ACQUISITION AND UTILIZATION OF AGRICULTURAL CREDITS BY POULTRY FARMERS IN EDO SOUTH AGRO-ECOLOGICAL ZONE, EDO STATE, NIGERIA

BY

Olamibo Lydia AWOSIKA(Miss)

AGR1600018

DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES
FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN
BENIN CITY

JANUARY, 2023

ACQUISITION AND UTILIZATION OF AGRICULTURAL CREDITS BY POULTRY FARMERS IN EDO SOUTH AGRO-ECOLOGICAL ZONE, EDO STATE, NIGERIA

BY

Olamibo Lydia AWOSIKA (Miss)
AGR1600018

A PROJECT SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES, UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF AGRICULTURE OPTION: (AGRICULTURAL ECONOMICS AND EXTENSION SERVICES)

JANUARY, 2023

CERTIFICATION

This is to certify that this research work was carried out by **Olamibo Lydia AWOSIKA** of the Department of Agricultural Economics and Extension services, faculty of agriculture, university of Benin, and that the research was approved as adequate in scope and quality for the partial fulfillment of the award of the bachelor of Agriculture (B. Agric).

Dr. (Mrs.) B.O. Izekor
(Project Supervisor)

Date: ——————

Dr. (Mrs.) M. J. Koyenikan
(Head of Department)

Date: ——————

DEDICATION

This project is dedicated to God almighty for his infinite mercies who has always being there for me.

ACKNOWLEDGEMENTS

My utmost appreciation goes to God for making this day a reality; seeing me through my undergraduate program, for His provision, protection, sustenance, deliverance from all danger through my stay in school and more so, keeping me alive to witness this day when there were times I thought I wouldn't make it. Thank you Father.

I would like to acknowledge my supervisor, Dr. (Mrs.) B. O. Izekor for guiding me through this research. I appreciate her commitment in taking time out of her busy schedule to pay detailed attention to this work, making corrections and invaluable contributions, ensuring that this work is a success.

Special thanks goes to the Head of Department, Dr. Mrs. M.J. Koyenikan, to my course adviser Dr. S.O Konkwo, Prof. E.R. Orhue and to the lecturers in the Department of Agricultural economics and extension, Prof. C.I Ada Okungbowa, Dr. O. Ojogho, Prof. D. U. Okoedo-Okojie, Prof. C.O Emokaro, Dr. John Ahmadu, Mr. O. Igbinidu, Mr. A. O. Ehigie, Mr. G. U. Uwana, Prof. C. O. Egonmwan, Dr. J. I. Osabuohien for their advice and tutorage towards the academic pursuit of my undergraduate program and their roles in shaping me as a student.

In a very special way, I will also like to acknowledge my mother, Mrs. Olatunde Awosika, my siblings and Soretire Ayomide, Olakunde Tomilola, Ozah Joseph Chinedu, Chialu Fidel, for all their support and encouragement throughout my academic journey.

TABLE OF CONTENTS

4.3 Source of credits and amount - - - - - - - 29

LIST OF TABLES

ABSTRACT

This study examined the acquisition and utilization of agricultural credits by poultry farmers in edo south agroecological zone of Edo state. The specific objectives were to examine the socioeconomic characteristics of the respondents in the study area, to examine the major sources and amount of agricultural credit to poultry farmers in the study area, to ascertain the uses in which the accessed credit was put into in the study area, compare production level and profitability between beneficiaries and non-beneficiaries of credit in the study area. Other objectives were to identify the determinant to the access and utilization to credit of poultry farmers as well as to examine the constraints faced by poultry farmers in acquiring and utilizing agricultural credit.

A three stage selection technique was employed in this study. Data for this study were obtained from both primary and secondary sources. Primary data were obtained through the use of structured questionnaire administered through interview schedule to one hundred and twenty (120) randomly selected respondents from the study area and ninety-six (96) were retrieved for analysis. Data obtained were analyzed using descriptive statistics, regression analysis and students' t-test.

Results from the descriptive statistic showed that majority of the respondents were male (65.6%), and large percentage were married (53.1%). The mean age and mean household size were 42.0 years and 4.5 members respectively. The result also showed 95.9% of the respondents had between primary to tertiary education, while about 4.1% had no formal education. The result also showed that majority (79.1%) of poultry farmers had other source of income. The result showed that 93.8% of the poultry farmers in the study area had years of experience between 0 to 10 years. The results showed that minority (31.3%) of the poultry farmers in the study have benefitted from agricultural credit at an average amount of N159,166.67, mostly from cooperatives and that credit acquired was used for agricultural production activities with feed being the most utilized for at 63.5% with a mean amount of N109,600.00. The credit utilized had significant effect (difference is at a level of 5% using the t-test) on the production level and profitability of the beneficiaries. Result from the multiple regression analysis revealed that age, education level and marital status were significant predictors of farmers to acquire agricultural credit. The problems encountered by the farmers in acquiring credit included high interest rates, lack of

collateral and demand for guarantor amongst others. The significance of acquired credit on the production level and profitability of beneficiaries of credits further reveals its importance in the production activities of small scale farmers and as such efforts should be made by the government and non-institutional sources to ensure that rural farmers have access to adequate credit facilities in order to increase their farm income.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Poultry are domesticated birds kept by humans for their eggs, their meat or their feathers. Poultry is one of the most important agricultural businesses providing ready cash in emergency needs as well as an important source of protein for consumers. Its role in rural livelihoods and food security is enormous especially in bridging the protein gap in Nigeria (Nimoh *et al*, 2011). This production system is evolutionary, responding to population pressure, resource endowment and marketing opportunities.

Agricultural credits are loans obtained by a farmer to start or expand his farming business. It may be in kind or cash. Credit is the use of or possession of goods and services without immediate payment. Credit provides a means of transfer of assets and wealth or the use of them through an individual or organization to improve quality and quantity of agricultural production. Availability of credit is a major determinant of scale of agricultural production, adoption of modern technology, ability to purchase modern inputs and induces farmers to take risks (Ijioma and Osondu, 2015). Thus, the ability to repay loans qualified the farmers to obtain more loans from lending institutions.

Majority of poultry farmers lack adequate funding to purchase all inputs necessary for their enterprise, therefore, they need credit facilities. These credit facilities are sourced from banks, cooperative societies, agricultural lending institutions, Esusu and thrifts associations etc, on agreement to pay back with interest within a specified period.

In some literature, it is states that increasing agricultural productivity requires adequate capital accumulation. Therefore, providing credit to farm households, especially small scale farmers who have limited financial resources, is an essential requirment. Credit can increase the financial capability of farmers to allocate more resources, to adopt better technology and invest more profitably. Agricultural credit is considered essential to the process of improving agriculture and transformation of the rural economy. The argument is that the agricultural sector depends more on credit than any other sector of the economy because of the seasonal variations in the farmer's returns and credit requirement in the transformation of subsistence to commercial farming. Credit provides the opportunity for the farmer to earn more money and improve on their standard of living (Mahmood et al, 2009 and Olagunju, 2010). Credit in the hands of poor farmers will enable him reap the economies of scale, discover new and cheaper products, create demands where none exists and provide utilities to satisfy a wider market.

