

## **LOAN REPAYMENT BEHAVIOR AMONG MEMBER OF FARMERS MULTIPURPOSE COOPERATIVE SOCIETIES IN ANAMBRA STATE**

**Nwafor Grace O, Agu Aguiyi Fortune (Ph.D), Anigbogu Thersa (Ph.D)  
and Umebali E.E. (PhD)**

---

**ABSTRACT:** *This study examined the loan repayment behavior of farmers multipurpose cooperative societies in Anambra State. The farmers are poor and cannot raise the money needed for farming and when they obtain loan repayment is usually poor. The study specifically examined the range of amount of loan applied for, amount approved, amount disbursed and repaid by the cooperative farmers. It investigated the socioeconomic factors affecting the farmers' credit repayment ability and ascertained major problems affecting the farmers in loan repayment using t-test statistics and a multiple econometric model of the Ordinary Least Square (OLS). Findings revealed that there is a significant difference between the amount of loan received and amount repaid by the cooperative farmers. The joint effect of the explanatory variable in the model account for 91.9% of the variations in the factors affecting the farmers' credit repayment ability. Four coefficients (educational qualification, farm size, loan application cost, and collateral value) are significant. Age, membership duration and income of the farmers are not significant but they show a positive relationship with loan repayment. Factors affecting the farmers' credit repayment ability are significant at 0.000 significant level. The study therefore recommends among others that cooperative societies should endeavour to educate the farmers on financial discipline and management because it has proven to significantly influence loan repayment. Lending institutions should ensure that whoever they are lending to meets a minimum threshold in asset value before loans are accessed. This will help to reduce defaulters.*

**KEYWORDS:** Loan Repayment, Farmers, Multipurpose Cooperative, Nigeria

---

## **INTRODUCTION**

### **Background of the Study**

Credit has been considered not only as one of the critical inputs in agriculture, but also is regarded as an effective means of economic transformation and poverty alleviation. The performance of the agricultural sector depends to a large extent on the availability of credit. Credit affects the performance of agriculture by providing resources for the purchases of inputs and adoption of new technology Nwankwo (2008). Credit plays a crucial role in amplifying the development of agriculture and the rural economy. As Oladeebo and Oladeebo (2008) argued that it acts as a catalyst or elixir that activates the engine of growth, enabling it mobilize its inherent potentials and advance in the planned or expected direction. Rahji (2000) also described credit/loanable fund or capital as more than just another resource. The limitations of self-finance, uncertainties in the level of output and time lag between inputs and output are justification for use of farm credit Kohansal and Mansoori, (2009).

However, to truly serve as a waterway for agriculture and rural development, credit should be accessible to the farmers. Kohansal and Mansoori (2009) believed that credit access is important for improvement of the quality and quantity of farm products to increase farmer's

income and reduce rural-urban migration. On their part, the benefitting farmers are expected to make the best or productive use of the borrowed fund and be able to repay on or before the due date, to enable the loan administrators' extension of the facility to other farmers in need of it. This has not always been the case as credit administration has been plagued by numerous challenges, including incessant cases of loan default that has characterized the scheme in many parts of the developing world.

The role of agricultural credit is closely related to providing needed resources which farmers cannot source from their own available capital. In respect to this, the provision of agricultural credit has become one of the most important government activities in the promotion of agricultural development in Nigeria Olagunju and Adeyemo (2008). The importance of agricultural credit is further reinforced by the unique role of Nigeria agriculture in the macroeconomic framework along with its significant role in poverty alleviation. Realizing the importance of agricultural credit in fostering agricultural growth and development, the emphasis on the institutional framework for agricultural credit is being emphasized since the era of microfinance banks in Nigeria.

### **Statement of the Problem**

This study was informed by the perceived farmers limited access to agricultural credit. Despite the crucial role of credit in agricultural production and development, farmers still have limited access to farm credit. Awoke (2004), noted that its acquisition and repayment are fraught with a number of problems especially in the small holder farming. Osakwe and Ojo (1986) reported that large rate of default has been a perennial problem in most agricultural credit schemes organized or supported by Nigerian government. Most of the defaults arose from poor management procedures, loan diversion and unwillingness to repay loans. According to Saleem and Janm (2014) various researchers have put forward the benefits, problems, access and role of credit for increased productivity. But prompt repayment of credit is necessary for good credit worthiness.

Inability of borrowers to repay amount of loans collected is crucial for the long-term sustenance of the credit institutions. As a result, many studies have tried to examine loan repayment performance of many socio-economic groups. Members of the cooperative group are selected based on the fact that, they share some common characteristics and goals which tend to bind them together. Over the years credit offering organizations have found it comfortable and less riskier in granting loan facilities to groups as opposed to individual farmers because they envisaged that members of a group would hold each other in check to prevent misapplication of funds. Contrary to this believe, some groups have reneged on their promise and this has become a source of worry to many financial institutions in Nigeria. Many researchers have done a lot by identifying some factor which hinder the smooth repayment of loans granted to societies. The empirical literature unravels a lot of factors influencing repayment of loan facilities by farmers. Despite this effort, very little has been done in respect of studying factors which influence the repayment of group loans. This research has become very necessary because farmers residing in rural areas considered to be the food basket of the nation hardly survive without the cooperative farming. However, despite the expected appreciable role of cooperative groups in promoting loan repayment of its members, limited studies have tried to investigate the loan repayment competence of cooperative farmers in Anambra State.

## **Objective of the Study**

The broad objective is to examine loan repayment behavior of Farmers Multipurpose Cooperative Societies in Anambra State. The specific objectives include to:

- i. determine the socioeconomic characteristics of cooperative members in the area of study.
- ii. Examine the amount of loan applied for, amount approved, amount disbursed and repaid by the cooperative farmers.
- iii. Determine socioeconomic factors affecting farmers' loan repayment.
- iv. Ascertain the challenges faced by the cooperative farmers in loan repayment.

## **Statement of Hypotheses**

H<sub>01</sub>: Socioeconomic characteristics of the cooperative farmers are not significant determinant of loan repayment of farmers in Anambra State.

H<sub>02</sub>: There is no significant difference between the amount of loan received and the amount of loan repaid by the cooperative farmers.

## **LITERATURE REVIEW**

### **The Concept of Cooperative**

Cooperative is one of the organizational forms for conducting legitimate business in a marketing economy like Nigeria. According to International Cooperative Alliance, in Nwankwo (2008), cooperative is an autonomous association of person united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Accordingly, Nwankwo (2008) further states that a cooperative is an independent enterprise, promoted, owned and controlled by members to meet their needs. As an enterprise, cooperatives are active in markets locally, nationally and worldwide.

The cooperative movement, since Strickland's report in 1934 (about eight decades ago) has come to stay. During the period, thousands of various types of agricultural and non-agricultural cooperatives have sprung up. Today, cooperatives have been described as a veritable instrument for enhancing the quality of life and the economic well-being of people, particularly the disadvantaged in the area of low productivity in agriculture, lack of employment opportunities, and lack of skills, weak infrastructures, political powerlessness and dearth of industries Okechukwu (2008). According to Ijere (1992), cooperatives all over the world have been accepted as possible alternative instruments for achieving economic development. In fact, as a result of this many attributes and the nature of its operation, cooperative is regarded as superior to capitalism, socialism and a mixed economy in the creation and delivery of goods and services. This is because, unlike capitalism, cooperation places emphasis on the human factor rather than capital, and unlike socialism, it gives due respect to personal property and ownership. They have proved as veritable agencies for tackling the many problems besetting rural areas. Cooperatives are in the areas of production, finance marketing industries etc.

