most small-scale poultry keepers have not received credit from the ADB as they fail to meet the benchmarks set for gaining access to credit (Modern Ghana News, 2010). A case in point is in the Ga West Municipality of the Greater Accra region where the bank is able to provide long-term credit to farmers who have appropriate collateral that guarantees loan repayment while small-scale poultry farmers without land titles do not have access to loans from the bank (Tham-Agyekum & Appiah, 2010).

Similarly, a study by Dessie & Olge, 2010 found that financial institutions in Ethiopia have been reluctant to lend to poultry farmers for a number of reasons, including the remoteness of clients, the lag between investment needs and expected

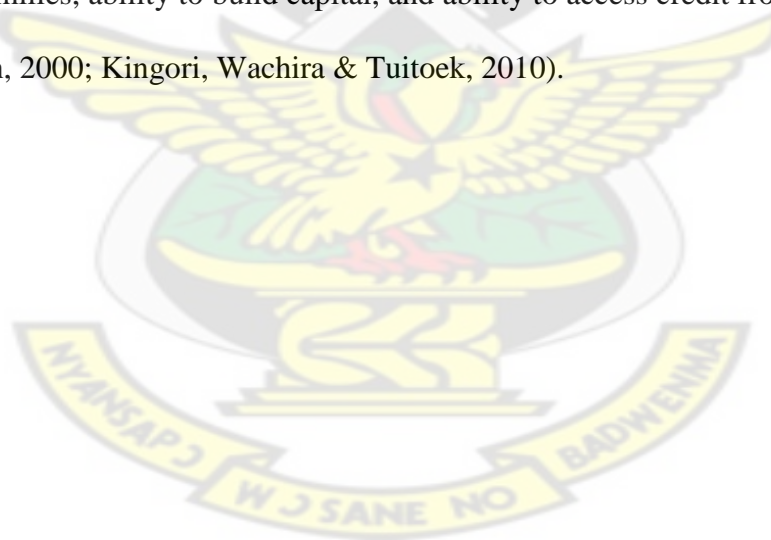
revenues, lack of usable collateral, and high risks due to environmental factors such as weather, pests, diseases and price. Banks also complain that most of the farmers do not keep farm records which makes it difficult to monitor their activities especially credit management decisions. Thus, gaining access to credit constitute the major challenge to most poultry farmers. Hence, it is vital to find out the contribution of ADB towards helping farmers to secure funds to finance their poultry projects, which is the thrust of this study.

Obtaining quality poultry feed also presents a challenge to poultry famers. Poultry feed by its quality and price is the major factor in determining the cost of poultry products -eggs and broilers and profitability of the poultry farm (Alam & Khan, 2000). The prices of feed have been constantly increasing. Due to recent global changes in the price structure of the cereal grains and other feed stuffs, the poultry industry at present is handicapped on account of high feed cost which have gone over to more than 60% of the total cost of production (Kingori, Wachira & Tuitoek, 2010).

The poultry industry is also bedevilled with diseases. Disease risks are high in commercial poultry production systems (Kingori, Wachira & Tuitoek, 2010). The outbreak of the deadly Avian Influenza in the Asian and Eastern parts of Europe had negative effects on the poultry industry in the country ((Tham-Agyekum & Appiah, 2010). The disease resulted in massive reduction in the sale of poultry products, particularly poultry meat. Consumers of poultry products either reduced their patronage or shifted to other animal products entirely. The situation resulted in low sales to farmers and consequently drove a good number of them out of business, following the collapse of their poultry farms (Tham-Agyekum& Appiah, 2010).

Inappropriate housing also impact negatively on production. Some farmers do not provide appropriate shelter to house birds. Hence the animals are affected by the vagaries of the weather which tends to affect productivity. A survey of commercial poultry production in Nigeria showed that more than half of the surveyed poultry farms did not provide adequate housing or shelter for their chickens (Onuekwusi, 2001). Consequently, birds were subject to predation, theft and rain water which reduced productivity drastically.

It is worth noting that each of the challenges discussed above - along with how farmers manage them- impact farm income, productivity, and access to credit. These challenges among others could lower farmers' anticipated income and have negative effects on their standard of living, ability to provide for themselves and their families, ability to build capital, and ability to access credit from lenders (Alam & Khan, 2000; Kingori, Wachira & Tuitoek, 2010).



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section of the research discusses the profile of the study area and the research methodology employed to collect relevant data for the study. The research design, target population, sample size and sampling procedure, research instruments, data collection procedure and data analysis are presented.

3.2 An Overview of Dormaa Municipality

The mainstay of the Municipality economy is Agriculture. Currently, it employs about 60% of the Municipality economically active labour force. Most of the Municipality's households are engaged in farming or agricultural related activity. Farming in the Municipality is largely carried out on small-scale basis. The average acreage cultivated ranges between 6 – 10 acres for all crops. Despite its importance to the economy, much of the agricultural potentials in the Municipality remain untapped.

Presently, the main food crops cultivated in commercial quantities in the municipality include maize, plantain, cassava, yam, cocoyam, tomatoes and pepper. The Municipality is also known for the production of cocoa and coffee. In the past, fish farming have not been pronounced in the Municipality. However, few farmers are now engaged in the sector. Such farmers are located in Dormaa Ahenkro, Nkrankwanta and Yaakrom. Livestock such as cattle, sheep, goats and pigs are

reared in the municipality. However, they seem to have received the least attention in all aspects of management, nutrition, breeding and health. Non-traditional farming which hitherto was not practiced is now gaining roots. Notable among are grass cutter, mushroom, snail and beekeeping. At the moment the poultry industry specifically table egg production is operating at a large scale levels. Currently, there are 287 poultry farmers of which 10 are women.

Table 3.1 Range of Holdings as at 2009

Number of Farmers	Number of birds
5	100,000 and above
10	35,000 – 99,000
25	10,000 - 34,000
97	2,000 – 5,000
150	100 – 2,000

Source: Field Survey, 2009

Through hard work of poultry farmers in the Dormaa Municipality, there has not been any outbreak of Avian Influenza. This was through the practices of Bio-Security Measures adopted by farmers on their farms. Few number of the farmers have received several Regional and National Farmers' Awards. There is a hatchery at Masu by name St. Charles Farms which 3km from Dormaa township and started

operation in 2003 with the aim of supplying the needed Day Old Chicks to farmers at affordable prices in Dormaa (www.ghanadistricts.com, 2006).

In spite of the numerous financial institutions in the municipality, ADB was chosen for the study due to the fact that the Bank was established primarily to promote and modernize the agricultural sector and allied economic activities through appropriate financial intermediation. Since its establishment, the ADB has been concentrating on agricultural sector of the country more than any other universal bank in the country. The bank has also broadened its corporate mission from the provision of agricultural credit and management projects to undertake the entire range of financial intermediation without sacrificing its primary function.

3.3 Research Design

The study adopted the quantitative survey research approach in answering the research questionnaires. This method involves the collection of quantitative data which was analysed using statistical techniques (Suander, 2007). This reveals the causal relationship between agricultural credit and poultry production.

The study employed the descriptive survey. Descriptive research design is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way (Neuman, 2000). In the view of Key (1997) descriptive design is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The design is used to observe natural behaviours without affecting them

in any way. In a descriptive sample survey, the objective is to obtain estimates of basic descriptive characteristics (such as means or proportions) for the whole population or particular subpopulations of interest. The methods involved range from the survey which describes the status quo, the correlation study which investigates the relationship between variables, to developmental studies which seek to determine changes over time (Sarantakos, 2006).

Thus, a descriptive study was undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation. This was done through the use of strategies and procedures to describe, clarify and interpret existing variables that constitute a phenomenon.

A major demerit of the descriptive survey is the difficulty of ensuring that the questions to be answered in descriptive survey are clear and not misleading. This is so because survey reports can vary significantly because of the exact wording of questions (Setert and Hofnung, 1997). Neuman (2003) also claims that the method may produce unreliable results because questions asked may eat into private matters that people may not be willing to talk about.

Notwithstanding the above limitations, the descriptive survey was found to be most appropriate for this study. This was mainly due to the fact that the design was considered to be relatively easy to conduct because data were fairly easy to obtain and interpret by the use of simple descriptive statistics (Blaike 2000 and Sarantakos, 2006). The present study adopted the descriptive design because it had the advantage of producing a good amount of responses from a wide range of

respondents including staff of ADB-Dormaa Branch, poultry farmers and leadership of poultry farmers associations in the Dormaa Municipality on issues concerning knowledge on banking services and access to credit, trend of credit from ADB's portfolio in Dormaa, challenges to poultry production and the effects of credit on poultry production.

3.4 Target Population

Patton (2002) defines the target population of a study as constituting the group of persons, objects or institutions that defines the objects of the investigation. For the purpose of this study, staff of ADB-Dormaa branch and owners of small scale poultry farms in the Dormaa Municipality constituted the population for the study. The Dormaa branch of the ADB has ten (10) permanent staff. There are 287 registered poultry farmers in the Municipality as at December 2009 (www.ghanadistricts.com, 2006).

However, due to the large number of respondents involved, coupled with the constraints of time and resources, a sample of the population was selected for the study. The study ignored the non-registered members outside Dormaa Poultry Farmers Association.

3.5 Sample Size and Sampling Procedure

Sample size refers to basic questions such as how large or small must the sample be for it to be representative (Sarantakos, 2006). A non-probability sampling method (purposive) was employed to select a sample for the study.

In terms of the non-probability method, the purposive sampling method was used to select two staff from ADB –Dormaa Branch (Retail) Manager and the Credit Officer. This was deemed as appropriate means of getting respondents who are knowledgeable and well abreast with the subject matter of interest (Sarantakos, 2006). These respondents were selected on the basis of their level of expertise regarding the trend of ADB's credit portfolio and other issues related to credit accessibility, risks and costs associated with it.

The probability method was used to select respondents from poultry farmers' population. In order to get a sample size which is representative of the population of poultry farmers, the International Fund for Agricultural Development (IFAD, 2009) formula for determining sample size is applied.

IFAD sample size formula:

$$n = \frac{t^2 \times p(1-p)}{m^2}$$

$$m^2$$

Description of variables in the formula

n = required sample size

t = confidence level at 95% (standard value of 1.96)

p = estimated proportion of the study population with similar characteristics.

m = margin of error at 5% (standard value of 0.05)

With proportion of poultry farmers that require credit from ADB for the production of poultry (p) set at 92% which is equivalent to 0.92 the sample size for the study is calculated as follows:

Calculation of the sample size

$$n = \frac{1.96^2 \times 0.92(1-0.92)}{0.05^2}$$

$$n = \frac{3.8416 \times 0.0736}{0.0025}$$

$$n = \frac{0.28274}{0.0025}$$

$$n = 113.096 \sim 113$$

The calculated sample size (n) of 113 poultry farmers was selected for the study. In addition, the two (2) staff from the ADB-Dormaa branch was added to the poultry farmers which brought the total sample for the study to 115. The lottery method of the simple random sampling technique was used to select the 113 respondents from the poultry farmers to participate in the study.

3.6 Sources of Data

Primary and secondary data constituted the sources of information for the research. The administration of questionnaires forms the basis of primary data. Data collected from this source focused on the background characteristics of respondents, their knowledge on banking services and access to credit, the trend of poultry credit from ADB's portfolio, challenges affecting the poultry industry as well as the impact of agricultural credit on poultry production in the Dormaa Municipality.

In the case of secondary sources, information from published and unpublished sources including Bank of Ghana publications and official annual financial reports of ADB were used to support the primary data.

3.7 Data Collection Instruments

A questionnaire was used to collect data for the study. Two separate questionnaires were prepared, one for the respondents of ADB and the other for the poultry farmers.

The instruments comprised a mix of open-ended, close ended and Likert scale questions. For questions that required a 'yes' or 'no' response, the instrument provided an opportunity for respondents to explain the response they chose. The questionnaire elicited responses on issues regarding the background characteristics of respondents, their knowledge on banking practices and access to credit, the trend of poultry credit from ADB's portfolio, challenges facing the poultry industry as well as the impact of agricultural credit on poultry production in the Dormaa Municipality.