1.2 Statement of Problems

Finance is an indispensable factor of production. This is true particularly with regards to agriculture. Finance could in fact, be seen as the main factor as it is used to purchase other factors of production such as land, labour and management. Small holder farmers face various challenges in production, one of them being inaccessibility to credit which hinders their acquisition of the required inputs to increase their output (Debertin, 2012).

According to Babajide (2020), farmers are the largest group of financially excluded persons in Nigeria, thereby highlighting the supply shortfall in finance to agriculture in Nigeria and financial intermediaries are continually faced with with challenges in providing financial services to the agricultural sector. In view of the reluctance of formal financial institutions to enter rural markets because of the high cost and risk of doing business in harsh economic and

physical environments, informal financial institutions emerged, but typically they are only able to offer a narrow range of financial services in a small geographic area.

This study aims to investigate the acquisition and utilization of credit obtained for financing poultry production in Edo-south, Edo state.

From the background of the study, these few questions were generated to guide the study;

1. What are the socio-economic characteristics of poultry farmers in the study area?
2. What are the major sources and volume of agricultural credit to poultry farmers in the study area?
3. How was the accessed credit used by poultry farmers in the study area?
4. What are the significant difference in production level and profitability between poultry farmer beneficiaries and non-beneficiaries of credit in the study area.
5. What are the determinants to the access and utilization of credit by poutry farmers in the study area?
6. What are the constraints faced by poultry farmers in acquiring and utilizing agricultural credit?

1.3 Objectives of the Study

The general objectives of this study are to examine the acquisition and utilization of credits by poultry farmers in Edo-south, Edo state, Nigeria. The specific objectives include to;

1. describe the socio-economic characteristics of poultry farmers in the study area.
2. identify the sources and amount of credit accessed by poultry farmers in the study area.
3. ascertain the uses in which the accessed credit was put into in the study area.

4. compare production level and profitability between beneficiaries and non-beneficiaries of credit in the study area.
5. identify the determinant to the access and utilization to credit of poultry farmers.
6. examine the constraints faced by poultry farmers in acquiring and utilizing agricultural credit.

1.4 Justification of the Study

Several researches have been carried out as related to poultry farming. Authors such as Effiong & Konye, (2017) conducted research on Comparative Analysis of the Effect of Agricultural Credit on Small Scale Poultry Enterprise in Owerri Agricultural zone, South Eastern, Nigeria. This study compared the effect of agricultural credit on beneficiaries and non-beneficiaries among small scale poultry enterprise operators in Owerri Agricultural Zone. It found that loan beneficiaries accessed their loans from isusu clubs owing to absence of stringent conditionalities and affordable interest rates hence their acquired input and production output was significantly higher than those of non-loan beneficiaries. Loan beneficiaries earned an annual gross margin of N365,800 and net production income of N358,300 while non-beneficiaries earned N117,280 and N113,880 as annual gross margin and net production income respectively.

Fred Nimoh, Enoch Kwame Tham-Agyekum, Maxwell Seth (2013) Awuku Factors Influencing Access of Poultry Farmers to Credit: The Case of the Agricultural Development Bank (ADB) in Ga East Municipality, Ghana. This study investigated the factors influencing poultry farmers' access to credit with particular reference to the Agricultural Develop ment Bank (ADB) in the Ga-East Municipality and found that among the characteristics that significantly influenced access to credit were age, secondary occupation, market turnover, and FBO membership of poultry farmers. An increase in age will decrease the probability of a poultry farmer to access

credit, on the other hand one's desire for credit increases with his/her occupation and finally, that there's a direct relationship between market turnover and FBO membership to access to ADB's credit.

But little attention has been paid on aquisition of credits by poultry farmers and how these credits were utilized to enhance the productivity of poultry business. It is the desire to fill this gap in knowledge that this work was undertaken.

This study will be useful in awakening the minds of poultry farmers on credit availability, credit acquisition and institutions that offer these credits. Some poultry farmers are totally ignorant to credit acquisition; therefore study is being carried out to create awareness to credit acquisition to the poultry enterprise to enhance production.

This study will also be useful to educate poultry farmers on the deteminants to credits acquisition.

This study will be useful in educating poultry farmers on how agricultural credits has been utilized by others farmers and also will educate poultry farmer and agricultural enterprises in general on the benefits of agricultural credits to production.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Poultry farming

The word "poultry" comes from the French/Norman word *poule*, itself derived from the Latin word *pullus*, which means small animal. Poultry farming is the raising of certain species of birds for the purpose of human use. They are domesticated birds kept by humans for their eggs, their meat, and their feathers and also for intelligence purpose. The word "poultry" comes from the French/Norman word *poule*, itself derived from the Latin word *pullus*, which means small animal.

Not all birds are kept for poultry by farmers because not all birds are desired for their meat, eggs etc. The aim purpose of rearing birds is to sell them and make profit. Therefore, farmers keep birds that are desirable so that diners can buy and enjoy their delicacy. The following birds are common birds reared by poultry farmers. They include; chicken, turkey, duck and geese, guinea fowl and squab etc.

2.2 Types of poultry birds

There are two main types of poultry birds: the broiler birds and the laying birds

2.2.1 Broiler birds

These chickens are raised to be slaughtered and eaten. Some of the most popular breeds of broiler chickens grow so quickly that they reach an average slaughter weight of 6.2 pounds in just a matter of weeks. During the 1950s chickens were not slaughtered until a week later and weighed on average only 2.2 pounds.

2.2.2 Laying birds

Laying hens are those that are raised to produce eggs. These hens often spend their lives in cages barely larger than they are. During their short life of 72 weeks, birds lay upwards of 320 eggs. This is despite their ability to live much longer productive lives of roughly four years if left to lay at a slower, more natural rate.

2.3 Poultry production system.

The productive systems where birds are housed can be of three types. Intensive, semi-intensive and extensive production systems (Buitrago and Forero, 2016).

2.3.1 Intensive (or cage) production system

The intensive system comes with high level of investment to be made on infrastructure. This is one of the constraints for low-scale production. The cost of the installations is high and mostly large-scale productions use this system due to their required economic injection.

Some advantages of this system include its outstanding feature is its high production rates, with a production of up to 300 eggs/bird/year. Birds grow faster and have better feed conversion rates. Also, drastic decrease in losses due to theft or predators in the area, which is a prevalent problem in other system, is controlled (Castellon et al, 2012).

2.3.2 Semi-intensive (or flooring) production system

The semi-intensive or floor system is an intermediate type of production compared to the others. For example, the cost of infrastructure is moderate. Birds will have both available grazing space and facilities to provide cover, perches, feeders, and troughs. This translates into a moderate labor demand, as it requires people to maintain facilities and bird management.

2.3.3 Extensive (or grazing) production system

In the extensive system, the investment to be made in infrastructure is low because birds remain outdoors. They just need a clean grazing area, free of dirt or foreign materials. This type of system guarantees the freedoms and animal welfare of birds, allowing their natural behavior. Consumers have better perception for the products produced in this type of systems. It also requires little manpower due to the low infrastructure required in this system. Added to this, the cost of food is also considered better as birds ingest food from the environment (Villanueva et al, 2015).