### **Relevance of Cooperative to Farmers**

Cooperatives societies in Nigeria like their counterparts all over the world are formed to meet people's mutual needs. Cooperatives are considered useful mechanism to manage risks for member in agriculture. Through cooperatives, farmers could pool their limited resources together to improve agricultural output and this will enhance socio-economic activities in the rural areas (Ebonyi and Jimoh, 2002).

Arua (2004) viewed cooperatives as an important tool of improving the living conditions of farmers. According to Bhuyan (2007) cooperatives are specially seen as significant tools of the creation of jobs and for the mobilization of resources for income generation. Levi (2005) asserted that cooperatives employed more than 100 million men and women worldwide. In Nigeria cooperative provide locally needed services, employment and input to farmers, cooperatives also provide opportunities to farmers to organize themselves into groups for the purpose of providing services which will facilitate output of members. According to Nweze (2002) cooperative societies serve as avenues for input distribution. Through their nation-wide structure, they have developed strong and reliable arrangements for the distribution of food crops, fertilizers, agro-chemicals, credits, seeds, and seedlings. Bhuyan (2007), stressed that rural cooperatives played an important role in mobilizing and distributing credit to the farmers. He further stressed that cooperative provide members with a wide range of services such as credit, health, recreational and housing facilities. Agricultural cooperatives are also useful in the dissemination of information about modern practice in agriculture.

Hermida (2008) reported that cooperatives provide functional education to members in the areas of production, processing and marketing of agricultural produce. The education of cooperative members could be formal where members are trained in courses like accounting and farm management. They could also be trained informally through the attendance of national and international conference and seminars. The most important reasons for cooperative failure in Nigeria according to Borgens (2001) include; the shortage of trained managers, lack of understanding of the principle and approaches of cooperatives and inability of cooperative member to cope with the modern methods and tools of production. Malthus (1999) also identified some of the problems facing cooperatives in Nigeria to include: shortage of skilled personnel, inadequate financing, excessive government control and lack of trust among members. Onje (2003) added that the problem of dishonesty among cooperative leaders is another factors retarding the growth of cooperative in Nigeria. According to Borgens (2001), the participation of cooperatives in marketing of agricultural produce is low as result of poor organizational structure, inadequate infrastructural facilities and administrative bottlenecks.

### **Concept of Agricultural Credit**

Agricultural credit as noted in the literature Gandhimathi (2006) is one of the pre-requisites for farmers to increase the agricultural output in the process of agricultural development of a country. According to Ololade and Olagunju (2013), agricultural credit is very important for sustainable agricultural development to be achieved in any country of the world. Rural credit has proven to be a powerful instrument against poverty reduction and development in rural areas. Farmers are particularly in need of such instrument (ie credit), because of the seasonal pattern of their activities and their important uncertainty they are facing. Agricultural credit enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers.

Imoudu and Onaksapnome (1992) contended that agricultural loan is a crucial input in small holder agriculture because it enables small scale farmers to establish and expand their farms as this could increase their income and ability to repay loan. Farmers need credit to meet the fixed capital requirements for creating adequate infrastructure to adopt new strategy of production and also to meet the variable expenses (Modi and Raj, 1999) and thus enhanced the demand for agricultural credit. The increased demand for agricultural credit can be met by a systematic expansion of rural credit system (Kumar et. al, 1987). Farmers access to credit facilities is supported to be an accelerator of agricultural development through a wide spread break away from traditional technology and by fostering the generalized adoption of developed and improved technology (Bolarinwa and Fakoya, 2011). Flores (2004) corroborating this assertion “stated that institutional credit if made available to farmers could ameliorate some of the farmers problems such as small farm size, low output, low income and low social-economic status. It can also relieve farmers of the excessive interest imposed on them by the informal creditors who usually charge high interest rate of between 100 – 300 percent per annum. Based on the above consideration and the vital role of credit in agricultural development, government initiated different policy measures for extending financial assistance to small-scale farmers through a farm credit scheme at low interest rates. Some of the credit institutions established are the: Agricultural Credit Guarantees Scheme; Nigeria Agricultural Insurance Scheme; Rural Banking Scheme; Agricultural Credit Corporation; Cooperative Thrift and Credit Society (Bolarinwa and Fakoya, 2011).

It has been confirmed that a well-managed institutional credit scheme aided agricultural development while poorly managed credit programme has been instrumental to agricultural stagnation in many developing countries (Alabi et. al. 2007). These farm credit schemes have been functioning for many years; it has therefore become pertinent to ascertain their impact on the beneficiaries.

Credits play a vital role in economic transformation and rural development (Ojiako and Ogbukwa, 2012). Agricultural or farm credit is a crucial input required by the smaller holder farmers to establish and expand their farms with aim of increasing agricultural production, enhancing food sufficiency, promoting household and national income, and augmenting the individual borrower’s ability to repay borrowed fund. It enables the poor farmers to tap the financial resources and take advantage of the potentially profitable investment opportunities in their immediate environment (Ojiako and Ogbukwa, 2012; Zeller and Sharma, 1998). The need for credit facilities is necessitated by the limitations of self-financing, uncertainty pertaining to the levels of output, and the time lag between inputs and output (Kohansal and Mansoori, 2009). However, its accessibility is imperative for improvement in the quality and quantity of farm products, so as to increase farmer’s income and reduce rural-urban drift (Ojiako and Ogbukwa, 2012; Kohansal and Mansoori, 2009). It is believed that farm credit is an indispensable tool for achieving socioeconomic transformation of the rural communities. If well applied, it would stimulate capital formation and diversified agriculture, increase resource productivity and size of farm operations, promote innovations in farming, marketing efficiency and value addition while enhancing net farm incomes (Nwagbo et al, 1989). In Nigeria, the acclaimed importance of credits in agribusiness promotion and development, notwithstanding, their acquisition, management and repayment have been burdened with numerous challenges (Obboh and Ekpebu, 2011; Afolabi, 2010), especially for the smallholder farmer (Awoke, 2004). In the case of credit acquisition and management, Rhaji (2000) observed that lack of adequate, accessible and affordable credit is among the major factors responsible for the systemic decline



in the contribution of agriculture to the Nigeria economy. With respect to repayment high levels of loan default among borrowers remain a major impediment.

Awoke (2004) reported that the high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans has been threatening the sustainability of most public agricultural credit schemes in Nigeria. In the same vein, Olagunju and Adeyemo (2007) argued succinctly that the problem of default in the repayment of agricultural loans is one of the factors that have militated against the development of the agricultural sector in Nigeria, because it dampens the willingness of the financial institutions to increase lending to the sector. Whatever the cause, one direct consequence of loan default is that it has caused considerable reduction in the loanable funds to greater majority of loan seekers and also requires substantial amount of administrative cost and time to recover the amount in default (Udoh, 2008). Partly because of the high default rate, most credit institutions are becoming more reluctant to extend loan to smallholder farmers (Afolabi, 2010; Olagunju and Adeyemo, 2007) in dire need of the facility. Towards curtailing loan defaults and enhancing loan repayment performance among Nigeria farmers, formation and memberships of farmers' groups have been advocated. A group is a collection of individuals among whom a set of interdependent relationships exist (Ofuoku and Urang, 2009). Groups are characterized by interaction, shared values and beliefs, common goal, structure and ideology (Ofuoku and Urang, 2009). Cooperatives are forms of groups that have been encouraged among farmers as instruments for social and economic transformation (Ijere, 1992). Under the cooperatives membership model, farmers were encouraged to become members of cooperative associations, which would be registered, have elected officials and be holding regular meetings with documented minutes (Ofuoku and Urang, 2009). The belief was that working under associations and groups, farmers would be empowered to speak and act with one voice and consequently it became easier for them to process credit through financial institutions. As long as the members of cooperative societies desire to remain in the group, it is expected that they will live up to expectations, norms and values of the group (Ofuoku and Urang, 2009).