3.8 Data Analysis

Data collected from the field were analysed using descriptive statistics. The Statistical Package for Social Science (SPSS version 16.0) was employed to process and analyse the instruments. Ages, proportions, frequencies, charts and diagrams were used to present the results and draw relations and trends between the variables involved in the study. Dependent variable in this study was outstanding loans. Independent variable was the disbursement of loans. Cross tabulation was used to form two-way tables and provides a variety of tests and measure of association for two-way tables. Cross tabulation was used to determine the frequency of account operations and access to credit in ADB.



CHAPTER FOUR

PRESENTATION AND ANALYSIS OF FINDINGS

4.1 Introduction

This Chapter will describe the data analysis collected from the questionnaire. The main Objective of the research is to determine the contribution of Agriculture Development Bank to the growth of the poultry sector, a case study of Dormaa Municipality. The analysis will compare respondents view with the official of the bank where necessary

4.2 Socio-Demographic Characteristics of Respondents

Descriptive analysis used to explaining and determining socio-demographic background information. An analysis of the gender computed revealed that out of the 110 respondents of poultry farmer 92.7 percent were male and 8.3 percent were females. This is an indication to prove that most Ghanaian women are not prepared to associate themselves with risk related ventures hence their small numbers. Again, the males are considered to be the bread winners and have more leadership qualities than females in our Ghanaian context.

The age of farmers for whom the questionnaires were administered within the metropolis is shown in Table 4.1 in appendix

From the research, it shows that respondents within the age bracket of 30-50 years form the highest percentage of 83.60 while above 60years forms only 1.8percent. This also indicates that majority of the farmers are middle aged and this

confirms continuity and sustainability of the poultry business in the metropolis. Respondents within this age bracket are very dynamic, energetic and are needed to keep the Ghanaian economy growing. Energy level is very important in poultry farming and needs a man/woman at the top to set a brisk space. The industry demands one who expects to work more than 8 hours a day and consistently demonstrates his/her ability to stay ahead of the business. In Dormaa municipality, the same cannot be said of the perception that most young people are generally inexperienced in managing their own business rather successive government effort to attract the youth in agriculture has been fruitless because no proper study has been conducted with the poultry sector in mind.

On the marital status of the respondents, the research reveals that 99 farmers were married and 10 percent were single. This status was to ascertain the sense of responsibility in their life.

The educational level of respondents did not seem to have much influence in the growth of poultry sector in the municipality however poultry production is not the preserve for drop outs as indicated in table 4.2 in the appendix. Basic knowledge is all that is required to ensure reading of instructions on drugs and vaccines and understanding their administering. On the part of the bank officials interviewed, all of them had tertiary education with degree in agriculture which is a good criterion for understanding the poultry business and offering advisory services where necessary. An official of the bank also holds additional professional certificate in Accredited Chartered Institute of Banking (ACIB) which augment the branch in terms of professionalism in the service area.

On the location of farms or business, respondents were assigned to the various major roads as demarcated by the researcher. These respondents were randomly picked according to the farmers' availability at the time of visit. The table 4.3 in appendix displays location of Farms. Dormaa township had the largest respondents because of its proximity to the researcher while Nkrankwanta had the least respondents as a result of its distant location.

The monthly income earners or salary workers do not engage their time fully in poultry business and have employed farmhands who assist in managing their farms. Out of the 110 respondents, 14 of them were placed in that category. The next table went on further to find out the income bracket of those respondents and it was realised that 6 each of the respondents were placed in both GH¢100-400 and GH¢400-800 respectively. It was only 2 respondents that were in the range of GH¢800-1200. Among the interviewees, the researcher realised that not all profits were realised from the farm proceeds. 13 of these respondents that answered 'No' for not realising all their profits from farm proceeds have diversified businesses that provide supplementary sources of profit.

The ownership of farm is vital information as it is linked to the sustainability of the poultry industry. Poultry is a capital intensive business not only in terms of the rearing of the birds and their related feed cost but their structure demands huge capital as well. The higher the number of farmers that owned structures, the more sustainable and growth the industry will be. This statement compelled the researcher to investigate owners of farms. Table 4.8 shows the ownership structure of farms by respondents.

Table 4.8 Ownership of Poultry Land

	Frequency	
Owned	99	90.0
Rented	11	10.0
Total	110	100.0

Source: Field Survey, (2011)

Table 4.8 depicts ownership of poultry farms by respondents. The research revealed that out of 110 respondents sampled, 99 owned their structures whereas 10 percent of respondents rent. This situation is very encouraging in the Dormaa municipality and if maintained will encourage family continuity and the sustainability of the poultry industry.

4.3 Poultry Farmers' knowledge on Banking Services and Access to Credit

The respondent knowledge on account operations in any financial institution(s) were investigated since it forms a basic requirement for accessing credit

Table 4.3a: Knowledge on banking Services and Access to Credit

	Frequency	Percent
Yes	107	97.3
No	3	2.7
Total	110	100.0

Source: Field Survey, (2011)

From Table 4.3a, 97.3 % of the respondents operate an account with financial institution(s) while 2.7% respondents out of the 110 do not operate any account. This obviously puts the 2.7% respondents out of contention for credit accessibility.

The study wanted to establish a general statement to ascertain if all poultry farmers that operate account in financial institution(s) is/are true reflections of what exist in Dormaa municipality. A null hypothesis was set using the SPSS version 16 to test run a non parametric Chi-square. The null hypothesis was stated as shown Table 4.3b.

H₀: Poultry farmers in Dormaa municipality do not operate account in financial institutions.

H₁: Poultry farmers in Dormaa municipality do operate account in financial institutions.

Table 4.3b Operating Account with Financial Institution

	Do you operate account (s) with financial institution (s)?
Chi-Square	98.327 ^a
Df	1
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

Source: Field Survey, (2011)

From the Table 4.3b, the P value of 0.000 is equivalent to 0.00 percent significant level of which it is less than the expected value of 5.0 percent so we reject the null hypothesis and accept the alternative. From the above result, it clearly indicates that poultry farmers in Dormaa do operate account with financial institution(s).

Similarly, since the focus of the study was on ADB as a financial institution, the researcher deem it much expedient to find out how many of the respondents operate with the bank. Table 4.3c depicts respondents that operation account with ADB.

Table 4.3c Operation of Account (s) with ADB

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	86	78.2	78.2	78.2
No	24	21.8	21.8	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)

The respondent that operates an account with ADB is higher at 78.2 percent as compared to the other financial institutions which is 21.8 percent. This indicates that ADB is managing most of the farmers deposit in Dormaa municipality.

The Pearson Chi-Square test was run to investigate the frequency of account operations and access to credit in ADB. A cross tabulations were computed using the SPSS and the null hypothesis was set as shown.

H₀: Frequency of account operation does not give Access to credit in ADB

H₁: Frequency of account operation does give Access to credit in ADB.

The results from the crosstabs is as shown in Table 4.6

Table 4.3d: Frequency of Account Operation and Access to Credit in ADB

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.880 ^a	6	.065
Likelihood Ratio	10.808	6	.094
Linear-by-Linear Association	.564	1	.453
N of Valid Cases	110		

a. 5 cells (35.7%) have expected count less than 5. The minimum expected count is .44.

Source: Field Survey, (2011)

From the above, the P value of 0.065 is equivalent to 6.5 percent significant level which is greater than the expected value of 5.0 percent so we accept the null hypothesis and reject the alternative. From the above P value result obtained, the frequency of account operations or deposits does not guarantee access to credit in ADB. This means there are other factors to be considered before accessing credit in ADB. Notably, among these factors to consider include collateral, proper booking or financial statement of account and good account turnover.

The study conducted on poultry farmers in Dormaa shows from table 4.3e in the appendix that most of the financial institutions have not been offering training on

credit management and this does not exclude ADB. The officials of ADB admitted the views of farmers.

Fairly large percent of farmers have had communication regarding their bank's product on agriculture from the Table 4.3f in appendix. 64.5 percent of respondents said their banks' products on agriculture have been communicated to them but inferring from Table 4.5 also in appendix the respondents who operates an account with ADB alone were 86 as such it can be concluded that it was ADB customers that responded to those statements regarding their bank's products on agriculture.

From the Table 4.3g in the appendix, majority of farmers were aware of collateral security as a requirement for credit assessment from the banks. Similarly, it can be deduced that there is co-relation between account operation and collateral awareness. For the purpose of establishing the statement that collateral is a requirement for assessing credit in ADB, a null hypothesis test was run. The null hypothesis states:

H_0 : collateral is not a requirement for assessing credit in ADB

H_1 : collateral is a requirement for assessing credit in ADB.

Table 4.3h: Awareness of Collateral as a Requirement for Assessing Credit at ADB

	Awareness of collateral as a requirement for assessing credit ADB
Chi-Square	98.327 ^a
Df	1
Asymp. Sig.	.000

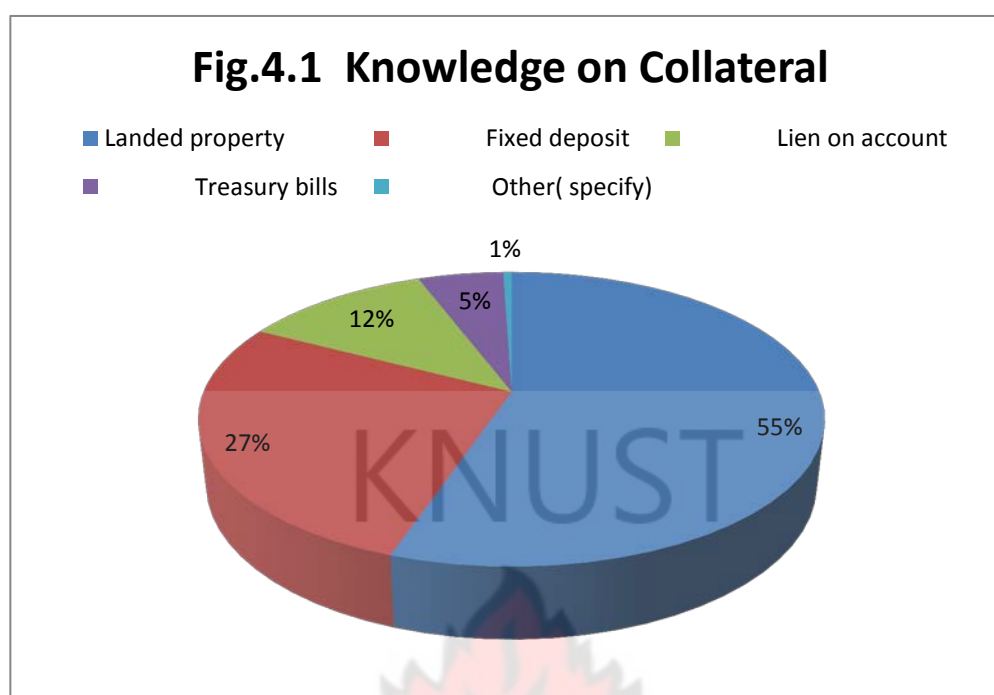
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

Source: Field Survey, (2011)

From Table 4.3h, the P value of 0.000 is equivalent to 0.00 percent significant level and is less than 5.0 percent of expected value so we reject the null hypothesis and accept the alternative. The result of the study indicates that poultry farmers are aware of collateral as a requirement for assessing credit from ADB.

From Figure 4.1 below, it shows that 55 percent of the respondents agreed to the knowledge of landed property as the most required collateral security by ADB for assessing credit in the bank. The least knowledge on collateral as security is one stated by both farmers and officials of the bank as plant and machinery and joint and several guarantees respectively

Figure 4.1: Knowledge on Collateral



Source; Field Survey, (2011)

4.4 Trend of Poultry credit to Farmers in Dormaa Municipality by ADB

The research was able to identify the financial institutions that have extended credit to farmers in the metropolis. The Table 4.4a in appendix indicated that among 110 respondents interviewed, 81 respondents have been granted loan facility by various financial institutions.

These 81 respondents make up 73.6 percent of the total respondents. From table 4.4a in the appendix, ADB recorded the highest number of credit extension to farmers in the municipality than other financial institutions. A non parametric test was run using the chi-square to investigate whether the views of respondents hold for the majority of farmers in the municipality. The null hypothesis was stated as follow:

H₀: ADB do not grant credit to poultry farmers more than other financial institutions in the metropolis

H₁: ADB grant credit to poultry farmers more than other financial institutions in the metropolis.