2.4 Poultry Diseases

Certain diseases have the potential to decimate a region's poultry industry. When such disease strikes, quarantine is usually place in the region. Diseases can be spread by direct contact (bird to bird), indirect contact (contaminated equipment, water or feed) and through vectors (Indiana state poultry association, 2021). These are some of the diseases of poultry birds.

2.4.1 Newcastle disease

Newcastle disease is a highly contagious disease of birds caused by a para-myxo virus. Birds affected by this disease are fowls, turkeys, geese, ducks, pheasants, partridges, guinea fowl and other wild and captive birds, including ratites such ostriches, emus and rhea.

The disease can be present in a very acute form with sudden onset and high mortality or as a mild disease with respiratory distress or a drop in egg production as the only detectable clinical signs. The main signs are sneezing, nasal discharge, coughing, greenish watery diarrhea, depression, muscular tremors, drooping wings, complete paralysis, swelling of the tissues around the eyes and in the neck, sudden death, increased death loss in a flock and partial to complete

drop in egg production; and production of thin-shelled eggs in laying birds (Agriculture and rural economy directorate, 2018).

2.4.2 Fowl pox disease

Fowl pox is a slow-spreading viral infection of chickens and turkeys characterized by proliferative lesions in the skin that progress to thick scabs (cutaneous form) and by lesions in the upper GI and respiratory tracts (diphtheritic form). Virulent strains may cause lesions in the internal organs (systemic form). Vaccination can prevent the disease and limit the spread in affected flocks (Tripathy, 2022).

2.4.3 Gumboro disease

Gumboro disease also known as Infectious Bursal Disease (IBD), is a virus that penetrates the chickens through the oral route and within a few hours is detected in the macrophages and lymphoid cells of the digestive tract, including the caeca, the duodenum, the jejunum, and the liver. Gumboro disease can harm poultry performance in different ways depending when and how it occurs. It can affect not just the field performance, but also the slaughterhouse performance, impacting directly on the profits of the poultry production. Vaccination can prevent the disease and limit the spread in affected flocks (Lopes, 2020).

2.4.4 Marek Disease

Marek disease (or 'fowl paralysis') is a very common disease of chickens caused by a herpes virus. Marek disease affects both commercial and backyard poultry and may result in death or severe production loss. The disease causes changes in many of the nerves and may cause tumors in major internal organs. There is no treatment for Marek disease. Diseased birds should be promptly removed from the flock and humanely destroyed. Other birds in the flock are likely to

be infected at this stage also, so close monitoring of all birds is important (Department of natural resources and environment Tasmania, 2022).

2.5 Credits

Credit is obtaining control over the use of money at the present time in exchange for a promise to repay it at some future time. Credit is also defined as a device for facilitating the temporary transfer of purchasing power from those who have surpluses of it to those who are in need of it. Thus, credit involves a temporary transfer of wealth. Access to basic loan is a necessary condition for economic development, as credit provision smooth consumption and sustains entrepreneurship (Agarwal, 2019).

2.5.1 Types of credit

There are three main types of credits. They include revolving credit, installment and open credit.

2.5.2 Revolving credit

This is one type of credit that comes with a capped limit and can be used up until you reach the predetermined threshold. It may include regular minimum payments, but usually, there is not a fixed repayment schedule. An example would be a credit card as there is a capped limit (the credit card limit), and you can keep using it until you reach such a limit.

2.5.3 Installment

Installment loans are another type of credit that includes a fixed payment schedule for a specified duration. An example of an installment loan would be a car loan. You are required to pay a set amount of money at a recurring interval (ex. N500,000 per month) until the loan is paid off in full. Other examples include mortgages, student loans, and term loans.

2.5.4 Open credit

Open credit is a type of credit that requires full payment for each period, such as per month. You can borrow up to a maximum amount, similar to a credit card limit, but you are required to pay the funds borrowed in full at the end of each period. An example of this would be a cellphone bill. You can make phone calls, send text messages, and use data each month, and at the end of the month, you are required to pay for the services you used.

2.6 Agricultural Credits

Agricultural credits are loans obtained by a farmer to start or expand his farming business. It may be in kind or cash. Agricultural credit can also be said to be amount of investment funds made available for agricultural production from resource outside the farm sector. Credit provides a means of transfer of assets and wealth or the use of them through an individual or organization to improve quality and quantity of agricultural production.

2.7 Acquisition and Utilization of Agricultural credits

2.7.1 Acquisition of Agricultural credits

According to the oxford dictionary, acquisition is the process of buying or obtaining an asset or an object. Therefore, acquisition of agricultural credits involves the process of obtaining agricultural credits by farmers from sources outside the farm sector.

2.7.2 Utilization of Agricultural credits

According to the oxford dictionary, utilization is the action of making practical and effective use of something. Therefore, utilization of agricultural credits is practical and effective use of agricultural credits obtained by farmers.

2.8 Sources of Agricultural credits

Sources of Agricultural credits can be classified into two agencies. Non-institutional and Institutional credit agencies (Evbuomwan et al, 2015).

2.8.1 Non-institutional credit agencies

Money lenders, traders, commission agents, landlords, friends, relatives are the various entities who provide non institutional credit. The agriculture credit provided by these people are known as non-institutional sources of credit.

Traders and commission agents

Advance loans are provided to agriculturists for productive functions next to their crop. It usually becomes obligatory for farmers to buy the inputs and put up for sale production all the way through them. They indict elevated rate of interest on the advance credit and a charge on the wholesale and acquires, creating it exploitive in nature.

Landlords

Predominantly small farmers and tenants depend on landlords for gathering their manufacture and day to day financial requirements.

Money lenders

Despite fast expansion in rural branches of various institutional credit agencies, village money lenders still dictate the outlook. Money lenders are there of two types:

i. Agriculturist money lenders who unite their funds providing job among farming and

ii. Professional money lenders whose only job is money lending.

2.8.2 Institutional credit agencies

The agriculture credit that is available by the government institutions are called as institutional credit. Cooperative banks, commercial banks, agricultural banks are included into the institutional sources of credit.

Agunuwa et al (2015) conducted a study to examine the impact of commercial banks' credits on agricultural productivity in Nigeria using the statistical tool of Ordinary Least Squares (OLS) techniques reveals find a positive relationship between commercial banks' credit and agricultural productivity.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Study Area and Scope of Study

Edo south agro ecological zone is one of the three (3) agro ecological zones in Edo state. Edo south agro ecological zone comprises of the rain forest, with some mangrove swamp. This zone is endowed with favorable climatic conditions and ecological conditions that have given ground to a blossoming agricultural sector and enjoys almost nine months of rainfall. Many poultry activities are being carried out in this agro ecological zone but little of other livestock production. Edo south agro ecological zone comprises of seven (7) local governments area which include Oredo, Ovia South West, Egor, Ovia North East, Orhionmwon, Ikpoba Okha and Uhunmwode local government areas, with Oredo LGA as its headquarters.

3.2 Sampling Technique and Sample Size

A three stage sampling techniques will be employed. The first stage will involve a purposive selection of four (4) local government areas from the study area, Edo south. They include; Oredo, Ovia North East, Ovia South West and Ikpoba Okha Local Government Areas.