### **Influencing Loan Repayment**

According to Deban et. al. (2005), the cause of non-repayment could be grouped into three main areas; the inherent characteristics of borrowers and their businesses that make it unlikely that the loan would be repaid. Secondly, the characteristics of lending institutions and suitability of the loan product to the borrower affect loan repayment. Lastly, systematic risk from external sources can cause default. Vigenina & Kritikos (2004) find that individual lending has three elements namely the demand for nonconventional collateral, a screening procedure which combines new and traditional elements and dynamic incentives in combination with the termination threat in case of default, which ensure high repayment rates up to 100 percent. Oke et. al. (2007) mentioned that a firm or a group's profit can significantly influence loan repayment. Besides that, Khandker et. al., (1995) raised the question of whether default is random, influenced by erratic behavior, or systematically influenced by area characteristics that determine local production conditions or branch-level efficiency. Since in a cooperative system members do not have comparable knowledge, Godquin (2004) suggest that the provision of non-financial services such as training, basic literacy and health services has positive impact on repayment performance. In view of that, Roslan & Mohd Zaini (2009) found that borrowers that did not have any training in relation to their business have a higher probability to default. Bassem (2008) examines the factors likely to affect the repayment performance of group lending in Tunisia. Empirical results from a logistic regression

estimation showed that the repayment is influenced positively by the internal rules of conduct, the same business, and the knowledge of the other members of the group before its formation, the peer pressure, the self-selection, the sex, the education and the non financial services. However, the homogeneity, and the marital status had a negative influence on repayment.

### **Empirical Review**

Chirwa (1997) specified a probit model to assess the determinants of the probability of credit repayment among smallholders in Malawi. The model allows for analysis of borrowers as being defaulters or non-defaulters. Various specifications of the x-vector were explored by step-wise elimination. However, only five factors (sales of crops, size of group, degree of diversification, income transfer and the quality of information) were consistently significant determinants of agricultural credit repayment. The explanatory power of the model is plausible with the log likelihood statistically significant at 1-percent. Four independent variables – gender, amount of loan, club experience and household size were not statistically significant in various specifications.

Koopahi and Bakhshi (2002) identified defaulter farmers from no defaulters of agricultural bank recipients in Iran by using a discriminate analysis. They found use of machinery, length of repayment period, bank supervision on the use of loan had significant and positive effect on the agricultural credit repayment performance. In the other hand incidence of natural disasters, higher level of education of the loan recipient and length of waiting time for loan reception had a significant and negative effect on dependent variable.

Olagunju and Adeyemo (2007) studied factors that determine loan repayment decision among farmers in Southwestern Nigeria during 2005. Data for 180 respondents were collected through multistage sampling technique. Tobit regression results showed farming experience, farm location, cost of obtaining loan, visitation, borrowing frequency and education as important factors in determining loan repayment with coefficients of -0.085, -0.0661, 0.1196E, 0.1048, 0.0518 and 0.0112 respectively. Farm size and dependence showed no significant effect.

Eze and Ibekwe (2007) studied determinants of loan repayment under the indigenous financial system in Southeast, Nigeria, during 2005. 180 respondents were selected randomly for primary data collection. Data were collected by means of questionnaire and observation. Descriptive statistics and multiple regression techniques were used for analysis. Age of beneficiaries, household size, year of formal education, and occupation were found significant under the system. Amount of loan borrowed and loan duration were found insignificant.

Adeyemo and Agbonlahor (2007) provides empirical analysis of microcredit repayment in Southwestern Nigeria. Multi-stage stratified random sampling procedure was used to collect data from 200 members of microfinance institutions (MFIs) in the study area. Linear multiple regression was used to determine the variables that affected microcredit repayment. The variables that significantly influence repayment: income, distance between dwelling place and bank, amount of business investment, socio-cultural expenses, amount of loan borrowed, access to business information, penalty for lateness to group meetings, membership of cooperative society, number of days between loan application and disbursement and poverty indicator were analyzed. Poverty was found to hamper repayment.

Oladeebo and Oladeebo (2008) examined socio-economic factors influencing loan repayment among small scale farmers in Ogbomoso agricultural zone of Oyo State of Nigeria. Data

collected from 100 farmers from 10 villages in 2 local government areas from the zone through a multistage random sampling techniques were analyzed using descriptive statistics and ordinary least square multiple regression analysis. Results revealed that farmers were on the average 47 years with fewer years of farming experience with credit use (average of 4 years). The average farm size of 3 hectares cultivated by the respondents indicate the small scale nature of their farming business. Results of multiple regression analysis showed that amount of loan obtained by farmers, years of farming experience with credit use and level of education were the major factors that positively and significantly influenced loan repayment. However, age of farmers influenced loan repayment negatively but significantly. The study recommend that for effective farm management and increase in agricultural production, further disbursement of loans should be targeted at young and better educated farmers who are more likely to adopt new innovations in agricultural production than their older counterparts.

Oladeebo et al (2008) examined socio-economic factors such as amount of loan repaid, amount of loan collected and spent on agricultural production, annual net farm income, age, farm size cultivated, farming experience with credit use, and level of education influencing loan repayment among small-scale farmers in Ogbomoso agricultural zone of Oyo State of Nigeria. Among them amount of loan obtained by farmers, years of farming experience with credit use and level of education were the major factors that positively and significantly influenced loan repayment. However, age of farmers influenced loan repayment negatively but significantly. At the end it was concluded that for increase in agricultural production, further disbursement of loans should be targeted at young and better-educated farmers who are more likely to adopt new innovations in agricultural production than their older counterparts. Data was collected from 100 farmers from 10 villages in 2 local government areas from the zone through multistage random sampling techniques with the help of structured questionnaire and were analyzed using descriptive statistics and ordinary least square multiple regression analysis.

Kohansal et. al. (2009) studied the factors influencing on repayment performance of farmers in Khorasan-Razavi province of Iran during 2008. The logit model was used to explain the probability of loan on time repayment as a result of any of the identified independent variables. The signs of the coefficient of independent variables and significance of the variables were used determining largely the impact of each variable on probability of dependent variable. Results showed that farmer's experience, income, received loan size and collateral value positive effect while loan interest rate, and total application costs and number of installment implies a negative effect on repayment performance of recipients. Comparison of the elasticity of significant variables indicated that loan interest rate is the most important factor in our model. Farming experience and total application costs are the next factors respectively.

Saleem and Janm (2010) examined the impact of farm and farmers' characteristics on repayment of farm credit user for agricultural growth in D.I. Khan district during 2007-09. A total of 320 respondents were selected by using stratified random sampling technique. For analysis of data T-test and ANOVA was used. The result was significant for impact of age, education, marital status, farm type, farm size, farm statue and numbers of times credit obtained. But regression result showed significant influence of marital status, farm type and numbers of times credit attained on repayment of farm credit. Collectively all farm and farmers characteristics used in preset study are significantly affecting repayment of credit.