Table 4.4b: Sources of Accessing Loans

	give the name of that financial institution
Chi-Square	148.037 ^a
Df	7
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.1.

Source: Field Survey, (2011)

From the above statistics, the P value of 0.000 is equivalent to zero (0) percent significant level and is less than the expected value of 5.0 percent. This means that we reject the null hypothesis and accept the alternative. This result confirms ADB superiority to other financial institutions in the metropolis in terms credit grant to poultry farmers as most of them are risk adverse.

Table 4.4c: Disbursement and Recovery of Loans 2006-2010

Year	Disbursement in GH¢	Recovery in GH¢	Outstanding Balance in GH¢
2006	141,200	105,900	35,300
2007	839,000	205,600	633,400
2008	197,800	59,340	138,460
2009	139,270	48,775	90,495
2010	635,000	185,750	449,250

Source: ADB-Dormaa Branch, (2011)

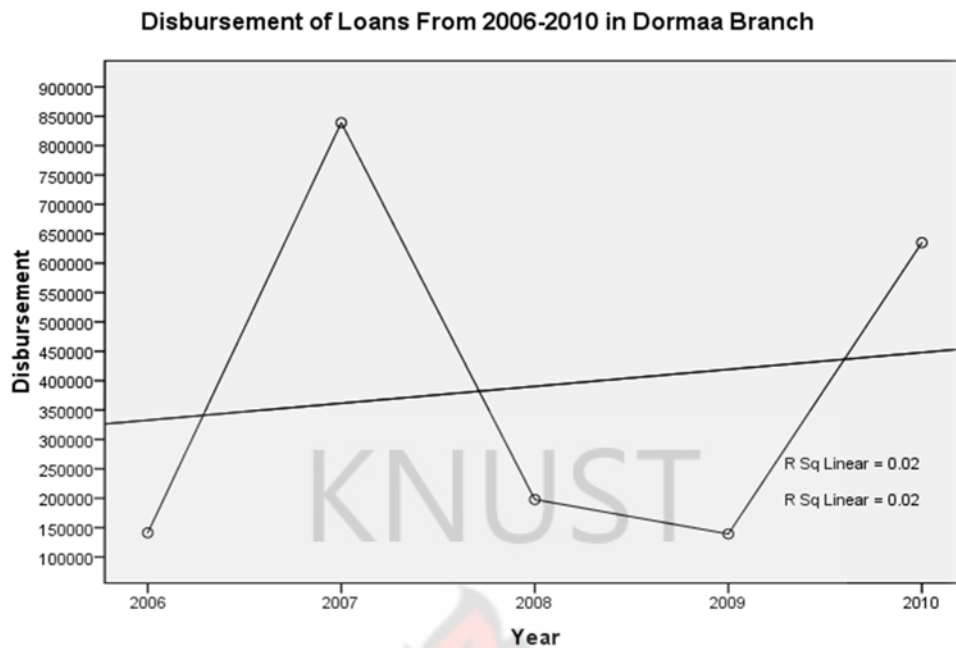


Fig 4.2

The Figure 4.2 indicates the disbursements from ADB since 2006 to 2010 have been rising. Even though, disbursement in 2006, 2008 and 2009 were far below the expected, the branch disbursed an appreciable amount in 2007 and 2010 to compensate the fall out in the years mentioned previously. Management of the branch shares similar sentiments that disbursement of loans to farmers improved or appreciated year by year. Looking at the years in perspective, where recoveries were better in terms of quantum of money collected, it was also discovered that disbursements were higher in that same years as shown in Fig.4.3 below. With this observation we can then say that disbursement is proportional to recovery. Management of the branch put the recovery rating of farmers in the branch as average but was quick to add that if farmers do not step up in their repayment of the outstanding loans the bank might be hesitant in approving further loans for them.

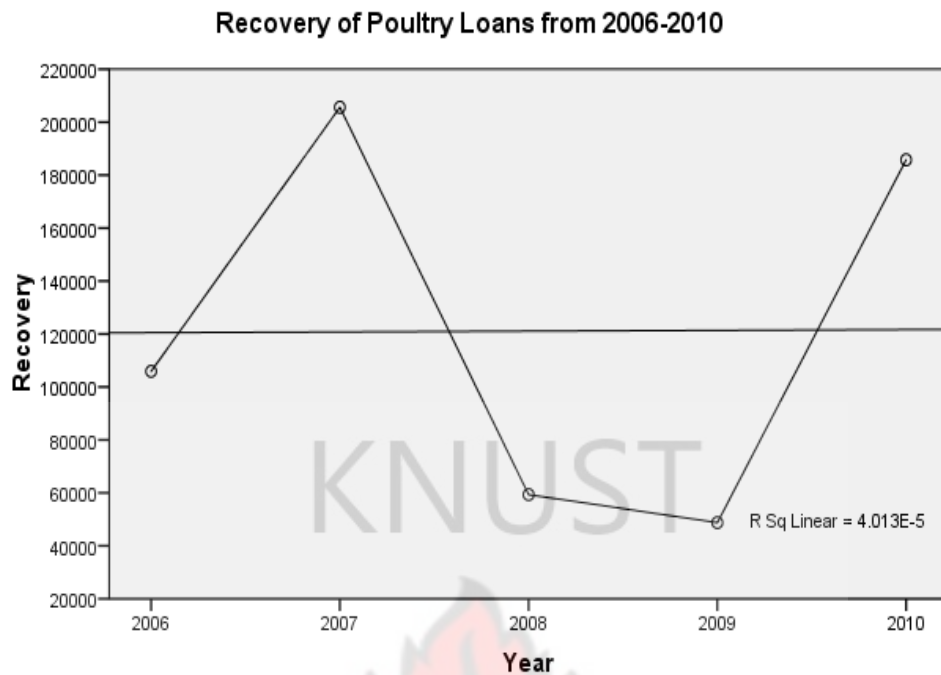


Fig.4.3

The study further investigates whether there is a relationship between the outstanding loans and disbursement of loans in ADB. A regression equation is then run to determine the relationship. The outstanding loans were made the dependent variables while the independent variables were the disbursement of loans. A null hypothesis was run as follows:

H_0 : Outstanding loans does not depend on disbursement of loans

H_1 : Outstanding Loans depend on disbursement of loans

Table 4.4d: Relationship between the outstanding loans and disbursement of loans in ADB

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.663E11	1	2.663E11	321.737	.000 ^a
	Residual	2.483E9	3	8.277E8		
	Total	2.688E11	4			

a. Predictors: (Constant), Disbursement

b. Dependent Variable: Outstanding

Source: Field Survey, 2011

Since the P value is 0.000 then the significant level is less than the expected value of 5. It also indicates that we reject the null hypothesis that outstanding loans does not depend on disbursement and accept the alternative that the outstanding loan depends on disbursement of loans.

Table 4.4e: Outstanding against Disbursements

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-40308.047	21532.282		-1.872	.158
	Disbursement	.793	.044	.995	17.937	.000

a. Dependent Variable: Outstanding

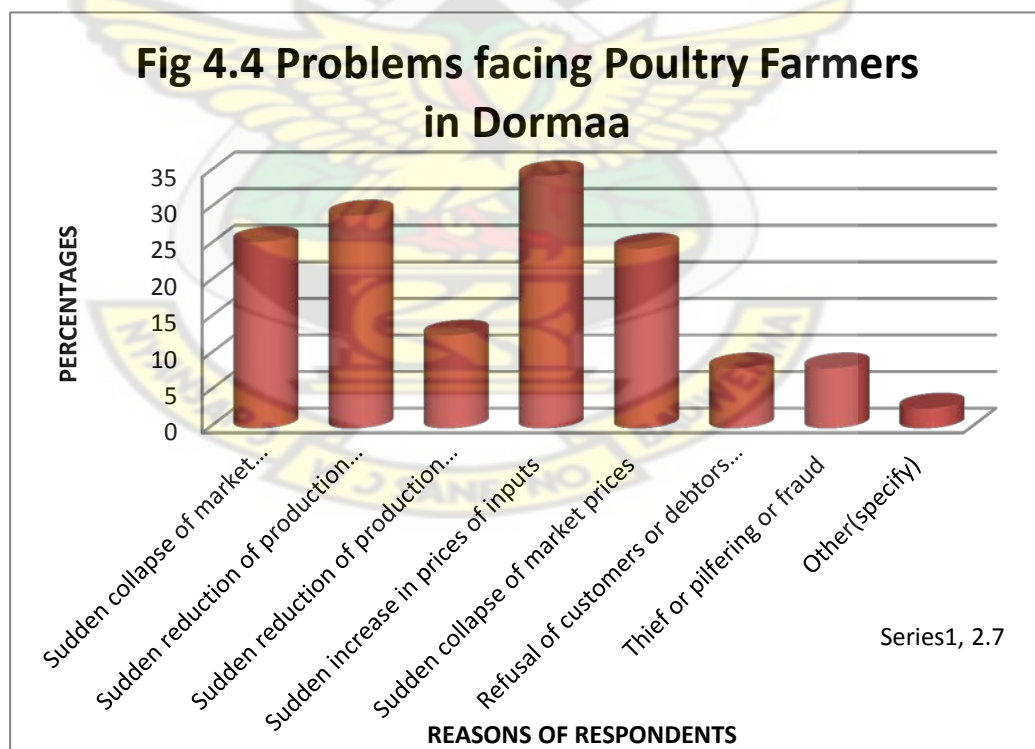
Source: Field Survey, 2011

The coefficient value of the regression when run was not zero hence the equation for the regression was Outstanding= 0.793*Disbursement-40308.047. If

disbursement increases by 1 percent, outstanding will also increase by 0.793 minus the constant slope of 40308.047.

As the study envisage the possibility of non- repayment of loans as a defense against none issuing of credit to poultry farmers, the researcher wanted to find out from the respondents problems they encountered for non- repayment of loans. The Table 4.4f in appendix enumerated some of the problems listed by the farmers as sudden increase in prices of inputs as the major factors leading to non- repayment of loans by defaulters in Dormaa municipality. Since respondents selected as many problems as possible, the percentages were computed for each problem and a bar chart constructed as shown in Figure 4.4.

Figure 4.4 Problems facing poultry farmers in Dormaa

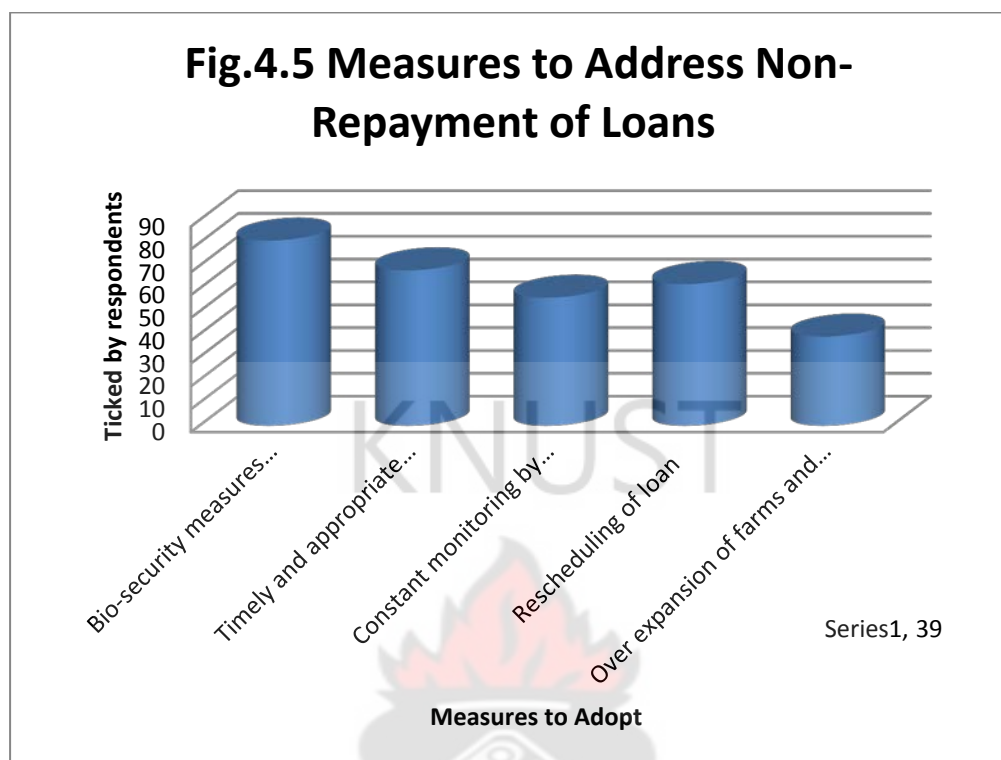


Source: Field Survey, (2011)

Problems specified by others which excluded those ticked by the respondents were untimely delivery of credit to farmers and inadequate amount requested. Officials of ADB also identified several factors which contributed to agricultural loan defaults. These include: moral hazards risk factors such as diversion of funds by farmers, deliberate refusal to pay, dishonesty of farmers in presenting misleading financial statements of accounts. Other factors identified by management include delays in processing and release of loans; sudden collapse of market demands; losses due to exposures of all forms of risks such as lack of insurance policy; sudden increase in prices of inputs and bad weather condition leading to diseases and disaster also corroborated with the findings of the farmers. Due to high default rates most banks are unwilling to extend credit facilities to farmers except the state owned banks like ADB. Bryla (2004) noted that: “Lending institutions have looked for a variety of ways to expand their portfolio into agriculture but because of the risks associated with lending to farmers who lack traditional forms of collateral and face price falls and yield risk, these inroads have been limited. Many traditional arrangements that commercial banks and other financiers use to extend lending are not well suited on their own to provide lending to the agriculture sector. In lieu of private involvement in agricultural lending the state has often set up financing facilities (mainly in the form of state owned agricultural banks) at highly subsidized rates that often face very high default rates” This has led to the bank high default rates as farmers perception on state owned banks all over developing countries is the same.