In the second stage will involve a purposive selection of two (2) communities each from the selected local government areas, making it a total of eight (8) communities. The communities selected are: Ekehuan and Etete in Oredo, Okada and Oluku in Ovia North East, Iguoba-Zuwa and Ofunama in Ovia South West and Idogbo and Aduwawa in Ikpoba Okha.

The third stage will be a simple random selection of fifteen (15) poultry farmers from each of the communities selected, making a total of 120 poultry farmers.

3.3 Instrument for Data Collection

Data used for the Study will be obtained through primary and secondary sources. The primary data will be obtained through the use of personally administered questionnaire of about 120 copies through field survey and interview of the respondents in the study area. The secondary data will be from literature works and existing documents such as text books, journals, e-books and relevant literatures.

3.4 Measurement of Variables

The following variables will be measured:

Quantitative Variables

1. Farming experience (years)

2. Age (years)

3. Money value (Naira)

4. Household size (Number of persons the farmer feeds in the household)

5. Farm size (Number of birds owned)

Qualitative Variables

1. Sex (male=1, female =2)

2. Marital status (Single=1, Married =2, Widowed=3, Divorced =4)

3. Education Qualification (No formal education =1, Primary =2, Secondary =3, Tertiary =4)

4. Area of specialization (Layers=1, Broilers =2)

5. Extension agent visitation (Yes=1, No=2)

6. Purpose of production (consumption =1, sales=2, both=3)

7. Nature of production (full-time =1, part-time =2)

8. Formal training (Yes=1, No=2)

9. Source of input (self=1, Government =2, Market =3, Industries =4, Friends =5, Cooperatives =6, other=7)

3.5 Data Analysis

Objective 1: The respondents' socioeconomic characteristics will be analysed using simple descriptive statistics such as frequency count, mean and percentages.

Objective 2: The sources and amount of credit accessed by the respondents will be obtained from the use of questionnaire and will be analysed using descriptive statistics such as frequency count, mean and percentages.

Amount of credits acquired: The respondents will be asked to state the amount of credits which they have had access to in naira (N)

Objective 3: The utilization the acquired credits by the respondents will be obtained from the use of questionnaire and interview schedule and will be analyzed using descriptive statistics such as frequency count, means and percentages.

Objective 4: The production level and profitability between poultry respondents that are beneficiaries and those that have not benefitted from credits will be obtained from the use of questionnaire and interview schedule and will be analysed using students t-test and profitability analysis.

Profitability analysis

Profitability analysis will be used to establish enterprise profitability. The method is stated as:

$GM = TR - TVC$

$\pi = TR - TC\ (TVC+TFC)$

Where,

GM = Gross Margin (N)

TR = Total Revenue (N)

TVC = Total Variable Cost (N)

π = Profit

TC = Total Cost (N)

Students' T-test

Students' T-test will be used to test the significance of mean values of the profit made by poultry farmers that are credit beneficiaries and non-credit beneficiaries. The student t-test statistic is given as:

$$t = \frac{(\dot{x}1 - \dot{x}2)}{\sqrt{\frac{(s_1)^2}{n_1} + \frac{(s_2)^2}{n_2}}}$$

Where,

ẋ1= Mean of farmers that acquired credit

ẋ2=Mean of farmers without credit

n1= Sample size for farmers that acquired credit

n2=Sample size for farmers without credit

s1= Variance for farmers that acquired credit

s2= Variance for farmers without credit

t= estimated t-values

Objective 5: Determinants to the acquisition of agricultural credits will be ascertained by the use of multiple regression.

$Y = b_0 + b_1X_1 + b_2X_2 + \ldots b_nX_n$

Where

Y = Credit acquisition

X_1 = Sex

X_2 = Age

X_3 = Educational level

X_4 = Household size

X_5 = Marital status

X_6 = Farming experience

X_7 = Farm size

X_8 = Extension agent visitation

X_9 = Formal training

Objective 6: The constraints faced by the respondents in acquiring agricultural credit will be obtained from the use of questionnaire and interview schedule. This will be measured on a 5-point likert scale with very serious = 5, serious = 4, moderately serious = 3, least serious = 2, not serious = 1. A mean of ≥ 3 will be considered serious and < 3 is not serious.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Socio-economic characteristics

4.1.1 Gender

Data in Table 1 show that about 65.6% of the poultry farmers in the study area were male while only 34.4% were female. Although, this study is not gender based, the result indicates the fact that males in the study area had greater access to production resources. The fact that men dominance is recorded in this research implies that the findings fall within the apriori expectation in the Nigerian context of farming operation (Asogwa et al, 2014).

4.1.2 Age

It was observed that the mean age of the respondents sampled and interview for this study was approximately 42 years where most of them (55.1%) were found within the age bracket of 30 to 49 years and only 17.7% were below 30 years and 29.2% were found within the age range of 50 years and above. The implication of this result is that poultry farming in the area was dominated by young people, who are energetic enough to withstand the stress involved in poultry farm operations.

4.1.3 Marital Status

Furthermore, results in Table 1 show that 31.3% of the sampled respondents were unmarried, while majority (53.1%) were married and only 7.3% and 8.3% were divorced and widowed/widowers, respectively. This means that most of the respondents were married and being married is associated with being responsible in catering for the needs of the family.

4.1.4 Household size

Results also show that about 27.1% of the poultry farmers had a household size of less than 4 persons, 63.6% had between 4 and 7 persons while only 9.4% had their household size as 8 persons and above. The mean household size was found as approximately 5 persons per household. This means that sampled respondents had relatively average household size that ranges between 4 and 5 persons; this will help the farmers not to spend much money hiring labourers. This result is in agreement with Osondu et al (2014), who stated that in the presence of constraints to farm labour availability, large households tend to use family members as sources of labour. Large households, whose labour is fully employed for agricultural production, would contribute to labour input for increase and sustainable production. In this case, credit obtained could be efficiently utilized.

4.1.5 Level of education

Based on the findings from the study, it was observed that about 4.1% of the poultry farmers had no formal education, only 7.3% had primary education, 17.7% had secondary education, while about 70.8% of the poultry farmers in the study area had tertiary education. This means that only very few (4.1%) of the respondents were not education while majority (95.9%) had between primary to tertiary education. This could be linked with the study of Ijioma and Osondu (2015) which stated that the majority of these respondents will be articulate enough in their decision making process, managerial skills and high level of awareness of credit facilities, for increased, sustainable and profitable production.

4.1.6 **Farming experience**

Result from table 1 showed that 1% and 5.2% of poultry farmers in the study area had farming experience of above 15 years and between 10 and 14 years respectively. 27.1% had between 5 and 10 years of experience, while majority (66.7%), had years of experience below 5 years. This means that 93.8% of the poultry farmers in the study area had years of experience between 0 to 10 years. This therefore implies that most of these respondents have little knowledge on poultry farming and may not make efficient use of credit facilities.