Nwachukwu, Alamba, and Oko-Isu (2010) examined determinants of loan repayment performance among farmers in Afikpo North Local Government Area (LGA) of Ebonyi State, Nigeria. The study employed purposive sampling technique in the selection of location and



respondents. A sample of 100 small holder agricultural loan beneficiaries from Nigeria Agricultural Cooperative and Rural Development Bank (NCRDB) served as respondents for the study. A set of protested and structured questionnaire was used to elicit data and information from the respondents. Data were analyzed using discriminant analysis. The discriminant function analysis result showed that 72% of the beneficiaries were operating performing loans while 28% were non-performing loan beneficiaries. On the basis of results, the study suggested extensive loan periods and adoption of income support measures as panacea for efficient credit delivery and utilization among farmers.

Acquah and Addo (2011) this study investigated factors influencing loan repayment performance of fisherman. A survey of 67 randomly sampled fishermen was conducted using a standard questionnaire. An interview schedule was the main tool of data collection while descriptive statistics and multiple regression analysis were the main analytical techniques. The study showed that majority of the fishermen interviewed were in the productive age range, had high average annual income and were experienced fishermen. Empirical results indicated that 70.1% of the fishermen interviewed had delayed repayment and this was partly attributed to low catch and high debts from fishmongers. Regression estimation results reveals that loan repayment increased with years of education, fishing income, years of fishing experience and amount of loan whilst the age and investment made negatively influenced the amount of loan repaid. The regression analysis finds the fishing income, loan and amount of investment made as significant predictors of the amount of loan repaid. The covariates in the model explained 77% of the variation in the loan repaid. It is recommended that allocation of loans to fisheries sector be increased to stimulate fishing activities and improve repayment performance of fishermen.

Onyeagocha et. al. Okorji (2012) the study investigated the loan repayment, its determinants and socio-economic characteristics of microfinance loan beneficiaries in the Southeast states of Nigeria. It was carried out in three states of the five southeast states. Using a multistage sampling technique, a total of 144 loan beneficiaries in the three segments of MFIs, namely; formal (commercial and development banks); semi-formal (NGOs – MFIs) and informal (ROSCAS, “Isusu” and co-operative societies) were randomly selected and interviewed in the three states. An ordinary least square (OLS) multiple regression analysis was carried out to isolate and examine the determinants showed that beneficiaries had low level of education, operated enterprises at a relatively small scale, had large family size and were of middle age. Further, it was found out that the majority of the respondents were involved in farming enterprise (crop and poultry) even though trading was the most prominent single non-farming enterprise (trading, processing and artisanship). The result affirmed that the informal sector respondents recorded the best repayment rate, followed by the respondents of semi-formal and the banks brought the rear. Outstanding among the determinants of loan repayments from the respondents’ perspective were; loan size, level of education, experience, profitability and portfolio diversity. These, therefore deserve special attention in loan administration of MFIs.

Awunyo-Vitor (2012) investigated the determinants of loan repayment default among farmers in Brong Ahafo region of Ghana. Data used in this study was gathered through a survey of 374 farmers in five districts within Brong Ahafo region of Ghana. The study employed Probit model to investigate factors that influence farmer’s loan repayment default. The results showed that farm size, and engagement in off farm income generating activities reduces the likelihood of loan repayment default significantly. Also, larger loan amount and longer repayment period as well as access to training are more likely to reduce loan repayment default. Thus, any policy

that aimed at improving farm size, farm income and cultivation of cash crops would significantly reduce loan repayment default. In addition loan repayment default would reduce if lenders train their loan beneficiaries and offer them adequate amount of loan and longer repayment period.

Lilian, Stanley and Simoyan (n.d) evaluates socio-economic factors that could predict repayment ability, quantify the effects of those factors and device a method to curb or manage default in agriculture and/or other credit lending. Data for the analysis were obtained by interviewing a sample of loan beneficiary farmers cooperative society members and non cooperative society members in three local government areas in Kogi State. The major factors that affect repayment ability were identified and the extent of the effect was assessed using the marginal and elasticity of probability. Participation in cooperative society, non-farm income; farming experience had major effect on repayment ability while farming size, farm size and return on investment, had a minimal effect on repayment ability. Poor record keeping, low literacy, and fear of high interest rates were some of the problems and constraints encountered by the farmers and the credit institutions. It is recommended that farmers should be encouraged to keep good records, financial institutions should also ease the process of loan acquisition to enable farmers with low educational background better access to funds. It is also recommended that credit worthiness of to be beneficiaries should be calculated in advance to reduce the frequency of loan default.

From the empirical literature reviewed, a myriad of factors have been identified to have influence loan repayment. All the studies reviewed were conducted in different socio-economic, cultural and geographical settings which arguably can influence the performance or repayment rate of loan beneficiaries. Therefore, considering the socioeconomic and environmental peculiarities across regions it is therefore necessary to carryout thorough investigation of the various aspects of loan default because of its importance to farmers, policy makers and the lending institutions. Hence, the major concern of this study in supplementing previous research and bridging the knowledge gap is to replicate the study in Anambra State in order to examine the performance of cooperative farmers in repayment of on-lending loan in Anambra State.

## **METHODOLOGY**

### **Area of Study**

This study is carried out in Anambra State. Specifically in the agricultural zones of the state. Anambra State is a state in South-Eastern Nigeria. Its name is an anglicized version of the original 'Oma Mbala', the native name of the Anambra River. The capital and the seat of Government is Awka. Onitsha and Nnewi are the biggest commercial and industrial cities, respectively. The state's theme is "Light of the Nation". Boundaries are formed by Delta State to the west, Imo State and Rivers State to the South, Enugu State to the east and Kogi State to the north. The origin of the name is derived from the Anambra River (Omambala) which is a tributary of the famous River Niger).

The indigenous ethnic group in Anambra State are the Igbo (98% of population) and a small population of Igala (2% of the population) who live mainly in the north-western part of the state. Anambra is the eighth most populated state in the Federal Republic of Nigeria and the second

most densely populated state in Nigeria after Lagos State. The stretch of more than 45km between Oba and Amora contains a cluster of numerous thickly populated villages and small towns giving the area an estimated average density of 1,5000 – 2,000 persons per square kilometer.

Anambra is rich in natural gas, crude oil, bauxite, ceramic and has an almost 100 percent arable soil. In the year 2006, foundation laying ceremony for the first Nigerian private refinery Orient Petroleum Refinery (OPR) was made at Aguleri area. The Orient Petroleum Resource Ltd (OPRL) owners of OPR, was licensed in June 2002, by the Federal Government to construct a private refinery with a capacity of 55,000 barrels per day (~ 7,500 t/d). Furthermore, Anambra State is a state that has many other resources in terms of agro-based activities like fishery and farming, as well as land cultivated for pasturing and animal husbandry. Currently, Anambra state has the lowest poverty rate in Nigeria.

### Population of the Study

The population of the study is made up all the members of agricultural cooperatives in Anambra State. Anambra State has a total of two thousand seven hundred and eighty-seven (2787) registered agricultural cooperative societies with a membership strength of thirteen thousand four hundred and sixty-six (13,466). (Cooperative Department Ministry of Commerce and Industry, Awka, Anambra State).