The research solicits the views of these farmers for the way forward.

Figure 4.5 Measures to Address Non- Repayment of Loans



Source: Field Survey, (2011)

The researcher grouped the measures for addressing none repayment of loans into two (2). These measures are (a) by the farmers and (b) by the bank i.e. ADB (Figure 4.5).

Taking farmers' views into consideration, bio-security measures must be adopted to prevent diseases. Preparation of water baths with the right disinfectants, proper administering of ration and drugs, clearing of weeds by spraying as well as taking insurance cover for any eventuality on the farms can be used to address diseases and disaster. Again, farmers who purchase chicks must do so by taking cognisance of their financial resources to avoid over expansion of birds and farms.

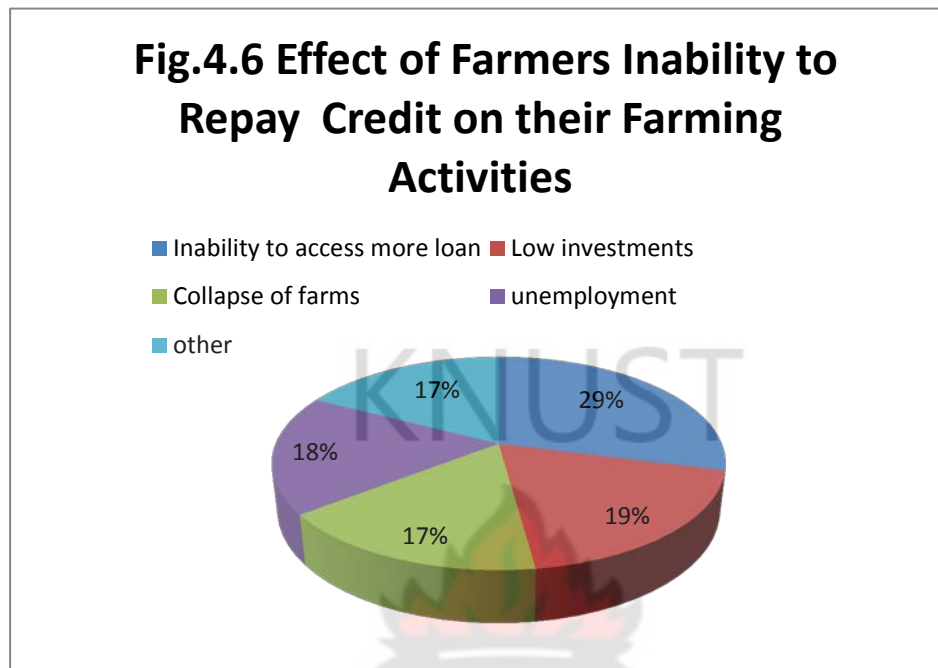
Farmers can learn proper and prudent financial management practices, budgeting and planning through seminars organised by resource personnel.

On the part of bank, respondents will require constant monitoring or regular visit and where possible play their advisory role properly. In events where problems are beyond farmers control such as diseases and disaster, rescheduling the loan or refinancing can be adopted. Some respondents welcomed rescheduling of loans with commitment fee charged to keep their credibility in good stand. Similarly, ADB must administer credit to farmers in a timely manner as these requests are for stock piling of maize and other feed ingredients. Late credit delivery leads to prices of inputs skyrocketing and this affect production cost. High input prices leads to high cost of farm operations which can easily consume farmers' working capital before the end of the season. The bank should grant farmers adequate amount of credit request.

Officials of the branch's position were that recalcitrant farmers who genuinely and wilfully default, court action must be instigated against them to serve as deterrent to the rest of the farmers who are also in a position to kowtow to these wrong doing.

Greater majority of the respondents who have defaulted in loan repayment were of the view that they have now been tagged as not creditworthy by banks and citizens in the metropolis. This name- tagged has lead to low investment and static growth of farms. The ripple effects of this tagging have led to collapse of farms cascading down to unemployment and increase the social vices in the municipality.

Figure 4.6 Effect of Farmers Inability to Repay Credit on their Farming Activities



Source: Field Survey, (2011)

The pie chart distribution on Figure 4.6 depicts the general respond by farmers on their inability to repay credit and its effect on their farming activities. The other reasons stated by the respondents were sleepless night, low banking culture and social vices perpetuated by their workers who have been rendered unemployed due to the financial difficulties faced by their poultry owners. From the officials of ADB in Dormaa, the inability of farmers to repay their credit has affected the branch recovery performance and this will adversely affect the bank's performance in general. The branch management were of the view that farmers operate with almost all the other financial institutions and take multiply loans which tend to increase their interest bills. From the above precedence, the branch and head

office are a bit reluctant to grant loans to farmers whose accounts are poorly operated due to account splitting to other banks.

4.5: Challenges Facing Poultry Farmers in Loan Repayment

Table 4.5a Challenges Facing Poultry Farmers in Loan Repayment

STATEMENT	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
High interest rate on agric. Loans	69(62.7%)	30(27.3%)	0(0 %)	11(10%)	0(0%)
High collateral requirement	68(61.8%)	28(25.5%)	4(3.6%)	8(7.3%)	2(1.8%)
High diversion of credit fund	32(29.1%)	20(18.2%)	43(39.1%)	14(12.7%)	1(1.9%)
Inadequate knowledge in accounting practices	27(24.5%)	43(39.1%)	15(13.6%)	13(11.8%)	12(10.9%)
Natural disasters(rainstorm, bushfires, etc) and diseases	57(51.8%)	31(28.2%)	9(8.2%)	3(2.7%)	10(9.1%)
Lack of efficient management practices(planning, organizing, controlling, distribution and performance appraisal)	42(38.2%)	30(27.3%)	24(21.8%)	12(10.9%)	2(1.8%)
Delay in documentation, granting and disbursement of loan to farmers	51(46.4%)	44(40%)	9(8.2%)	4(3.6%)	29(1.8%)

Source: Field Survey, (2011)

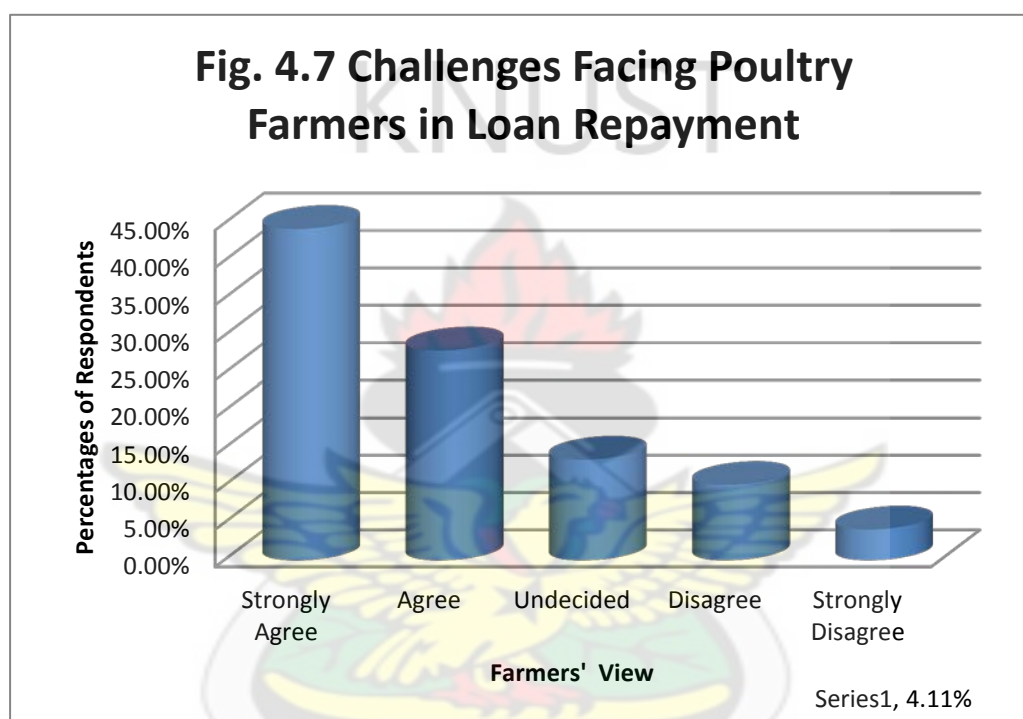
Table 4.5b Challenges Facing Poultry Farmers in Loan Repayment

STATEMENT	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Inadequate storage facilities for birds and eggs	44(40%)	22(20%)	19(17.3%)	16(14.5%)	9(8.2%)
Limited ready market for poultry products (birds, eggs etc)	31(28.2%)	30(27.3%)	21(19.1%)	24(21.8%)	4(3.6%)
Competition from imported poultry products	62(56.4%)	29(26.4%)	9(8.2%)	5(4.5%)	5(4.5%)
High taxes on local poultry products	61(55.5%)	24(21.8%)	7(6.4%)	14(12.7%)	4(3.6%)
High tariffs on imported poultry inputs(drugs, feeds etc)	65(59.1%)	25(22.7%)	9(8.2%)	9(8.2%)	2(1.8%)
Inability of debtors to pay promptly to farmers	24(21.81%)	31(28.2%)	32(29.1%)	20(18.2%)	3(2.7%)
Unanticipated seasonal price changes of inputs	55(50.0%)	32(29.1%)	13(11.8%)	8(7.3%)	2(1.8%)
Lack of guaranteed/stable market	44(40.0%)	47(42.7%)	7(6.4%)	6(5.5%)	6(5.5%)
Inefficient farm practices leading to drastic changes in production efficiency	31(28.2%)	33(30.0%)	19(17.3%)	19(17.3%)	8(7.3%)
Large exposure to all forms of risk management e.g. no agric. Insurance cover, lack of policy support to the industry	65(59.1%)	25(22.7%)	12 (10.9%)	3(2.7%)	5(4.5%)

Source: Field Survey (2011).

Tables 4.5a and 4.5b above were bridged by finding the averages of respondents' answers from the Likert scales to establish the challenges facing poultry loan repayment. The table 4.5c in the appendix shows the abridged portion of tables 4.5a and 4.5b.