Table 1: Socio-economic characteristics

Gender	**Freq**	**%**	**Mean**	**Std. Dev**
Male	63	65.6		
Female	33	34.4		
Age in years				
<30.00	17	17.7		
30.00 - 39.00	26	27.1		
40.00 - 49.00	25	26	42.0	10.8
50.00+	28	29.2		
Marital status				
Single	30	31.3		
Married	51	53.1		
Widow/Widower	8	8.3		
Divorced	7	7.3		
Household size				
<4.00	26	27.1		
4.00 - 5.00	47	49	4.5	1.8
6.00 - 7.00	14	14.6		
8.00+	9	9.4		
Level of Education				
No formal education	4	4.1		
Primary school	7	7.3		
Secondary school	17	17.7		
Tertiary	68	70.8		
Farming experience				
<5.00	64	66.7		
5.00 - 9.99	26	27.1		
10.00 - 14.99	5	5.2	4.3	3.0
15.00+	1	1		

Source: Field Survey, 2022.

4.2 Production system

Results from Table 2 showed that majority (62.7%) of the poultry farmers in the study area specialized in egg production, while 37.5% specialized in broiler production. The table also showed that 14.6% and 15.6% of the poultry farmer practice poultry farming for the purpose of consumption and sales respectively, while majority (69.8%) practice poultry farming for the purpose of both consumption and sales. The result also showed that 50.0% of the poultry farmer practice poultry farming fulltime and 50.0% also practice part-time. This means that farmer have other sources of income.

Table 2 further indicates that 2.1% and 9.4% of the poultry farmers in the study had between 500 to 899 birds and above 900 birds respectively, while 38.5% has below 100 birds and 50% of the poultry farmers had between 100 to 499 birds. This implies that most of the poultry farmers were small scale farmers. The table also showed that 3.1% of the poultry farmers got their input from the government, 13.5% got their input from agricultural industries such as Capable Bird Feeds and Tiscul Farm Poultry, to ensure healthy and better breeds of birds and quality feeds, 20.8% produced some of their inputs themselves like feed formulation while majority (62.5%) got their inputs from the market.

Table 2 further indicates that majority (70.8%) did not undergo any formal training on poultry production; they practice poultry farming using informal learning like from family and friends, while only 29.2% went through formal training to practice poultry production. Also, result showed that only 27.1% had been visited by an extension agent, while majority (72.9%) had not come a crossed any extension worker.

The results also showed that only 11.5% of the poultry farmer used only hired labour, 38.5% used both hired and family labour while 50.0% used only family labour. From the study, results show that majority of the poultry farmers practice small scale farming. In small scale farming, labour, most of the time is provided by members of the household (Ijioma and Osondu, 2015).

Table 2: Production system

Variables	Freq.	%	Mean	Std. Dev.
Area of specialization				
Broiler production	36	37.5		
Egg production	60	62.5		
Purpose of production				
Consumption	14	14.6		
Sales	15	15.6		
Both	67	69.8		
Nature of production				
Fulltime	48	50		
Part-time	48	50		
Number of birds				
<100.00	37	38.5		
100.00 - 499.00	48	50	190.44	16.61
500.00 - 899.00	9	9.4		
900.00+	2	2.1		
Source of inputs				
Self	20	20.8		
Government	3	3.1		
Market	60	62.5		
Industries	13	13.5		
Did you undergo any formal training on poultry production				
Yes	28	29.2		
No	68	70.8		
Have you ever been visited by an extension agent				
Yes	26	27.1		
No	70	72.9		
What kind of labour do you use?				
Family	48	50		
Hired	11	11.5		
Both	37	38.5		

Source: Field survey, 2022

4.3 Source of credits and amount of credit acquired

The results from Table 3 showed that majority (68.7%) of the poultry farmers in the study have not benefitted from any agricultural credit, while only 31.3% have benefitted. The results also showed that 1.0% and 3.1% of the farmers got their credits from government agriculture loan and commercial banks respectively, 10.4% got credits from microfinance banks and 16.7% got credits from cooperatives. The implication is that the major sources of credit among the respondents were co-operative societies, which are non-institutional credit sources (Warren and William, 2011). Credit from non-institutional sources is more attractive, because there is little or no insistence on collateral security. On the other hand, formal sources of credit had low patronage from the farmers, which may be due to lack or limited presence of banks in the study area coupled with delay in approval and disbursement of loan and insistence on collateral security. This confirms the study of Udih (2014).

The table further showed that the amount of credit applied for was usually the amount of credit received with a mean amount of N159,166.67 with a standard deviation of N88,292.23. The mean interest rate on credit was 15.3%, with a mean repayment period of 8.6 months. The results also showed that the time given to the farmers to pay back the loan was enough for them to pay back. This implies that poultry farmers had access to credit and that the credit are with relatively high interest rates.

Table 3: Credit sources and amount of credit

Variables	Freq	%	Mean	Std. Dev
How you ever benefitted from any agricultural credit?				
Yes	30	31.3		
No	66	68.7		
Source of credit				
Cooperatives	16	16.7		
Commercial banks	3	3.1		
Microfinance banks	10	10.4		
Government agriculture loans	1	1		
What was the amount of credit applied for?			159166.67	88025.11
Amount of credits received			159000	88292.23
How long did it take to receive the credit? (in days)			5.8667	3.87506
Interest rate on credit			15.3	4.71352
Repayment period? (in months)			8.6	3.31766
Was the time given to repay the credit enough?	30	31.3		

Source: Field Survey, 2022.

4.4 Utilization of the acquired credit by poultry farmers

The results from Table 4 showed that poultry farmers used the credit for more than one production activity like purchasing of feeds, chicks, pullets, vaccines and medications, equipment and rent. Majority (63.5%) used acquired credits for feed, with a mean amount of N109,600.00, while 59.4%, 57.3%, and 51.05% used acquired credits for purchase of vaccines and medication, chicks and pullets respectively. Only 14.6% and 10.4% used acquired credits for equipment and rent respectively. This implies that credit acquired was used for agricultural production activities with feed being the most utilized for at 63.5% (Olowofeso et al, 2017)

Table 4: Credit utilization

	Activity		Utilization amount	
Production activity	**Freq.**	**%**	**Mean**	**Std. Dev.**
Feed	61	63.5	109600.00	68610.01
Chicks	55	57.3	64142.86	57983.99
Pullets	49	51.0	200000.00	83666.00
Vaccines and medications	57	59.4	16400.00	9710.82
Equipment	14	14.6	70666.67	50806.82
Rent	10	10.4	23400.00	9333.81

Source: Field Survey, 2022.

4.5 Comparison production level and profitability between beneficiaries and non-beneficiaries of credits

4.5.1 Production level of beneficiaries and non-beneficiaries of credits

The results from table 5 showed the mean price for crates of eggs as N2071.43, with a mean daily production of approximately 47 crates of eggs for beneficiaries of credits. While for the non-beneficiaries of credits, results showed the mean price for crates of eggs as N2047.86, with a mean daily production of approximately 60 crates of eggs. Further results from Table 5 showed that the mean number of broiler birds for beneficiaries and non-beneficiaries were approximately 99 birds and 73 birds respectively. Also, the results showed that the sum of the mean prices of broiler birds for beneficiaries and non-beneficiaries is N28,366.67 and N27,085.71 respectively with average price for a broiler bird is N7091.67 and N6771.42 respectively.