### Sample Size and Sampling Procedure

To determine the sample size, for the purpose of questionnaire distribution, multi-staged sampling technique was adopted. In the first stage, the state was divided into three agricultural zones. The three zones were selected. In the second stage, a sub-sampling also called a two-stage sampling was carried out by judgmentally selecting two local governments each from the agricultural zones making a total of six so as to help achieve the main objectives. According to Michael, Oparaku and Oparaku (2012), judgment sampling makes use of typical cases among the population to be studied, which the researcher believes will provide the result needed. In the third stage otherwise called the three-stage sampling, the simple random sampling technique was used to select two towns each from each of the three selected local governments in the agricultural zone. The fourth stage was at random selection of two members of cooperative societies from each of the two towns. The table below shows the LGAs selected, towns, names of societies, their membership strength and sample size which was determined using the Taro Yamani Formula.

**Table 3.1: The table below shows the societies selected.**

Name of Societies	Towns	Membership		Total
		Male	Females	
Igwebuike Nzam (FUG) MCS Ltd	Nzam	11	4	15
Chukwubueze Oroma-Etiti Anam MCS	Anam	9	6	15
Umueze-Anam MCS	Umueze-Anam	21	16	37
Chidimma Alor MCS Ltd.	Alor	7	3	10
Ezeamadi Akwukwu MCS Ltd.	Akwukwu	7	5	12
Okaka Ojoto MCS	Ojoto	13	11	24
Ndubueze Ihite MCS Ltd.	Ihite	35	2	37
Umuosaku Umuze MCS	Umuze	15	12	27
Ebubechukwu Eziagu MCS	Eziagu	31	22	53
<b>TOTAL</b>		<b>149</b>	<b>81</b>	<b>230</b>

**Source:** Field Survey, 2015.

$$nh = \frac{nNh}{N}$$

Where: n = Total sample size  
 Nh = The number of items in each stratum in the population  
 N = Population size.  
 nh = the number of units allocated to each stratum

n = 146  
 Nh = Societies 1 = 15, 2 = 15, 3 = 37, 4 = 10, 5 = 12, 6 = 24, 7 = 37, 8 = 27, 9 = 53

Substituting in the above formula:

Society 1;	=	nh	=	$\frac{146 \times 15}{230}$	=	9.5	=	5
Society 2;	=	nh	=	$\frac{146 \times 15}{230}$	=	9.5	=	5
Society 3;	=	nh	=	$\frac{146 \times 37}{230}$	=	19.8	=	20
Society 4;	=	nh	=	$\frac{146 \times 10}{230}$	=	6.3	=	6
Society 5;	=	nh	=	$\frac{146 \times 12}{230}$	=	7.6	=	8
Society 6;	=	nh	=	$\frac{146 \times 24}{230}$	=	15.2	=	15
Society 7;	=	nh	=	$\frac{146 \times 37}{230}$	=	23.5	=	42
Society 8;	=	nh	=	$\frac{146 \times 27}{230}$	=	17.1	=	17
Society 9;	=	nh	=	$\frac{146 \times 53}{230}$	=	33.6	=	34

### Sources of Data

The researcher explored two sources of data which are the primary and secondary data:

**Primary Data** – the primary data will be obtained from members of the six (6) selected cooperative societies in the three local government selected from the agricultural zone of the state, using a structured questionnaire.

Secondary Data – the secondary data was obtained from existing literature in the field of study which was available to the researcher such as: journals, test book, internet materials, unpublished write ups etc.

### Data Analysis

Objective one of the study were analysed using descriptive statistics such as frequency and percentages, objectives two and four were analyzed using mean and standard deviation. While objective three was analyzed using regression analysis. The t-test statistics was used to test the hypotheses of the study. All the analyses were done using SPSS version 17.

The model for the study is implicitly specified as follows:

$$Y = f(X_1, X_2, X_3, \dots, X_n) \dots \dots \dots \text{eq. (1)}$$

The linear form of the model is explicitly specified as follow:

$$Y = \alpha + \beta_{1x1} + \beta_{2x2} + \beta_{3x3} + \beta_{4x4} \dots \dots \dots \beta_{kxk} \dots \dots \dots \text{eq. (2)}$$

The semi log form of the model is specified thus:

$$Y = \alpha + \beta_1 \log x_1 + \beta_2 \log x_2 + \beta_3 \log x_3 + \beta_4 \log x_4 \dots \dots \dots \beta_k \log x_k \dots \dots \dots \text{eq. (3)}$$

The double log form of the model is specified thus:

$$\log Y = \alpha + \beta_1 \log x_1 + \beta_2 \log x_2 + \beta_3 \log x_3 + \beta_4 \log x_4 \dots \dots \dots \beta_k \log x_k \dots \dots \dots \text{eq. (4)}$$

The econometric form of the model becomes more realistic with the introduction of the random or scholastic term  $\varepsilon$ . The econometric form of the model is express thus:

$$Y = \alpha + \beta_{1x1} + \beta_{2x2} + \beta_{3x3} + \beta_{4x4} + \beta_{5x5} + \beta_{6x6} + \beta_{7x7} \dots \dots \dots (5)$$

Where:

a = intercept

Y = Amount of loan repaid (in naira)

$B_1 - B_9$  = Regression coefficient

ei = Error term designed to capture the effects of unspecified variables in the model.

The a and  $B_s$  are the parameters for estimation and ei is the error term.

$X_1$  = Age of farmers (yrs)

$X_1$  = Level of education (yrs)

$X_1$  = Family size (number of persons)

$X_1$  = Membership duration (yrs)

$X_1$  = Farm size (ha)



$X_1$	=	Income of farmers (N)
$X_1$	=	Loan obtained (N)
$e_i$	=	Constant term

## DATA PRESENTATION AND ANALYSIS

**Table 1: Distribution according to socioeconomic profile of respondents**

Items	Frequency	Percentage (%)	Cumulative (%)
<b>Gender</b>			
Male	99	67.8	67.8
Female	47	32.2	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100.0</b>	
<b>Age (years)</b>			
≤20	-	-	-
21-30	7	4.8	4.8
31-40	22	15.1	19.9
41-50	86	58.9	78.8
51-60	25	17.1	95.9
>60	6	4.1	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100</b>	
<b>Marital Status</b>			
Married	104	71.2	71.2
Single	23	15.7	86.9
Divorced	3	2.0	88.9
Widow/widower	16	11.1	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100.0</b>	
<b>Educational Qualification (in years)</b>			
Primary	65	44.5	44.5
Secondary	68	46.6	91.1
Tertiary	13	8.9	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100</b>	
<b>Duration of membership (in years)</b>			
1-5	15	10.3	10.3
6-10	28	19.2	29.5
11-15	66	45.2	74.7
15-30	37	25.1	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100</b>	
<b>Farm size (in Hectares)</b>			
1-2	98	67.1	67.1
3-5	36	24.7	91.8
6-8	9	6.1	97.9
9-15	3	2.1	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100</b>	
<b>Family size (in numbers)</b>			
1-3	19	13.0	13.0
4-6	87	59.6	72.6
7-9	37	25.3	97.9
10-12	3	2.1	<b>100</b>