Figure 4.7: Challenges Facing Poultry Farmers in Loan Repayment



Source: Field Survey, (2011)

The chart on Figure 4.7 shows the challenges that poultry farmers face in loan repayment. It indicates that fairly large percentage of the respondents strongly alluded to the fact that they face challenges in their operations. Though their views spread across varied challenges it can be determined that the views of poultry farmers in Dormaa Municipality are skewed towards left i.e. towards strongly agree. The factors influencing repayment of agricultural credit as identified by farmers were high interest rate and collateral requirements, high diversion of funds,

inadequate amount requested and accounting knowledge practises, delay in disbursing, granting and documentation of loans, unanticipated seasonal price changes of inputs, competition from imported poultry products, high tariff on imported inputs and large exposure to all forms of risk management are some of the factors militating against the prompt repayment of agricultural loans by farmers

Table 4.5 d: Suggested Solutions on Challenges faced by Farmers in loan Repayment.

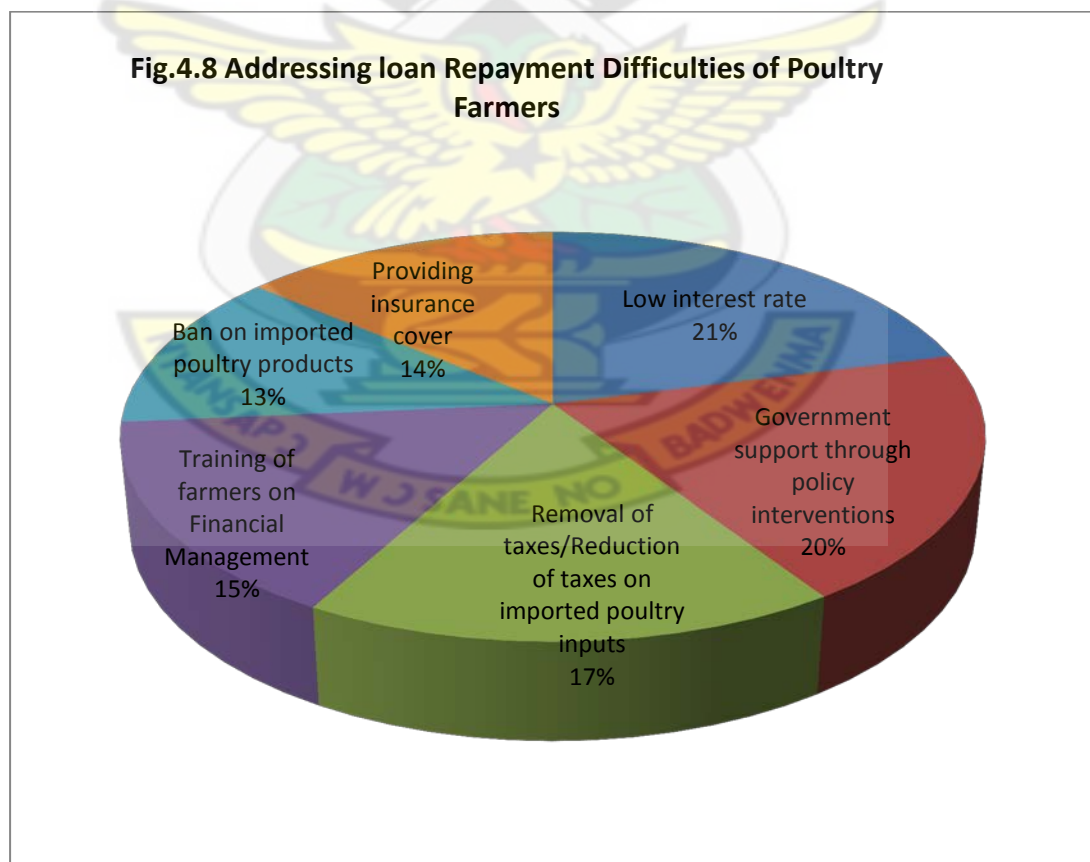
Suggested Solutions	Number of Farmers	Percentages
Low interest rate	85	77.3%
Government support through policy interventions	80	72.7%
Removal of taxes/Reduction of taxes on imported poultry inputs	70	63.6%
Training of farmers on Financial Management	63	57.3%
Ban on imported poultry products	51	46.4%
Providing insurance cover	56	50.9%

Source: Field Survey (2011)

The Table 4.5d states some solution given by the farmers in finding the best way to address prompt repayment of loans. The bank must offer low interest rate, relaxed collateral security requirement and grant the required amount requested by the farmers. Others were of the opinion that government must offer support through right policy interventions that could alleviate their plight. The research also find out that tax on imported poultry inputs such as Russian fishmeal, yellow maize and

equipments such as drinkers and feed troughs were high and goes to increase cost of production. This they believe when something is done by the government through reduction on imported excise duties on these inputs, production cost can be reduced and could allow citizens of Ghana to enjoy tasteful chicken with required protein devoid of carcasses at affordable price. Another daunting challenge worth mentioned was the provision of insurance cover for both goods on transit and farms. The farmers were of the view that the insurance cover could solve a lot of their problems but what they found distasteful of this policy is their timeliness to come to their aid in times of eventualities. The Figure 4.8 shows diagrammatically, how these challenges were resolved.

Figure 4.8 Addressing Loan Repayment Difficulties of Poultry Farmers



Source: Field Survey, 2011

Respondents also commented on the effect of agricultural credit on the poultry industry. Almost all respondents accepted that agricultural credit has helped them to expand their farms. A large majority of farmers (usually above 70%) supports the idea that agricultural credits have helped to increase profits, provide employment to people in the community including other effects in Table 4.6a.

4.6: Effect of Agriculture Credits on Poultry Industry

Table 4.6a: Effect of Agricultural Credits on Poultry Industry

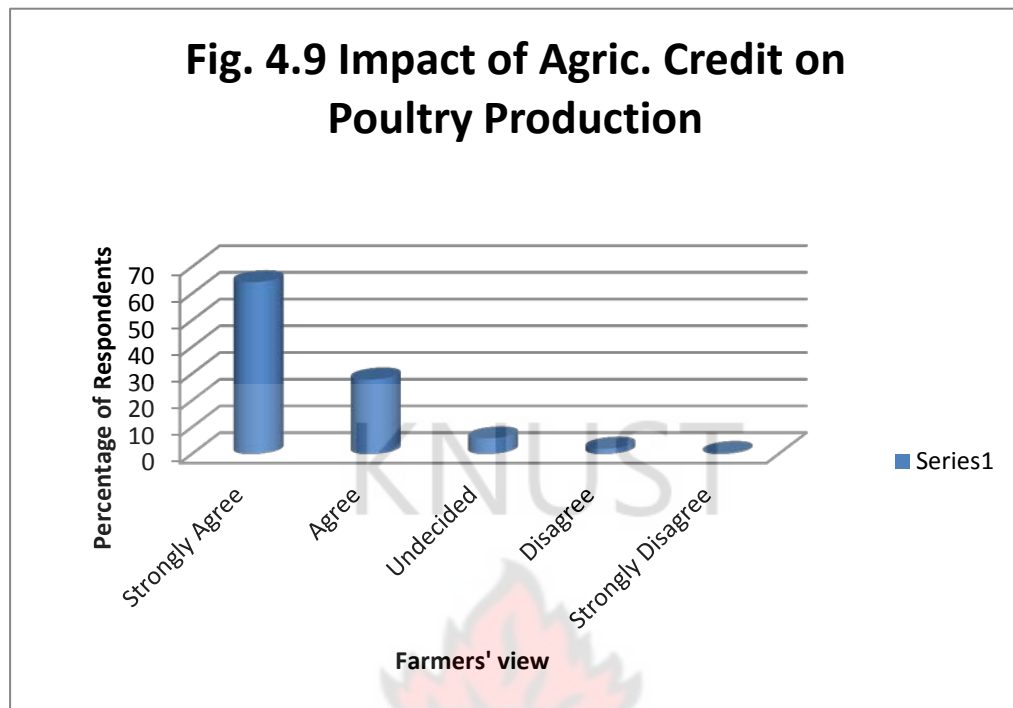
Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Expansion of farms	101(91.8%)	9(8.2%)	0(0%)	0(0%)	0(0%)
Increase profit margin	80(72.7%)	29(26.4%)	1(0.9%)	0(0%)	0(0%)
Provide employment to the people in the Metropolis	70(63.6%)	32(29.1%)	6(5.5%)	2(1.8%)	0(0%)
Improve nutritional value	44(40%)	51(46.4%)	11(10%)	2(1.8%)	2(1.8%)
Enhanced commercial activities in poultry-related business	73(66.4%)	31(28.2%)	3(2.7%)	3(2.7%)	0(0%)
Improvement in living standards	65(59.1%)	39(35.5%)	2(1.8%)	3(2.7%)	1(0.9%)
Enhanced social status	70(63.6%)	36(32.7%)	3(2.7%)	1(0.9%)	0(0%)
Improved banking culture	70(63.6%)	24(21.8%)	12(10.9%)	4(3.6%)	0(0%)
Improved financial management practices	63(57.3%)	24(21.8%)	19(17.3%)	4(3.6%)	0(0%)

Source: Field Survey (2011)

The chart below shows the impact of agricultural credit to the poultry production. Figure 4.9 shows that most of the respondents strongly agreed that agricultural credit have had a positive effect on the poultry production. Those that responded strongly agreed constituted 64.24 percent and the cumulative response of farmers in favour of the notion formed 92.04 percent. Though alternative views were expressed, it can be said that the views of poultry respondents in Dormaa were skewed towards strongly agreed. The positive impact of poultry credit to farmers have greatly been felt in the expansions of farms, increase profit margins, enhanced commercial activities in poultry-related business and the rest mentioned above.

Similarly officials of ADB also attested to the positive effects of credit on farmers' poultry activities. These include: farmers gaining knowledge on bank credit; increased outputs and profit margins; expansion of farm sizes; employment of extra farmhands in the metropolis; enhanced social status and enhanced commercial activities in poultry-related business

Figure 4.9: Effect of Agricultural Credit on Poultry Industry



Source: Field Survey, 2011

Based on the respondents' views that were in agreement with the impact of agricultural credit on poultry industry in the municipality, a non parametric chi-square test was run to ascertain whether the views of respondents reflect other poultry farmers in the Dormaa municipality that were not captured. The null hypothesis was set as follows:

H_0 : Agricultural credit does not have any impact on poultry production in Dormaa municipality.

H_1 : Agricultural credit does have impact on poultry production in Dormaa municipality.

Table 4.6c: Effect of Agricultural Credit on Poultry Industry

	expansion of farms	increase profit margins	provide employe nt to people in the Metropolis	improve nutritional value	enhanced commercial activities in poultry- related business	improve ment in standard s of living	enha nced social statu s	improved banking culture
Chi-Square	76.945 ^a	87.509 ^b	106.873 ^c	1.021E2 ^d	119.382 ^c	151.818 ^d	1.157 E2 ^c	9.495E1 ^c
Group Label df	1	2	3	4	3	4	3	3
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.

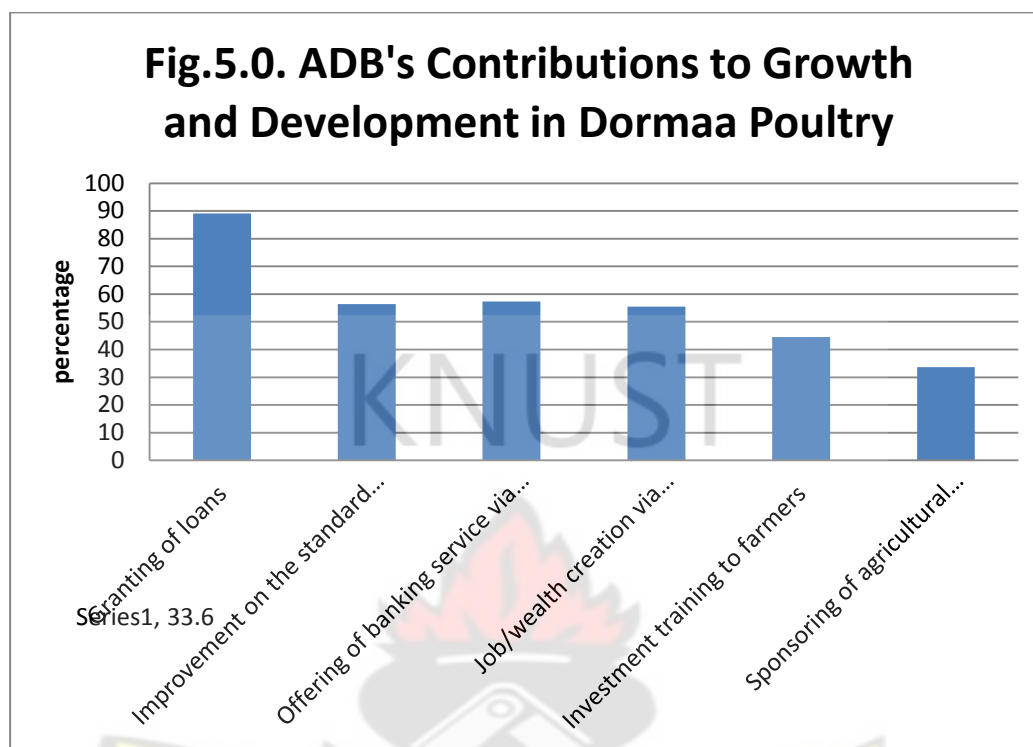
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 27.5.

d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.0.