This implies that the beneficiaries produced more products at higher prices than non-beneficiaries. This might be as a result of the credit acquired, according to Egwu (2016).

Table 5: Production level of beneficiaries and non-beneficiaries

	Beneficiaries		Non-Beneficiaries	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Layer Birds				
Price/Crate	2071.43	111.49	2047.86	309.77
No of crates produced per day	47.24	34.63	60.72	53.31
Broiler Birds				
No of birds	98.50	26.64	44.09	42.94
Price of bird				.
Price < 4 wks	1600.00		1800.00	
Price at 4 wks	5000.00	2645.75	5500.00	3162.28
Price at 6 wks	8566.67	4100.41	9428.57	1966.99
Price above 6 wks	13200.00	2196.59	10357.14	2593.49
No of birds at sale				.
<4 wks	4.00		4.00	
Price at 4 wks	10.00	10.58	7.60	3.58
Price at 6 wks	10.00	5.20	9.43	13.64
Price above 6 wks	9.20	4.66	10.86	8.47

Source: Field Survey, 2022.

4.5.2 Cost of inputs and Sales records of beneficiaries and non-beneficiaries of credits

The results from Table 6 showed feed as the major inputs (37.67% and 56.75%) with mean cost of N271,972.41 and N319,359.38 for beneficiaries and non-beneficiaries respectively. This indicated that poultry feeds were the inputs with utmost importance.

Table 6: Cost of inputs and Sales records of beneficiaries and non-beneficiaries

	Beneficiaries			Non-Beneficiaries		
Price	**%**	**Mean**	**Std. Dev.**	**%**	**Mean**	**Std. Dev.**
Layer	93.80	783380.95	502584.17	83.46	1029285.71	706306.81
broilers	6.20	51775.00	31583.08	16.54	51954.55	38716.57
Cost of inputs						
Land	18.62	74250.00	43500.00	2.80	15000.00	10111.11
Vaccines	2.39	17234.48	20244.62	2.91	16390.63	11908.07
Equipment	17.97	67666.67	95705.10	13.54	26662.50	50680.76
Feeds	37.67	271972.41	217334.69	56.75	319359.38	324992.31

Labour	2.52	18200.00	6292.85	3.17	17812.50	6187.18
Transportation	20.83	150345.33	20478.10	20.83	76,371.44	10,489.39

Source: Field Survey, 2022.

4.5.3 Profitability

The results from Tables 7 and 8 shows profitability for beneficiaries and non-beneficiaries of credits and t-test showing significant difference between beneficiaries and non-beneficiaries profit respectively. Total cost and total revenue accumulate by beneficiaries of credit for one production cycle were N736,086.75 and N835,155.95 respectively, with a profit margin of N99,069.20, while total cost and total revenue accumulate by non-beneficiaries of credit for one production cycle were N566,935.58 and N622,475.26 respectively, with a profit margin of N55,539.68. The result also showed that feed was the highest variable cost of input for both beneficiaries and non-beneficiaries at 37.67% and 56.75% respectively. This implies that although there is a significant difference in the profit made, poultry production was profitable for both beneficiaries and non-beneficiaries(Nnaemeka and Suoye, 2021).

Table 7: Profitability of beneficiaries

	Beneficiaries		**Non-Beneficiaries**	
Variable Cost	**Total**	**%**	**Total**	**%**
Vaccines	17234.48	2.39	16390.63	2.91
Feeds	271972.41	37.67	319359.38	56.75
Labour	18200.00	2.52	17812.5	3.17
Chicks	64142.86	8.89	44221.61	7.86
Pullets	200000.00	27.70	158613.77	28.18
Transportation	150345.33	20.83	6,371.44	1.13
Total Variable Cost (TVC)	**721,895.08**		**562769.33**	
Fixed cost				
Land	74250.00	52.32	15000.00	36.00
Equipment	67666.67	47.68	26662.5	64.00
Total Fixed Cost (TFC)	**141,916.67**		**41662.50**	
Depreciation	**14,191.67**		**4166.25**	

Total Cost (TC)	**736,086.75**		**566935.58**	
Revenue				
Layer	783380.95	93.80	102928.71	16.54
Broilers	51775.00	6.20	519546.55	83.46
Total Revenue	**835,155.95**		**622475.26**	
Profit = TR – TC	**99,069.20**		**55539.68**	

Source: Field Survey, 2022

Table 8: T-test showing the significance difference in the beneficiaries and non-beneficiaries profit

Category	Mean	Std. Deviation	F	Sig.	t	Df	Sig. 92 tailed)	Decision
Beneficiaries of credit	783380.95	102584.17	15.59*	0.000	5.16*	40	0.000	*
Non-Beneficiaries	102928.71	70630.81						

Source: Field Survey, 2022
* = t-ratio significant at 5%
** = t and f-ratios significant at 1%

4.6 Determinants to the acquisition of credits

Table 9 shows the regression estimate of determinants of credit obtained by poultry farmers in the study area. The t-ratio was chosen as the lead equation based on the magnitude of R^2, the significant level of the F-ratio, the number of significant variables and the conformity of the variables to a priori expectations. The t-ratio posted R^2 value of 0.6961, which indicates that 69.61% variation in acquisition of agricultural credit by poultry farmers was accounted for the selected explanatory variables. It suggests that the model has average explanatory power on the changes in farmers' acquisition of agricultural credit.

The coefficient of age (-0.009) was negatively signed and significant at 1.0% level. This result implies that the likelihood of acquiring agricultural credit by farmers decreases as they get older.

The result is in agreement with priori expectation. Older farmers are relatively more risk averse and tend to acquire fewer loans to avoid loan default.

The coefficient (0.020) of education level was positive and significant at 1.0% level. This result conforms to priori expectations and implies that farmers with a higher level of education have the awareness and more access to agricultural credits than farmers with little to no education. This positive attribute increases loan repayment potential, which is attractive to lenders (Kumar et al, 2007)

The coefficient of marital status (0.789) was positive and significant at 10.0% levels of probability. This implies that any increase in their variables would lead to an increase in the tendency to obtain credit. The posture of this result implies that single farmers in the study area less often, acquire agricultural credit. Married farmers have relatively larger household sizes, which serves as a drive to obtain agricultural credit in the area. Also lenders view married farmers as being relatively more stable, responsible and capable of repaying borrowed funds.

Table 9: Determinants of credit acquisition

Predictors	**Coefficient**	**t-ratio**
Constant	2.759	5.142**
X1= Sex	0.051	0.388
X_2 = Age	-0.009	-3.94***
X_3 = Educational level	0.020	2.79**
X_4 = Household size	-0.04	-1.002
X_5 = Marital status	0.789	1.67*
X_6 = Farming experience	0.024	1.37
X_8 = Extension agent visitation	-0.081	-0.519
X_9 = Formal training	0.25	3.902

Source: Field Survey, 2022
* = t-ratio significant at 10%
*= t-ratio significant at 5%
** = t and f-ratios significant at 1%; $R^2 = 0.6961$

4.7 Constraints to the acquisition of credits by poultry farmers in the study area

Results in Table 10 show that a mean of above 3.0 was used as the benchmark of the constraints faced by the poultry farmers on the acquisition of credits. Specifically, it was observed that poor access to information (Mean = 3.87), farming experience (Mean = 3.40), high interest rate (Mean = 3.37), demand for guarantor (Mean = 3.57), level of education (Mean = 4.20), location of farm (Mean = 3.16) and size of farm (Mean = 3.26), all had above a benchmark of 3.0 out of a total of 12.0. They were therefore, adjudged to be serious. This finding agrees with Ijioma and Osondu (2015), who noted that creditors generally charged exorbitant rates from farmers and due to the risk of loan default, most formal and some informal sources require collateral as a prerequisite for credit acquisition.