<b>Total</b>	<b>146</b>	<b>100</b>	
<b>Income of farmers (monthly)</b>			
N1,000-N10,000	3	2.1	2.1
N10,100- N20,000	22	15.1	17.2
N20,100- N30,000	27	18.5	35.7
N 30,100-40,000	59	40.4	76.1
N40,100 and above	35	23.9	<b>100</b>
<b>Total</b>	<b>146</b>	<b>100</b>	

**Source: field survey, 2015.**

as shown in Table 1. With respect to gender, 67.8% of the respondents are males while 32.2% are females indicating more active participation of male than females in cooperative activities. Majority of them fall within the age bracket of 41-50 years and above. This account for 80.1% of the respondents. Members are still active in economic activities, 71.2% of the respondents are married while 15.7% of them are still single, 2.0% are divorced while 11.1% are widows. All the respondents had formal education. Majority of the respondents 46.6% has secondary education, such can enhance their economic activities, while 8.9% has tertiary education. Over 80% of the respondents have above 10 years of cooperative experience. Majority of the farmers 67.1% have between (1-2) hectares of farm size. Thus indicating that they are small holder farmers. Over 80% of the respondents have above three person in the family. Thus indicating large household and high level of dependency ratio among the farmers. With respect to income of the farmers, over 80% of them earn above N20,000. Although relatively low considering the high level of dependency ratio and loan repayment burden.

**Table 2: Distribution according to the range of amount of loan applied for, amount received and amount repaid by the cooperative farmers.**

Options	N	Minimum N	Maximum N	Mean N	Std. Dev
Amount of loan applied	<b>146</b>	N50,500	N450,500	N201927.35	N95343.404
Amount of loan approved	<b>146</b>	N50,500	N450,500	N248534.19	N101139896
Amount of loan received	<b>146</b>	N50,500	N450,500	N248534.19	N101139896
Amount of loan repaid	<b>146</b>	N50,500	N450,500	N174576.92	N107175.372

**Source: Field Survey, 2015.**

As shown in table 2, with respect to the range of amount of loan applied for, amount received and amount repaid by the cooperative farmers, the minimum amount of money applied for, approved, disbursed and repaid was fifty thousand five hundred naira (N50,500) respectively. The maximum amount of money applied for, approved, disbursed and repaid was four hundred and fifty thousand, five hundred naira (N 450,500). On the average the amount of money applied for, approved, disbursed and repaid by the applicants was two hundred and one thousand, nine hundred and twenty-seven naira, thirty-five kobo (N 201927.35), two hundred forty eight thousand, five hundred and thirty-four naira, nineteen kobo (N248534.19), two hundred forty eight thousand, five hundred and thirty-four naira, nineteen kobo (N248534.19) and one hundred and seven seventy four hundred, five hundred and seventy six naira, ninety-two kobo (N 173576.92) respectively.

**Table 3: Distribution according to factors affecting the farmers ' credit****Repayment ability.**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std.Dev</b>
Unprofitable scale of operations	<b>146</b>	3.75	0.653
Defective management and shortage of skilled man power	<b>146</b>	3.46	0.422
Inadequate and ill-time supplies of required production	<b>146</b>	3.84	0.733
Inadequate storage and service inputs	<b>146</b>	3.55	0.755
Administrative bottlenecks	<b>146</b>	2.66	0.876
Corrupt and dishonest staff	<b>146</b>	3.53	0.422
Poor educational status of member patron	<b>146</b>	2.33	0.775
Low membership strength	<b>146</b>	3.77	0.755
Financial problems	<b>146</b>	3.89	0.643

Source: field survey, 2015

Table 3 shows all the factors affecting the farmers' credit repayment ability: unprofitable scale of operations, defective management and shortage of skilled man power, inadequate and ill-time supplies of required production, inadequate storage and service inputs, administrative bottlenecks, corrupt and dishonest staff, poor educational status of member patron, low membership strength and financial problems. They were all identified as factors affecting the loan > however, inadequate and ill-time supplies of required production and financial problems were identified to be the major organizational factors affecting the farmers' loan repayment.

**Effects of socioeconomic characteristics on cooperative members on lending loan in Anambra State.****Regression Result****Table 4: Socioeconomic factors influencing cooperative farmers loan repayment**

<b>Model</b>	<b>B</b>	<b>Std.error</b>	<b>T</b>	<b>Sig</b>
CONSTANT	-101310.445	23721.009	-4.697	0.000
AGE	122.919	683.911	0.179	0.858
EDUQUA	14254.736	2126.529	6.703	0.000
FARMISIZE	3765.288	5074.751	0.742	0.460
MEMDURA	2602.924	2053.858	1.269	0.207
FARMSIZE	15311.937	3878.798	3.948	0.000
LOANAPCOSTINOME	03.254	0.864	-3.768	0.000
INCOME	1.254	1.241	1.368	0.174
LOANOBTAINED	-0.016	0.143	-0.114	0.909
COLLATERAL	-0.204	0.090	-2.260	0.026
<b>R</b>	0.959			
<b>R<sup>2</sup></b>	0.919			
<b>ADJ. R<sup>2</sup></b>	0.912			
<b>F-STATISTIC</b>	135.160			0.000

Source: Computation from field survey, 2015

Socioeconomic factors were regressed on the amount of loan repaid. Table 4 showed the precision of the model. In general the joint effect of the explanatory variable in the model account for 91.9% of the variations in the factors affecting the farmers' loan repayment.

Four coefficients namely: educational qualification, farm size, loan application cost, and collateral value were significant at 5%, 1% respectively. Age, membership duration and income of the farmers were not significant but it shows a positive relationship with loan repayment.

**Factors affecting the farmers' credit repayment ability are not significant.**

**Table 5: t-test statistics of factors the farmers' credit repayment.**

Variable	T	df	Sig	Mean diff.	Std. error	95% interval difference lower	Confidence of the Upper
Unprofitable scale operations	55.002	145	0.000	3.74	0.663	3.50	3.76
Defective management and shortage of skilled man power	44.157	145	0.000	3.45	0.432	3.30	3.61
Inadequate and ill-time supplies of required production	65.520	145	0.000	3.83	0.743	3.63	3.86
Inadequate storage and service inputs.	43.553	145	0.000	3.54	0.765	3.29	3.60
Administrative bottlenecks	34.713	145	0.000	2.65	0.886	2.34	2.62
Corrupt and dishonest staff	53.852	145	0.000	3.52	0.432	3.46	3.72
Poor educational status of member patron	34.820	145	0.000	2.32	0.765	2.31	2.58
Low membership strength	72.500	145	0.000	3.76		3.62	3.82
Financial problems	75.993	145	0.000	3.84	0.653	3.64	3.83

**Source: Computation from field survey, 2015.**

Hypothesis three states that factors affecting the farmers' credit repayment ability are not significant. To test the hypothesis the t-test statistics was employed. Table 7 is a summary of the t-test values on the organizational factors affecting the farmers' credit repayment ability. The result of the test shows that all the factors (unprofitable scale of operations, defective management and shortage of skilled man power, inadequate and ill-time supplies of required production, inadequate storage and service inputs, administrative bottlenecks, corruption and dishonest staff, poor educational status of member patron, low membership strength and financial problems) are significant. All the t-calculated values were significant at 0.000 significant level. This implies that the organizational are not significant.