Source: Field Survey,(2011)

From the above statistics, the P value of 0.000 is equivalent to zero (0) percent significant level and is less than the expected value of 5.0 percent. This means that we reject the null hypothesis and accept the alternative. The result buttressed the point that agricultural credits have had great impact on poultry production in Dormaa municipality (Table 4.6c). The ADB being the focal point of study to the poultry production in Dormaa municipality, the research seeks to find out its contribution to the growth and development in that sector to the farmers. The respondents gave varied answers which were tabulated in percentages in table 4.4c in the appendix. A bar chart was constructed as shown below

Figure 5.0: ADB's Contributions to Growth and Development in Dormaa Poultry



Source: Field Survey,(2011)

The chart above depicts the contribution of ADB to the growth of the poultry industry in Dormaa municipality. Majority of the respondents were of the opinion that the bank grants loans to farmers which have led to their improved standard of living. The granting of loan to farmers by ADB have offer employment opportunity to more youth in the municipality (Figure 5.0). The poultry industry is mostly privately owned as such it is believed to be the engine of growth in Dormaa municipality. The poultry sector in the municipality has alleviated government burden of employment creation for the youth. The credit extensions to farmers by the bank have resulted in farm expansions leading to the creation of more poultry-related businesses such as the egg marketing, transporting and inputs suppliers. The

bank has also assisted poultry farmers in the municipality with their modern network services such Quicalert, Automated Teller Machines (ATM) and other products. Some farmers has also benefited from investment training by personally contacting the bank. This has encouraged additional investments to their existing ones. Few of the respondents were of the view that the bank sponsors agricultural related activities like National Farmers' Day.

The performance of the bank to poultry production was rated by the respondents as shown in table 4.6e in the appendix. Few respondents that form 5.5 percent of the total rated the bank's performance as excellent in terms of poultry production. 45.5 percent of the farmers responded to the branch performance rating as very good. Out of the 110 respondents, 30 of them rated Dormaa branch performance as good whereas 21.8 percent of the total respondents rated the branch between the ranges of average to poor. This can be shown diagrammatically in the Figure 5.1.

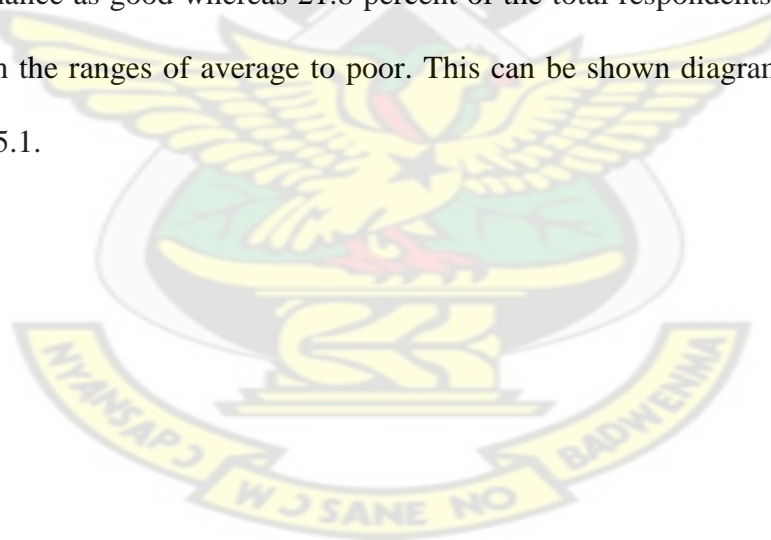
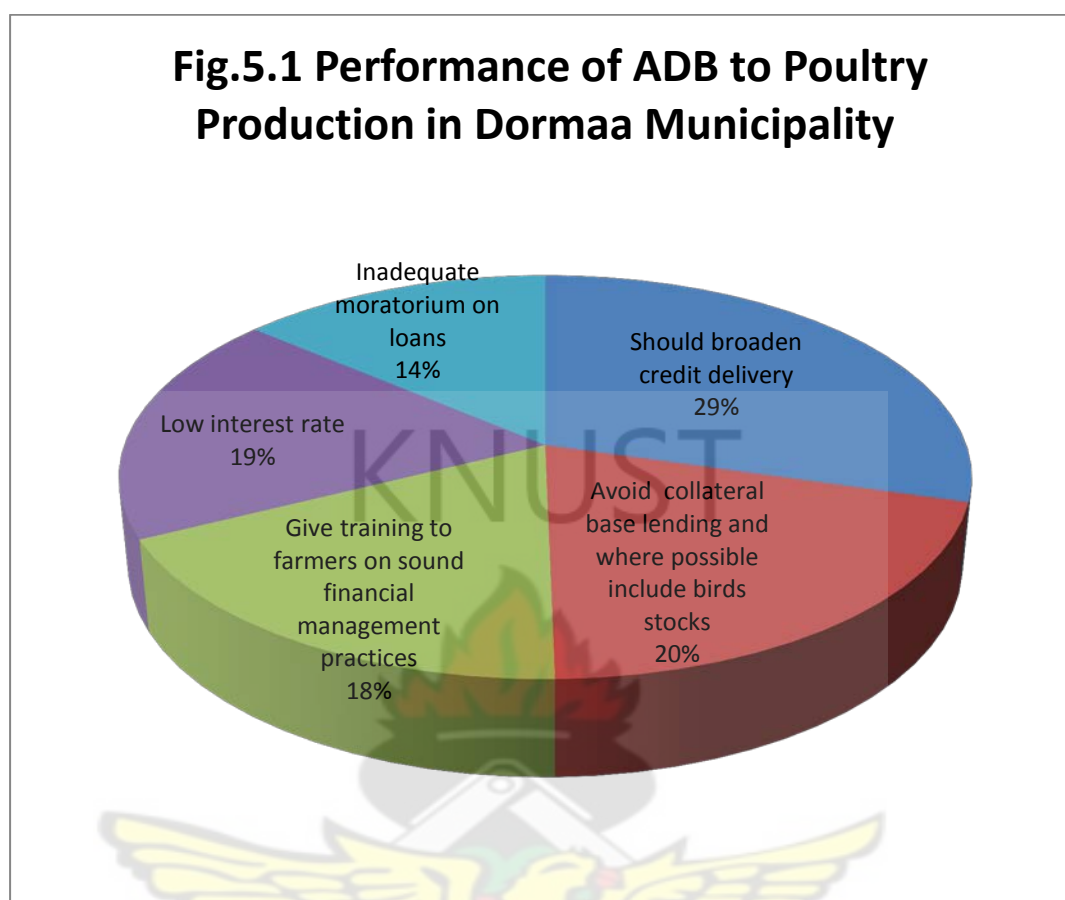


Figure 5.1: Performance of ADB to Poultry in Dormaa Municipality



Source: Field Survey, 2011

Table 4.6f shows the various reasons assigned to the rating of the bank by the respondents. The chart below shows how respondents assigned reasons to the bank. Notably among these reasons were broaden of credit delivery, low interest rate, avoidance of collateral based lending and where necessary live birds stock should be used.

Table 4.6f Reasons for ADB's Rating by Respondents

Should broaden credit delivery	92(83.6%)
Avoid collateral base lending and where possible include birds stock as security	63(57.3%)
Low interest rate	58(52.2%)
Give training to farmers on sound financial management practices	56 (50.9%)
Inadequate moratorium of loans	43(39.1%)
Rescheduling of loans in times of difficulty	46(41.8%)
Delay in loan granting or approval	50(45.5%)
Limited banking hall space or congestion of banking hall	34(30.9%)
Other reasons	41(37.3%)

Source: Field Survey (2011)

Others reasons suggested were relaxed collateral security which represents 83.6% of respondents' views. Additionally assigned reasons by respondents that affected the bank's image positively are its good customer relationship and the use of technological banking support such as Quicalert and internet banking (Table 4.6f). It is worth noting that the major drawback that respondents mentioned against the Dormaa branch was the congested nature of the banking hall and the small size of the premises as compared to its competitors.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this chapter is to present a summary of the findings; draw conclusions based on the result of the research and suggest recommendations for the solution of the problems identified and also implications for further empirical study.

5.2 Summary of Findings

The research established that poultry farmers in Dormaa municipality operate an account(s) with financial institutions by rejecting the null hypothesis and accepting the alternative. It further reveals that 78.2 percent of respondent operates with ADB.

A cross tabulation performed on the frequency of account operations and access to credit in ADB resulted in the P value of 6.5 percent significant level being greater than the expected 5.0 percent. Hence, the null hypothesis was accepted indicating that frequency of account operations does not guarantee access to credit in ADB. Other factors which included collateral, proper book keeping or financial statements and good account turnover are considered.

The farmers show their knowledge on collateral awareness by rejecting the null hypothesis and accepting the alternative that collateral is a requirement for accessing credit in ADB. Notably among the most mentioned collateral by respondents were landed property or land title deeds.

The trend of poultry credit in ADB Dormaa branch from 2006 to 2010 as a whole shows a positive slope for disbursement as against negative slope for recovery. The research reveals that outstanding loans depend on disbursement in ADB. A regression coefficient test runs with outstanding loans as dependent variable and disbursement as independent variable. The coefficient value determined in a regression equation is $\text{outstanding} = 0.793 * \text{Disbursement} - 40308.047$.

The major factors that negatively influenced prompt repayment of poultry credit were sudden collapse market demands and prices, reduction of production due to diseases and disasters, sudden increase in price inputs, pilfering, thief or fraud, overstocking of birds, diversion of funds, delay in granting, documentation and disbursement of loans and refusal of ADB to grant the amount requested.

The research alluded to the fact that poultry farmers in Dormaa municipality face challenges. Though respondents views spread across varied with challenges as in Fig.4.7 they skewed towards strongly agreed. These views include high interest rate and collateral requirements, high diversion of funds, inadequate amount requested, delay in disbursing, granting and documentation of loans, unanticipated seasonal price changes of inputs, competition from imported poultry products, high tariff on imported inputs and large exposure to all forms of risk management are some of the factors militating against the prompt repayment of agricultural loans by farmers. Credit to poultry farmers were generally considered to be beneficial by both the farmers and officials of ADB as it led to many positive effects. The result from the study revealed a strongly skewed impact of agricultural credit to the poultry industry and the municipality at large. These positive effects include expansion of farms, increase profit margins, employment creation, enhanced commercial

activities in poultry- related businesses and status, improved living standards and banking culture.

The study also revealed ways in which ADB has contributed to the growth and development of Dormaa municipality in terms of poultry production. The granting of loans, improvement on the standard of living of customers, offering of banking services through modern network system, creation of job and wealth in poultry-related businesses, investment training to farmers and sponsoring of agricultural related activities were some mentioned by the respondents.

5.3 Conclusion

In conclusion, three different approaches were used in both qualitative and quantitative analysis to explore the contribution of ADB to the growth of the poultry sector in Dormaa Municipality. The following are conclusions drawn from the study:

The socio-demographic characteristics of farmers gathered and analysed were their age group, gender distribution and ownership status of farms. The age group and gender distribution demonstrate the energetic influence of farmers on the sustainability and continuity of the business while ownership status confirms farmers' commitment level to the growth of the industry.

The study established that poultry farmers in Dormaa municipality have knowledge on banking practices and access to credit but it further established that frequency of account operations does not guarantee access to credit in ADB. It can therefore be concluded that other factors play additional role to credit accessibility

such as collateral security, proper book keeping or financials and good account turnovers.