Table 10: Constraints to acquisition of credits

Constraints	Mean	Std. Dev.
Lack of collateral	4.20*	0.76
Poor access to information	3.87*	1.04
Demand for Guarantor	3.57*	0.86
Farming experience	3.40*	1.28
High interest rates	3.37*	0.93
Size of farm	3.26*	0.12
Location of farm	3.16*	0.37
Late approval of loans	2.03	1.33
Level of education	2.03	1.33
Short repayment period	2.00	1.29
Strict eligibility criteria	2.00	1.29
Unavailability of banks	1.97	1.32

Source: Field Survey, 2022.
*Mean > 3.0 = Serious constraints

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Majority of poultry farmers lack adequate funding to purchase all inputs necessary for their enterprise, therefore, they need credit facilities, yet farmers are the largest group of financially excluded persons in Nigeria. Thus, this study was conducted generally to examine the acquisition and utilization of credits by poultry farmers in Edo-south, Edo state, Nigeria. Specifically it was done to describe the socio-economic characteristics of poultry farmers in the study area, identify the sources and amount of credit accessed by poultry farmers in the study area, ascertain the uses in which the accessed credit was put into in the study area, compare production level and profitability between beneficiaries and non-beneficiaries of credit in the study area, identify the determinant to the access and utilization to credit of poultry farmers, and examine the constraints faced by poultry farmers in acquiring and utilizing agricultural credit.

Scientifically recognized sampling procedure was used to select 120 poultry farmers with the use of validated structured questionnaire and interview schedule while data collected were analysed with frequency counts, percentages, mean, standard deviation, student t-test and regression analysis.

The outcome of the study revealed that poultry farming activity in the study area were carried out mostly by married males who are educated with large household size and still in their productive years. They are mostly full time farmers with small to medium farm holdings, who sourced agricultural credit mainly from the informal sources. Cooperatives were the major source of credits. Feeds, vaccines and medications, chicks and pullets were the major production in which the acquired credits were utilized. The result of the multiple regression analysis revealed that; age, household size, marital status, and education level were significant predictors at varied signs and levels of amount of agricultural credit acquired by farmers. The farmers encountered problems of high interest rate, lack of collateral, location of the farm, demand for guarantor, poor access to information, size of farm and farming experience in their bid to acquire credit.

5.2 Conclusion

This study shows that farmers had access to agricultural credits and that they utilized acquired credits on agricultural production activities. Credit utilization had significant effect on the production level and profitability of the beneficiaries. There is a significant difference between the profitability of beneficiaries and non-beneficiaries of credit in the study area using the t-test result. The significance on the profitability and production level of beneficiaries of credits further reveals the importance of credits in the production activities of small scale farmers.

5.3 Recommendations

In line with the finding of this study, the following recommendations were made:

1. Financial institutions, such as agricultural and micro finance banks, should be established in the rural areas to ensure that rural farmers have access to adequate credit facilities.
2. The procedures for securing loans should also be streamlined in order to make it simple for the farmers. The demand for guarantor, size of farm and location of farm should not

be determining factors for the acquisition of credits as most farms are small scale and are located in remote place. This is to encourage small scale farmers.

3. There should be a deliberate policy to ensure that rural farmers have access to adequate credit facilities. This, no doubt, will go a long way to boost the production capacity of the farmers, thereby increasing their farm income. To achieve it, deliberate policy to ensure peasant farmers acquisition of agricultural credit should be put in place. Long term solutions should be provided by government at all levels to solve the recurrent problem of high interest rate and absence of collateral as farmers' constraints to production credit

REFERENCES

Agarwal, S., Kigabo, T., Minoio, C., Andrea, P., and Andre, S. (2018). Financial access under the microscope. *IMF working paper.*

Agriculture and Rural Economy Directorate, (2018). Newcastle disease: how to spot and report the disease.

Agunuwa, E. V., Inaya, L. and Proso,T. (2015). Impact of commercial banks credit on agricultural productivity in Nigeria: Time series analysis. *International Journal of Academic Research in Business and Social Sciences, 5*(11).

Asogwa, B. C., Abu1, O., and Ochoche, G. E. (2014). Analysis of Peasant Farmers' Access to Agricultural Credit in Benue State, Nigeria. *British Journal of Economics, Management and Trade, 4*(10): 1525-43.

Buitrago, J. D., and Forero, M. L. (2016). Comparison of two production models (grazing and intensive) and their relationship in egg quality and welfare of laying hens.

Castellon, V. E., Duran, C. A., Escalada, C. G., Farré, M. A., and Fernández, P. A. (2012). Influence of the different production systems on the welfare of laying hens. Minimum standards for the protection of laying hens.

Department of Natural Resources and Environment Tasmania, (2022). Marek's disease: Clinical signs, Methods of spread, Treatment and Prevention. *Tasmania Biosecurity.*

Debertin, David L., "Agricultural Production Economics" (2012). Agricultural Economics. Textbook Gallery. 1.

Effiong, J. A. L. and Konye, M. C. (2017). Comparative Analysis of the Effect of Agricultural Credit on Small Scale Poultry Enterprise in Owerri Agricultural Zone, South Eastern, Nigeria. *International journal of agriculture.*

Effiong, J. A. L., Konye, M. C., Eze, E. U. and Njoku, G. U. (2013). Impact of Credit on Small Scale Poultry Enterprise in Owerri West Agricultural Zone, Imo State. *Proceedings of the 47th Annual Conference of the Agricultural Society of Nigeria 2012.*

Egwu, P. N. (2016). Impact of agricultural financing on agricultural output, economic growth and poverty alleviation in Nigeria. *Journal of Biology, Agriculture and Healthcare 6*(2), 36-42.

Evbuomwan, G.O., Ikpi, A.E., Okoruwa, V.O. and Akinyosoye, V.O (2015). Sources of finance for micro, small and medium enterprises in Nigeria. *International Farm Management Congress, 1*(1), 1-11.

Fowowe, B. (2020), "The effects of financial inclusion on agricultural productivity in Nigeria", Journal of Economics and Development, Vol. 22 No. 1, pp. 61-79. https://doi.org/10.1108/JED-11-2019-0059

Fred Nimoh , Enoch Kwame Tham-Agyekum , Maxwell Seth Awuku , Factors Influencing Access of Poultry Farmers to Credit: The Case of the Agricultural Development Bank (ADB) in Ga East Municipality, Ghana, Management, Vol. 3 No. 1, 2013, pp. 54-58. doi: 10.5923/j.mm.20130301.11.