## Summary Findings

From the analysis of the study the following findings are made:

- i. The socioeconomic characteristics showed that the males participate more actively than female in cooperative activities in Anambra State.
- ii. The age distribution showed that the farmers are still in their active working age. Majority of the farmers fall with the age bracket of 41-50 years and above. This account for 58.9% of the respondents.
- iii. Majority of the respondents are married. This account for 71.2%.
- iv. All the respondents had formal education.
- v. Over 80% of the respondents have above 10years of cooperative experience.
- vi. Majority of the farmers 67.1% have between (1-2) hectares of farm size. Thus indicating that they are small holder farmers.
- vii. Over 80% of the respondents have above three person in the family. Thus indicating large household and high level of dependency ratio among the farmers.
- viii. With respect to income of the farmers, majority over 80% of the farmers earn above N20,0000. Although relatively low considering the high level of dependency ration and loan repayment burden.
- ix. From the analysis, the joint effect of the explanatory variable in the model account for 91.9% of the variations in the factors affecting the farmers' credit repayment ability. Four coefficients (educational qualification, farm size, loan application cost, and collateral value) are significant at 5%, 1% respectively. Age, membership duration and income of the farmers were not significant but it shows a positive relationship with loan repayment.
- x. There is a significant difference between the amount of loan received and amount repaid by the cooperative farmers.
- xi. Factors (Unprofitable scale of operations, Defective management ans shortage of skilled man power, Inadequate and ill-time supplies of required production, Inadequate storage and service inputs, Administrative bottlenecks Corrupt and dishonest staff, Poor educational status of member patron, low membership strength and Financial problems) affecting the farmers' credit repayment ability are significant at 0.000 significant level.

## CONCLUSION

The findings of this study are robust. With reference to the topic under consideration – performance of farmers in loan repayment among members of cooperative farmers Multipurpose Cooperative Societies in Anambra State educational qualification, farm size, loan application cost, and collateral value are significant in influencing the loan repayment of the farmers. From the result, a year increase in the educational qualification of the farmers will



bring about N14,254.74 increase in the farmers repayment ability. An increase in the farmers farm size by a hectare will bring about N3,765.29 increase in the farmers repayment ability about N1.00 increase in the farmers loan application cost will bring about 3.25 reduction in the farmers repayment ability. A naira increase in the collateral value bring about N-0.204 reduction in the farmers repayment ability.

## RECOMMENDATION

Based on the analysis and findings of this study, the researcher therefore recommended that:

1. The farm should be encouraged to move into farm settle where they can have access to increase farm land. The invariably will increase their productivity, income and consequently loan repayment.
2. Loan application cost should be made to be free since it was been indentified to be reduce farmers repayment ability.
3. Collateral value should be less. So as to encourage farmers to borrow for agricultural production and repay with ease.
4. Farmers can be made to improve on their repayment of farm credit by adoption of income support measures which would serve as panacea.
5. Lending institutions should ensure that whoever they are lending to meets a minimum threshold in asset value before loans are accessed. This will help to reduce default.

## BIBLIOGRAPHY

- Acquah, H.D & Addo J. (2011). Determinants of Loan Repayment Performance of Fishermen: Empirical Evidence from Ghana.
- Afolabi J.A (2002). Economics Analysis of Loan Repayment among Small Scale Farmers in Oyo State, Nigeria. Ph.D thesis (unpublished), Akure: Federal University Technology.
- Afolabi J.A (2010). Analysis of loan Repayment among Small Scale Farmers in Oyo State, Nigeria. *Journal of Social Sciences*, 22(2), 115-119.
- Afolabi, J.A & Fagbenro O.A (1998). Credit Financing of Coastal Agriculture in Nigeria. Paper presented at the 9<sup>th</sup> International Conference of the International Institute of Fisheries Economics and Trade-Tromso, Norway, July 8-11, pp. 12-15.
- Anaman, K.A (1988). African Management Accra: Ghana University Press.
- Arua, E.O (2004). Comparative Cooperative Sysytem. Unpublished Departmental Mimeograph. Department of Agricultural Economics, University of Nigeria, Nsukka.
- Asrat, T. (1989). Development Finance for Small and Medium Industries, International Workshop on Transfer of Techniology for small Sclae and Medium Industries.
- Awoke, M.U (2004). Factors Affecting Loan Acquisition and Repayment Patterns of Small Holder Farmers in Ika North East of Delta State, Nigeria. *Journal of Sustanable Tropical Agricultural Research* 9:61-64.
- Awoke, M.U (2004). Factors Affecting Loan Acquisition and Repayment Patterns of Small Holder Farmers in Ika North West of Delta State, Nigeria. *Journal of Sustanable Tropical Agricultural Research* 9:61-64.

- Awunyo-vitor, D & Abankw, V (2012). Substitutes or Complements: Farmers Demand for formal and Informal Credit in Ashanti and Brong Ahafo Regions of Ghana. *Journal Agricultural Science*, 7(1), 1-13.
- Balogun E.D & Alimi, A. (1988). Loan Delinquency Among Small Farmers in Developing Countries: A Case Study of the Small Farmers Credit Programme in Lagos State, Nigeria. *Economic and Financial Review*, 26(3), 36-44.
- Bhuyan S. (2007). "The People Factor in Cooperatives". An Analysis of Members, *Cnadian Journal of Agricultural Economics*, 55(3): 275-298.
- Borgens, S.O (2001). Identification as a Trust-generating Mechanism in Cooperatives". *Annual Publication of Cooperative Economics*.
- Chirwa E.A (1997). An E conomc Analysis of the Determinants of Agricultural Credit Payment in Malawi *African Review of Money Finance and Banking*, 1(2), 107-122.
- Dadson, S & Awubnyo V, (2012). Determinants of Loan Repayment Default among Farmers in Ghana Department of Agricultural economics, Agribusiness and Extension, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Dadson, S (1992). "Informal Finance in Africa: A survey of Group Lending Schemes" Draft paper, U.K.
- Dong F. Lu J. & Feathersone, A. (2010). Effets of Credit Constraints on Productivity and Rural Household Income in China Selected Paper prepared for presentation at te Agricultural & Applied Economics Association 2010 AAEA, CAES, & WAEA Joint Annual Meeting, Denver, Colorado.
- Ebonyi V & Jimoh O.B (2002). *Cooperative Movements; a way Out of Poverty*. Lagos, Lonman Publishers.
- Ehigiamusoe G. (2005). Tested Institutional Practices for Effective Microfinance Service Delivery, *Proceedings of Seminar on Microfinance Policy Regulatory and Supervisory Framework in Nigeria*.
- Ekpebu, I.D (2011). Determinants Of Formal Agricultural Credit Allocation to the farm Sector by Arable Crop Farmers in Benue state, Nigeria. *African Journal of Agricultural Research*, 6(1), 181-185.
- Eze C.C & Ibekwe , U.C (2007). Determinants of Loan Repayment under the Indigenous Financial System in Southeast, Nigeria. "The social Sciences, 2(2), 116-120.
- Fry M (1995). *Money Interest nd Banking in Economic Development*, Second Edition, the John Hopkins University Prress.
- Gebeyehu A (2002). Loan Repayment and its Determinants in Small Scale Enterprises Financing In Ethiopia: Case of Private Borrowers Around Zewey Area. Unpublished MSc. Thesis, School of graduate Studies of Addis Ababa University, Ethiopia.
- Hermes, n and Lensink, R (2004). "The Short-Term Effects of Foreign Bank Entry on Domestic Bank Behaviour: Does Economic Development Matter?" *Journal of Banking & Finance* 28:553-568.
- Hermida J (2008). *Agricultural Cooperative in Asia*. Retrieved October, 1,2015, from <http://asiadhrra.org/wordpress/2008/01/11agriccoops-in-asia/>.
- Hunter C.V (1996). Controlling Loan Default and Improving the Lending Technology in credit Institutions. *Saving and Development*, XX (1): 23-34.
- Ifeanyi, N Nwachukwu C. Samuel A, & Oko-Isu, A. (2010). Determinants of Institutional credit Repayment performace among farmers in Afikpo North LGA of Ebonyi State, Nigeria. Department of Agribusiness and management, Michael Okpara University of Agricultue, Umudike, Abia State, Nigeria.
- Kareem, R.O Arigbabu , Y.D, Akintaro J.A & Badmus, M.A (2012). The Impact of Cooperative Society on Capital Formation (A Case Study of Temidere Cooperative and