From the period under review in ADB, the two variables of poultry credit disbursement and recovery seem not to relate. The disbursement of credit graph shows a positive slope contrary to the recovery of credit graph.

The survey conducted revealed that outstanding loan is dependent on disbursement in ADB. This is expressed in the regression coefficient equation as $\text{Outstanding loan} = 0.793 * \text{Disbursement} - 40308.047$. This is explained that if disbursement increases by 1 percent, outstanding loan will also increase by 0.793 minus the constant slope of 40308.047.

The research revealed that poultry farmers face myriads of challenges which can be addressed in three ways by the bank, government and the farmers themselves. The study suggested ways that the bank can address these challenges such as timely and appropriate credit delivery, relaxed collateral security, rescheduling or refinancing of loans, quick disbursement and documentation of loans and granted amount requested by the farmers.

On the part of the government, policy interventions like subsidies to local poultry production, removal or reduction of taxes on imported poultry inputs and high tariffs or ban on imported poultry products to prevent competition from the local industry.

The farmers' role to advert these challenges is to prevent overstocking of birds and diversion of funds, adopt bio-security measures to prevent diseases and take insurance cover for any eventualities throughout their operations.

The survey conducted revealed that agricultural credit have had positive impact on poultry production in the Dormaa. The effect of agricultural credit on poultry production skewed towards strongly agreed and has impacted positively on their life of farmers and the municipality at large. The result clearly showed that farmers benefited socially, economically and financially from accessing agricultural credit.

5.4 Recommendations

In view of the findings, the following recommendations are made to address the challenges confronting farmers in accessing and repaying agricultural loans.

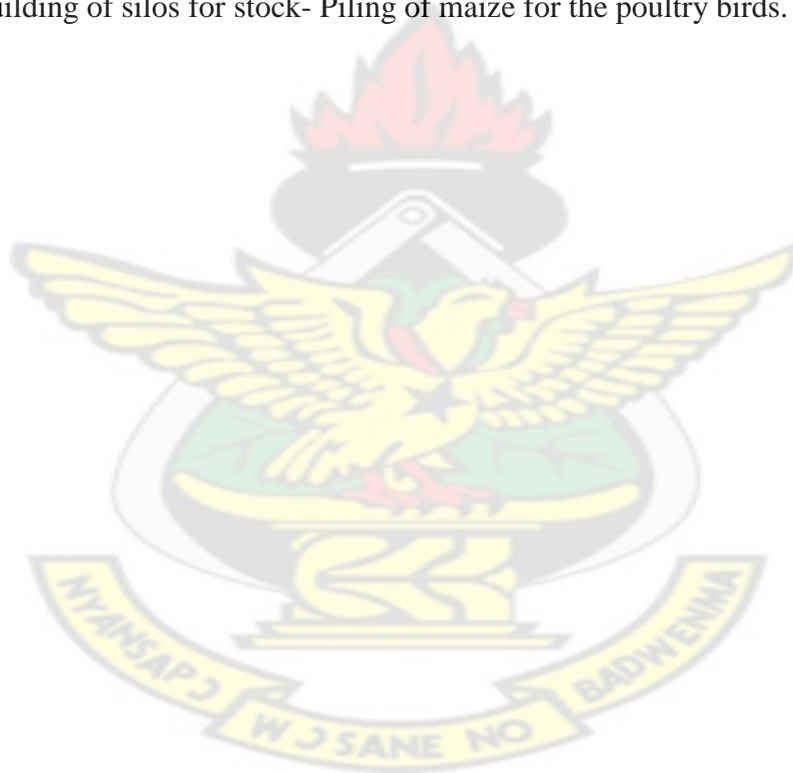
There should be easy access to credit for farmers. This can be done through simplifying collateral conditions; simplifying loan documentation process; speeding disbursement of approved loans.

Government should support the industry through implementation policies against the IMF policies such as high tariffs or ban imported poultry products and reduction or removal of taxes on local poultry products. Government subsidies on agricultural inputs should be reviewed upward to reduce production cost hence prompt payment of agricultural credit.

Agricultural credit should attract low interest rate. Affordable credit to farmers will greatly reduce their credit risks and therefore enhance better repayment. Effective monitoring and evaluation by credit officers will prevent the abuse of credit by farmers, thus avoiding moral hazards risks in the process and sometimes the ADB must adopt refinancing or rescheduling of loans.

A careful understanding of the market demands as well as the seasonal nature of poultry feed requirements could inform bank officials for timely disbursement of loans so as to prevent late disbursement and diversion of funds meant for feeding purposes.

There should be close collaboration between veterinary services officers and farmers in order to increase output through technology transfer and prevent diseases through bio-security measures. The Dormaa Municipal Assembly should rehabilitate the hatchery in Masu to befit a Modern structure with all the technological gadgets and building of silos for stock- Piling of maize for the poultry birds.



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APPENDIX

QUESTIONNAIRE

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI**

**RESEARCH TOPIC: “THE CONTRIBUTION OF ADB AS A FINANCIAL
INSTITUTION TO THE GROWTH OF THE POULTRY SECTOR, A CASE
OF DORMAA MUNICIPALITY IN THE BRONG AHAFO REGION”**

QUESTIONNAIRE FOR POULTRY FARMERS

Survey Questionnaire No.....

The following questions form part of a study by a research student. The main objective of the study is to assess the contribution of ADB as a financial institution to the growth of the poultry sector, a case of Dormaa Municipality in the Brong Ahafo Region. This questionnaire is designed to elicit information regarding this dissertation. Information given will be used solely for this research. You are also assured of full confidentiality and anonymity of any information that you provide. You are kindly requested to answer the questions as frankly and openly as you can. Please make a tick [✓] in the box against your response where provided and do not hesitate to comment on any part of the questionnaire that is not clear to you. Do not write your name or company's name on any part of the questionnaire. Thanks for your co-operation.

A: Socio-demographic characteristics of respondents

1. Sex:

- (a) Male []
(b) Female []

2. Age:

- (a) Between 18-30 []
(b) Between 31-45 []
(c) Between 46-60 []
(d) Greater than 61 []

3. Level of education:

- (a) No formal education []
- (b) Basic education/ MSLC []
- (c) Secondary/ voc/tech education []
- (d) Tertiary education []
- (e) Others (specify).....

4. Religions:

- (a) Christian []
- (b) Muslim []
- (c) Traditional []
- (d) No religion []
- (e) Others (specify).....

5. Location.....

6. Which of these ethnic groups/zones do you belong to in Ghana?

- (a) Akan []
- (b) Mole- Dagbani []
- (c) Ewe []
- (d) Ga Adangbe []
- (e) Others (Specify).....

7. Marital status: (a) Single [] (b) Married [] (c) Divorced [] (d) Separated []

(e) Widowed []

8. Do you receive monthly income? (a) Yes [] (b) No []

9. Among which of the following income brackets per month will you place yourself? (a) Less than GH¢100 [] (b) GH¢101- 400 [] (c) GH¢401-800 []

(d) GH¢801-1200 [] (e) Greater than GH¢1201 []

10. Are all your profit realised from the farm proceeding? (a) Yes [] (b) No []

11. Among which of the following profit brackets per month will you place yourself? (a) Less than GH¢1000 [] (b) GH¢1000- 2000 [] (c) GH¢2000-4000 []

(d) GH¢4000-8000 [] (e) Greater than GH¢8000 []

12. Is the poultry farm your (a) own [] (b) rented []

B: Knowledge on banking services and access to credit

1. Do you operate account(s) with any financial institution? (a) Yes [] (b) NO []
2. Do you operate account(s) with ADB? (a) Yes [] (b) No []
3. Are you aware that having account(s) is a basic requirement for accessing credit from the bank? (a) Yes [] (b) No []
4. How frequent do you operate/put money in your account(s)? (a) Daily [] (b) Every other day [] (c) Once a week [] (d) Every fortnight [] (e) Occasionally [] (f) Never []
5. Have you ever received training on credit management from your bank? (a) Yes [] (b) No []
6. Have you received any sort of communication regarding your bank's products on Agriculture?
(a) Yes [] (b) No []
7. Are you aware of collateral as a requirement for assessing credit from your bank?
(a) Yes [] (b) No []
8. If 'yes' what is /are your knowledge on collateral requirement(s) for poultry credit? (Tick as many that you are aware) (a) Landed property [] (b) Fixed deposit [] (c) Lien on account deposit [] (d) Treasury bills [] (e) others (specify).....
9. Are you aware that proper bookkeeping is a requirement for getting access to credit?
(a) Yes [] (b) No []
10. If 'yes' do you keep the books? (a) Yes [] (b) No []
11. If 'No' why?
(a) Lack of knowledge [] (b) unavailability of accountants [] (c) too costly to employ [] (d) book keeping do not add value [] (e) Others []

12. Has your bank been playing its advisory role to you? (a) Yes [] (b) No []

C: Trend of poultry credit to farmers in Dormaa Municipality by ADB

1. How many times have you obtained poultry credit from financial institution(s) between 2006 and 2010?

(a) 0 (b) 1 (c) 2 (d) 3 (e) 4 (f) 5

2. Give the name of that financial institution?

3. Within the period under review, what volume of money has been disbursed to you?

(a) GH¢2,000-10,000 (b) GH¢10,001-50,000 (c) GH¢50,001-100,000
(d) GH¢101,000-200,000 (e) Greater than GH¢201,000

4. Within the period under review, have you been able to service all the loan taken from the bank? (a) Yes [] (b) No []

5. If 'No' how many years have the outstanding of the debt been? (a) 1 (b) 2 (c) 3
(d) above 4

6. What problems did you encounter in prompt repayment of the loan(s)? (Tick as many that you are aware of)

- (i) Sudden collapse of market demand []
- (ii) Sudden reduction of production due to diseases []
- (iii) Sudden reduction of production due to disaster []
- (iv) Sudden increase in prices of inputs []
- (v) Sudden collapse of market prices []
- (vi) Refusal of customers or debtors to honour their debt obligations []
- (vii) Theft or pilfering or fraud []
- (viii) Other (specify) []

6. In your view what measures can be taken to address the challenges confronting non prompt repayment of poultry credit?

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

7. How has your inability to repay credit promptly affected your farming activities?

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....
- (vi).....

D: Challenges facing poultry farmers in loan repayment

The following statements describe the challenges farmers face in the production of poultry. Indicate the extent to which you agree or disagree with the statements.

SA: Strongly Agree=4 A: Agree=3 U: Undecided=2 D: Disagree =1 SD: Strongly Disagree=0

No	Statements	SA	A	U	D	SD
I	High interest rates on agric loans					
Ii	High collateral requirement					
Iii	High diversion of credit fund					
Iv	Inadequate knowledge in accounting practices					
V	Natural disasters (rainstorm, bushfires, etc) and diseases					
Vi	Strict management practices(planning, organising, controlling and distribution)					
Vii	Delay in documentation, granting and disbursement of loan to farmers					
viii	Inadequate storage facilities for birds and eggs					
Ix	Limited ready market for poultry products (birds, eggs, etc)					
X	Competition from imported poultry products					
xi	High taxes on local poultry products					
xii	High tariffs on imported poultry inputs (drugs,					

	feeds, etc)					
xiii	Inability of debtors to pay promptly to the farmers					
xiv	Unanticipated seasonal price changes					
xv	Lack of guaranteed/stable market					
xvi	Inefficient farm practices leading to drastic changes in production efficiency					
xvii	Exposed to any form of risk management. e.g. insurance cover					

2. In your view, how can these challenges be addressed?

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....
- (vi).....

E: Impact of agric credit on poultry production

The following statements describe the impact of agric credit on poultry production.

Indicate the extent to which you agree or disagree with the statements.

SA: Strongly Agree=4 A: Agree=3 U: Undecided=2 D: Disagree=1 SD: Strongly Disagree=0

	Statements	SA	A	U	D	SD
I	Expansion of farms					
Ii	Increase profit margins					
Iii	Provide employment to people in the Metropolis					
Iv	Improve nutritional value					
V	Enhanced commercial activities in poultry-related business					
vi	Improvement in living standards					
vii	Enhanced social status					
viii	Improved banking culture					
vix	Improved financial management practices					

2. In what other ways has ADB contributed to the growth and development of Dormaa Municipality in terms of poultry production?