Ijioma, J. C. and Osondu, K. C. (2015). Private capital formation activities and banks credit access among farmers in Anambra state.

Ijioma, J. C. and Osondu, K. C. (2015). Agricultural Credit Sources and Determinants of Credit Acquisition by Farmers in Idemili Local Government Area of Anambra State. *Journal of Agricultural Science and Technology, (5)*, 34-43. 10.17265/2161-6264/2015.01.004

Indiana State Poultry Association, (2021). Common Poultry Diseases and Prevention Methods.

Kumar, Anjani, Singh, Dhiraj K. and Kumar, Prabhat (2007) Performance of rural credit and factors affecting the choice of credit sources, Indian Journal of Agricultural Economics, 62(3): 297-313.

Lopes, M. (2020). Symptoms of Infectious Bursal Disease. *CEVA worldwide.*

Mahmood, A.N., M. Khalid, S. Kouser (2009). "The role of agricultural credit in the growth of the livestock sector: A case of Faisalabad." *Pakistan Veterinary Journal.*

Nimoh, F., Kwasi, A. and Tham-Agyekum, E. K. (2011). "Effect of formal credit on the performance of the poultry industry: The case of urban and peri-urban Kumasi in the Ashanti Region". *Journal of Development and Agricultural Economics.*

Nnaemeka, A. and Suoye, I. (2021). Impact of agricultural credits on the Nigerian economic growth. *Journal of Research in Business and Management, 9*(7), 31-39.

Olagunju, F.I. (2010). Impact of credit on poultry productivity in Southwestern Nigeria. *World Rural Observations.*

Olowofeso, O. E., Adeboye, A. A., Adejo, V. T., Bassey, K. J., and Ochoche, A. (2017). Agricultural sector credit and output relationship in Nigeria: evidence from nonlinear aril. *CBN Journal of Applied Statistics, 8*(1), 101-122.

Osondu, C. K., Ezeh, C. I., Emerole, C. O., and Anyiro, C. O. (2014). Comparative Analysis of Technical Efficiency of Small Holder Fadama II and Fadama III Cassava Farmers in Imo State, Nigeria. *Nigerian Journal of Rural Extension and Development, 8*, 26-37

Tripathy, D. N. (2022). Fowl pox in chicken and turkey. *Journal of Veterinary Manual.*

Udih, M. (2014). Bank credits and agricultural development: does it promote entrepreneurship performance? *International Journal of Business and Social Science, 5*(11), 102 – 107.

Villanueva, C., Oliva, A., Torres, Á., Rosales, M., Moscoso, C., and González, E. (2015). Backyard Poultry Production Management Manual.

Warren, F. H., and William, G. M. (2011). Agricultural Finance. Dr. Satyveer Singh Meena, Mr. Vikash and Mr. Anubhav (2019), Source of Agricultural credits.

APPENDIX

RESEARCH QUESTIONNAIRE
DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES
FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN, BENIN CITY, EDO STATE

Dear Sir/Madam,

I am an undergraduate student of the above-named institution, seeking for information that will assist my project work on **"ACQUISITION AND UTILIZATION OF AGRICULTURAL CREDITS BY POULTRY FARMERS IN EDO SOUTH AGRO-ECOLOGICAL ZONE,**

EDO STATE, NIGERIA.". Your co-operation in filling this questionnaire will be highly appreciated. All information is purely for academic purposes.
Thank You
OLAMIBO, Lydia Awosika

INSTRUCTION: Please tick (√) or fill in the spaces as appropriate.

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS

1. Community: _____

2. Gender: (a) Male [ ] (b) Female [ ]

3. Age: _____years

4. Marital status: (a) Single [ ] ; (b) Married [ ] ; (c) Widow/Widower [ ] ; (d) Divorced [ ]

5. Family / household size: _____

6. Level of Education: (a) no formal education [ ] ; (b) primary school [ ] (c) secondary school [ ] ; (d) Tertiary [ ]

7. Other occupation(s): (a) Fishing [ ] ; (b) Civil service [ ] ; (c) Trading [ ]; Others (specify) : ……

8. Years of experience in poultry farming? _____

9. Income range per month: _____

SECTION B: PRODUCTION SYSTEM

10. Area of specialization**:** (a) Broiler production [ ] ; (b) Egg production [ ]

11. Purpose of production: (a) Consumption [ ] ; (b) Sales [ ] ; (c) Both [ ]

12. Nature of production: (a) Fulltime [ ] ; (b) Part-time [ ]

13. Number of birds: _____

14. Source of inputs: (a) Self [ ] ; (b) Government [ ] ; (c) Market [ ] ; (d) Industries [ ] ; (e) Friends [ ] ; (f) Cooperatives [ ] Other: _____

15. Did you undergo any formal training on poultry production? (a) Yes [ ] (b) No [ ]

16. Have you ever been visited by an extension agent? (a) Yes [ ] (b) No [ ]

17. Number of crates of eggs produced per day: _____

18. Number of crates of eggs produced and price

Size of egg	Big	Small
Price per crate		
Number of crates produced one week ago		
Number of crates produced two weeks ago		

19. Number of birds raised per cycle: _____

20. Number of broiler birds sold and price

Age	<4wks	4wks	6wks	>6wks
Price per bird				
Number of birds sold at last sale				
Number of birds sold at sales before last				

21. Cost of inputs for a production cycle

S/No	Inputs	Cost (N)
1	Layer birds [chick or pullet]	
2	Broiler chicks	
3	Land	
4	Vaccines and medications	
5	Equipment	
6	Feeds	
7	Labour	
8	Water	

Others specify: _____
_____

22. What kind of labour do you use? (a) Family Labour [ ] (b) Hired Labour [ ] (c) Both [ ]

SECTION C: CREDIT ACQUISITION AND UTILIZATION

23. How you ever benefitted from any agricultural credit? (a) Yes [ ] ; (b) No [ ]

24. Sources of credits?

S/No	Source of credit	Tick (√)
1	Cooperatives	
2	Commercial banks	
3	Microfinance banks	
4	Government agriculture loans	

Other sources (please specify) _____
_____

25. What was the amount of credit applied for? _____

26. Amount of credits received: _____

27. How long did it take to recieve the credit? _____

28. Interest rate on credit: _____

29. What is the repayment period?_____

30. Was the time given to repay the credit enough? (a) Yes [ ] ; (b) No [ ]

31. What production activities was the credit utilized on?

S/No	Production activity	Tick(√)	Amount
1	Land		
2	Feed		
3	Chicks		
4	Pullets		
5	Vaccines and medications		
6	Equipment		
7	Water		
8	Labour		
9	Transportation		
	Others:		

32. CONSTRAINTS FACING ACQUISITION OF CREDIT

S/N	Constraints	Very serious	Serious	Moderately serious	Least serious	Not Serious
1	Lack of collateral					
2	Poor access to information					
3	Short repayment period					
4	Strict eligibility criteria					

5	Farming experience					
6	Unavailability of banks					
7	High interest rates					
8	Demand for Guarantor					
9	Late approval of loans					
10	Level of education					
11	Location of farm					
12	Size of farm					