- Thrift-society, Ijebu-Ode, Ogun state, Nigeria). *Global Journal of Science Frontier Research Agriculture and Veterinary Science*, 12(11), 17-29.
- Kohansal M.R & Mansoori H (2009). Factors affecting on loan repayment performance of farmer in Kharasan-Razavi province of Iran. A paper presented in a conference on International Research on Food Security. Natural Resource Management and Rural Development, University of Hamburg, October 6-8.
- Kohansal M.R, Gharbanc M & Ansoori, H.M (2008). Effect of Credit Accessibility of farmers on Agricultural Investment and Investigation of Policy options in Kohansal. Razavi province. *Journal of Applied Sciences*, 8(23), 455-459.
- Koopahi, M & Bakhshi M.R (2002). Factors affecting Agricultural Credit Repayment: A Case Study of Birjand District. *Iranian Journal of agricultural Sciences Research*, 5(4), 354-358.
- Koutosoyiannis A. (1977). *Theory of Econometric Method*. Ontario: ELS/Macmillan.
- Levi Y (2005). *A Cooperative Perspective*, Ireland: International Cooperative Research Institute.
- Mensah c. (1999). *Bank Credit Provision and Performance Measurement?; The Experience of Rural Banking in Ghana*, Master's Thesis.
- Njoku J.E and Odii M.A.C.A (1991). Determinants of loan repayment under the special Emergency loan scheme (SEALS) in Nigeria: a Case Study of Imo State, *African Review of money, Finance and banking* 1(1), 39-52
- Nnabuike E.I.C, & Ike, P.C (2008). Loan Repayment Among Microfinance Cooperators of the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) in Anambra State, *Journal of Research and Development*, 6(2).
- Nweze N.J (2002). Rural Development in Nigeria: Past Approaches, emerging issues and strategies for the future. *Nigerian Journal of cooperative Studies*. 2(1), 39-52.
- Oboh V.U and Epkpebu I.D (2011). Determinants of Formal Agricultural Credit allocation to the farm sector by arable crop farmers in Benue State, Nigeria. *African Journal of Agricultural Research*, 6(1) 181-185.
- Ofuoku, A.U & Urang E (2009). Effect of Cohesion on loan repayment in farmers' cooperative societies in Delta State, Nigeria. *International Journal of Social Anthropology*, 1(4): 070-076.
- Ojiako I.A & Ogbukwa, B.C (2012).; economic Analysis of Loan Repayment capacity of small holder cooperative farmers in Yewa North Local government Area of Ogun State, Nigeria, *African Journal of Agricultural Research*, 7(13), 2051-2062.
- Ojo M.O (1998). Some Implications of Government Economic policies for Financing and Development of Agriculture in Nigeria. In: A Okorie, M.O Ijere (Eds): *Readings in Agricultural Finance*. Lagos: Longman Publisher, pp. 16-24.
- Oke JTO, Adeyemo R, & Agbonlahor, MU (2007). An Empirical Analysis of Microcredit Repayment in South Nigeria. *Journal of Social Sciences* 2(1), 63-74.
- Oladeebo J.O & Oladeebo O.E, (2008). Determinants of Loan Repayment among Smallholder farmers in Ogbamoso Agricultural zone of Oyo State, Nigeria. *Journal of Soc. Sci.* 17(1), 59-62.
- Oladeebo J.O & Oladeebo O.E, (2008). Determinants of Loan Repayment among Smallholder farmers in Ogbamoso Agricultural zone of Oyo State, Nigeria. *J. of Soc. Sci.* 17(1), 59-62.
- Oladeebo, J.O, Oladeebo O.E (2008). Determinants of Loan Repayment among Smallholder farmers in Ogbamoso Agricultural zone of Oyo State, Nigeria. *Journal of Social Science*, 17(1), 59-62.

- Oladeenbo O.E (2003). Socio-economic Factors Influencing Loan Repayment among scale Famers in Ogbomoso Agricultural zone of Oyo State, Nigeria. Diploma thesis, Unpublished. Ogbomoso: Ladoke Akintola University.
- Olaguj, F.I (2007). Impact of Credit Use on Repayment Decision among Small Holder Farmers in Southwestern Nigeria. Pakistan Journal Social Sciences, 4(5), 677-686.
- Olayide S.O (1980). Characteristics, Problems and Significance of Small Farmers in Nigeria-Problems and Prospects. In: SO Olayide, JA Eweka, VE Bello-Osagie (Eds): Nigerian Small Farmers. Ibadan: CARd Publisher 43-52.
- Oni T.K (1999). Bank Credit Facilities for Smallholder Farmers: Implications for food security in Nigeria. In: FAbiyi YL and Idowu EO (Eds). Poverty Alleviation and food security in Nigeria, Ibadan, NAAE, 342-348
- Onje, S.O (2003). Introduction to Cooperative Studies. Lokoja: Howard Publishers pp 68,
- Onyeagocha S.U.O Chidebelu, S.A.N.D, Okorji E.C, Ukaoha, A.H Osuji, M.N & Korie, O.C (2012). Determinants of Loan Repayment of Microfinance Institutions in Southeast States of Nigeria. International Journal of social Science and Humanities, 1(1).
- Osakwe J.O & M.O (1986). An appraisal of Public Sector Financing of Agricultural Development in Africa with Particular reference to Nigeria. CBN Economic and Financial Review, 24(2), 33-41.
- Oyatoya E.T.O (1983), An Economic Appraisal of Small Farmers Credit Schemes: A Cost Study of Western Nigeria, savings and Development, 7(3), 79-91
- Rhasi, M (2000). An Analysis of the determinants of Agricultural Credit Approval/Loan SIZE by Commercial Banks in South-western Nigeria, Niger. Agricultural Development Studies 1(1): 17-26
- Saleem, A, Ali, F, Khattak R.M and Quraishi M.I (2014). Impact of Farms Characteristics on Repayment of Agriculture Credit (A Case Study of D.I Khan, Khyber Pakhtoonkhawa. Abasyn Journal of Social Sciences, 4(1).
- Schumpeteer J.A (1993), The Theory of Economic Development, Oxford University Press Ugwumba,
- Vaginao L. (1993), A Credit Scoring Model for Development Banks: An African Case Study, savings and development, 17(4), 441-482
- Von Pischke J.D (1980). Rural Credit Project Design, implementation an Loan Collection Performance. Savings and Development, IV(2): 45-51.
- Zeller M, and Sharma, M (1998). Rural Finance and Poverty Alleviation. Food Policy Report. International Food Policy Research Institute (IFPRI), Washington D.C