- (i).....
- (ii).....
- (iii).....
- (iv).....

3. How do you rate the performance of ADB to poultry production in the Dormaa Municipality of the Brong Ahafo Region? (a)Excellent [] (b) Very Good [] (c) Good [] (d) Average [] (e) Poor []

- Give reasons (i).....
- (ii).....
- (iii).....
- (iv).....

THANK YOU!!1

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI**

**RESEARCH TOPIC: “THE CONTRIBUTION OF ADB AS A FINANCIAL
INSTITUTION TO THE GROWTH OF THE POULTRY SECTOR, A CASE
OF DORMAA MUNICIPALITY IN THE BRONG AHAFO REGION”**

QUESTIONNAIRE: *(FOR OFFICIALS OF ADB)*

The information requested for in this questionnaire is solely for academic purposes. Your answers would be treated with strict confidentiality and your anonymity is guaranteed. This will be of great help as your response to the questions will enable me make recommendation to improve your core business in the banking sector within the municipality. Do not hesitate to comment on any part of the questionnaire that is not clear to you. Please tick where necessary and comment where available.

Interview No.....

BACKGROUND INFORMATION

1. In which year was the bank established?
2. How old is the Dormaa branch?
3. . Ownership of the bank? (a) Wholly Ghanaian [☐] (b) wholly Foreign
[☐] (c) Ghanaian and foreigners partnership
4. . Currently, how many branches does the bank have?
5. . What is the current work force of the bank?

PERSONAL DATA OF RESPONDENT

1. Sex:

(a) Male ☐

(b) Female ☐

2. Age:

(a) Between 18-30 ☐

(b) Between 31-45 ☐

(c) Between 46-60 ☐

(d) Greater than 61 ☐

3. Level of education:

(a) Basic education/ MSLC ☐

(b) Secondary/ voc/tech education ☐

(c) Tertiary education ☐

(d) Others (specify).....

4. Did you ever study Agriculture Science in any level of your education?

(a) Yes ☐ (b) No ☐

5. If 'Yes' at what highest level of your education did you study Agriculture Science?

(a) Basic education/ MSLC ☐

(b) Secondary/ voc/tech education ☐

(c) Tertiary education ☐

(d) Others (specify)

6. Which of these ethnic groups /zones do you ascribe in Ghana?

(a) Akan ☐

(b) Mole- Dagbani ☐

(c) Ewe ☐

(d) Ga ☐

(e) Others (Specify).....

7. Marital status:

(a) Single [] (b) Married [] (c) Divorced [] (d) Widowed []

A: Knowledge on banking services and access to credit

1. How long have you served in the Dormaa branch?

2. Are the poultry farmers aware that account operation is a basic requirement for accessing credit from the bank? (a) Yes [] (b) No []

3. Are poultry farmers aware that good account turnover is also a requirement for granting credit? (a) Yes [] (b) No []

4. Have farmers been educated by the bank on the culture of savings and its benefit?

(a) Yes [] (b) No []

5. Has the bank offered training on credit to any farming association in the poultry industry?

(a) Yes [] (b) No []

6. If 'Yes', how many times can you remember? (a) 1 (b) 2 (c) 3 (d) 4 (e) above 4

7. Have the bank's products on agriculture been communicated to poultry farmers?

(a) Yes [] (b) No []

8. Has Collateral as a requirement for assessing credit from ADB been communicated to farmers? (a) Yes [] (b) No []

9. If 'Yes' what are the collateral requirement(s) for credit to the poultry sector? (Tick as many that you are aware) (a) Landed property [] (b) Fixed deposit [] (c) Lien on account deposit (d) Treasury bills [] (e) Others (specify).....

10. Are farmers informed that proper book keeping is a requirement for getting access to credit?

(a) Yes [] (b) No []

11. Has the bank been playing its advisory role to farmers? (a) Yes [] (b) No []

B: Challenges facing the bank in loan repayment by poultry farmers

The following statements describe the challenges the bank faces in extending credit for the production of poultry. Indicate the extent to which you agree or disagree with the statements.

SA: Strongly Agree=4 A: Agree=3 U: Undecided=2 D: Disagree =1 SD: Strongly Disagree=0

No	Statements	SA	A	U	D	SD
i	High interest rates on agric loans					
ii	High collateral requirement					
iii	High diversion of credit fund					
iv	Inadequate knowledge in accounting practices					
v	Natural disasters (rainstorm, bushfires, etc) and diseases					
vi	Strict management practices(planning, organising, controlling and distribution)					
vii	Delay in documentation, granting and disbursement of loan to farmers					
viii	Inadequate storage facilities for birds and eggs					
ix	Limited ready market for poultry products (birds,					

	eggs, etc)					
x	Competition from imported poultry products					
xi	High taxes on local poultry products					
xii	High tariffs on imported poultry inputs (drugs, feeds, etc)					
xii	Inability of the debtors to pay farmers promptly					
xiii	Unanticipated seasonal price changes					
xiv	Lack of guaranteed/stable stable					
xv	Inefficient farm practices leading to drastic changes in production efficiency.					
xvi	Farmers exposed to any forms of risk management.eg. insurance cover					

2. What problems does the bank encounter in granting poultry credit to farmers in Dormaa municipality aside the ones mentioned above?

3. What challenges does the bank encounter in repayment of loans from the farmers in Dormaa municipality?

4. Has the farmer's inability to repay credit promptly affected credit delivery to farmers? (a) Yes [] (b) No []

5. If 'Yes', explain how it affects credit?

6. As an official of the bank, how can these challenges faced by granting loans to poultry farmers be addressed?

7. How can the problems identified under the farmers' inability to repay their loans be addressed?

C. Trend of poultry credit from ADB's portfolio and in Dormaa Municipality.

1. As a staff of the bank, would you agree or disagree that credit over the last five (5) years to the poultry industry has improved? (a) Yes [] (b) No []
2. As an official of the bank, would you agree or disagree that the number of farmers who have obtained credit has increased between 2006 and 2010? (a) Yes [] (b) No []
3. Within the period under review, would you agree or disagree that the volume of money disbursed by ADB globally to poultry farmers has increased? (a) Yes [] (b) No []
4. From the global view, would you agree or disagree that Dormaa branch has the largest disbursement on poultry credit? (a) Yes [] (b) No []
5. How would you describe recovery by ADB globally from poultry farmers within the period of review? (a) Bad [] (b) Average [] (c) Good [] (d) Excellent []
6. How would you describe recovery in Dormaa branch from the period under review?
(a) Bad [] (b) No [] (c) Good [] (d) Excellent []

D: Impact of agric credit on poultry production

The following statements describe the impact of agricultural credit on poultry production. Indicate the extent to which you agree or disagree with the statements.

SA: Strongly Agree=4 A: Agree=3 U: Undecided=2 D: Disagree=1 SD: Strongly Disagree=0

	Statements	SA	A	U	D	SD
I	Expansion of farms					
Ii	Increase profit margins					
Iii	Provide employment to people in the Metropolis					
Iv	Improve nutritional value					
v	Enhanced commercial activities in poultry-related business					
vi	Improvement in living standards					
vii	Enhanced social status					
viii	Improved banking culture					
ix	Improved financial management practises					

2. In which other ways has ADB contributed to the growth and development of Dormaa Municipality in terms of poultry production?

- (i).....
(ii).....
(iii).....

3. In your view, is your bank, ADB, doing enough to promote poultry production in the Dormaa Municipality in the Brong Ahafo Region? (a) Yes [] (b)

No []

- Give reasons (i).....
(ii).....
(iii).....
(iv).....

THANK YOU VERY MUCH!!!

Table 4.1 Age of respondents

	Frequency	Percent
below 30yrs	3	2.7
30-50yrs	92	83.6
50-60yrs	13	11.8
above 60yrs	2	1.8
Total	110	100.0

Source: Field Survey, (2011)

Table 4.2: Level of Education of Respondents

	Frequency		Valid	Cumulative
No formal education	3	2.7	2.7	2.7
basic/MSLC	35	31.8	31.8	34.5
sec/voc/tech education	61	55.5	55.5	90.0
tertiary education	11	10.0	10.0	100.0
Total	110	100.0	100.0	

Source: Field Survey, (2011)

Table 4.3:Location of Farms

Location	Frequency		Valid	Cumulative
Masu road	13	11.8	11.8	11.8
Dormaa township	33	30.0	30.0	41.8
Gonokrom road	21	19.1	19.1	60.9
Aboabo road	17	15.5	15.5	76.4
Kyeremasu road	23	20.9	20.9	97.3
Nkrankwanta road	3	2.7	2.7	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)

Table 4.4: Monthly income earner/ salary workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	14	12.7	12.7	12.7
no	96	87.3	87.3	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)**Table 4.5: Income brackets per month of salary earners**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid GH¢ 100-400	6	5.5	42.9	42.9
GH¢ 400-800	6	5.5	42.9	85.7
GH¢ 800-1200	2	1.8	14.3	100.0
Total	14	12.7	100.0	
Missing System	96	87.3		
Total	110	100.0		

Source: Field Survey (2011)**Table 4.6: Profits realised from the farm proceeds**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	97	88.2	88.2	88.2
no	13	11.8	11.8	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)

Table 4.7: Profit brackets per month from farm proceeds

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than GHC 1000	18	16.4	16.4	16.4
GHC 1000-2000	38	34.5	34.5	50.9
GHC 2000-4000	27	24.5	24.5	75.5
GHC 4000-8000	4	3.6	3.6	79.1
Above GHC 8000	23	20.9	20.9	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)**Table 4.3e Training on Credit Management from Banks**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	41	37.3	37.3	37.3
No	69	62.7	62.7	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)**Table 4.3f Communication on Bank's Products on Agriculture**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	71	64.5	64.5	64.5
No	39	35.5	35.5	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)

Table 4.3g Collateral Requirement for Credit Accessibility

COLLATERAL	NUMBER/PERCENTAGE
Landed property	105 (95.5%)
Fixed deposit	52 (47.3%)
Lien on account deposit	22 (20%)
Treasury bills	10 (9.10%)
Other(specify)	1 (0.9%)

Source: Field Survey, (2011)

Table 4.4a Sources of Accessing loans

	Freque ncy	Percent	Valid Percent	Cumulative Percent
ADB	45	40.9	55.6	55.6
NIB	7	6.4	8.6	64.2
GCB	9	8.2	11.1	75.3
BBG	3	2.7	3.7	79.0
SGSSB	1	.9	1.2	80.2
RURAL BANKS	1	.9	1.2	81.5
PRO-CREDIT	12	10.9	14.8	96.3
ADB AND OTHER FINANCIAL INSTITUTION	3	2.7	3.7	100.0
Total	81	73.6	100.0	
Missin g	29	26.4		
Total	110	100.0		

Source: Field Survey (2011)

Table 4.5c: Summarized Challenges facing Poultry farmers in loan Repayment

Strongly Agree	44.28%
Agree	28.03%
Undecided	13.48%
Disagree	10.10%
Strongly Disagree	4.11%

Source: Field Survey, (2011)

Table 4.6b: Summarized Effect of Agric. Credit on Poultry Industry

Strongly Agree	64.24%
Agree	27.80%
Undecided	5.76%
Disagree	1.90%
Strongly Disagree	0.30%

Source: Field Survey, (2011)

Table 4.6d The Contribution of ADB to the Growth and Development in Dormaa.

No.	ACTION	Number/Percentages
1.	Granting of loans	98(89.1%)
2.	Improvement on the standard of living of customers	62(56.4%)
3.	Offering of banking service via modern network system	63(57.3%)
4.	Job/wealth creation via related poultry businesses	61(55.5%)
5.	Investment training to farmers	49(44.5%)
6.	Sponsoring of agricultural related activities	37(33.6%)

Source: Field Survey (2011)

Table 4.6e Performance of ADB to Poultry Production in the Dormaa Municipality

	Frequency	Percent	Valid Percent	Cumulative Percent
excellent	6	5.5	5.5	5.5
very good	50	45.5	45.5	50.9
good	30	27.3	27.3	78.2
average	20	18.2	18.2	96.4
poor	4	3.6	3.6	100.0
Total	110	100.0	100.0	

Source: Field Survey (2011)

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