

## Determinants of Agropreneurs Accessibility to Credit Sources in Egbeda Local Government Area of Oyo State

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### ABSTRACT

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*This study was conducted to ascertain the determinant of Agropreneurs accessibility to credit sources in Egbeda Local Government Area of Oyo State. Specific objectives of this study were designed to; described the socio economic characteristics of Agropreneurs, identified the credit sources among Agropreneurs, identified the Agropreneurs ventures existing, determined the demand for business loan for Agropreneurs, examined the factors that influence Agropreneurs participation in credit market in the study area and determined the factors militating against access to credit by Agropreneurs in the study area, Multi stage sampling technique was used to select 120 respondents for this study. Questionnaires were used to elicit information from the respondents. Both descriptive and inferential statistics were used to achieve the objectives of the study. The results on socio economic characteristics of the respondents showed that 34.2% of the respondents were within the age of 31-40 years, majority (76.7%) of the respondents were married, above average (55.8%) were Christians, above average (58.3%) were male, half (55.0%) of the respondents had tertiary education, most (65.8%) of the respondents had 1-5 household members, average (50.0%) of the respondents had farming as their secondary occupation, majority (86.7%) were member to cooperative society, 40.8% of the respondents had 11 and above years of experience, majority (56.7%) of the respondents had no access to extension services. The result on credit sources among Agropreneurs further revealed that personal savings (95.0%) was major respondents sources of credit, results on Agropreneurs ventures existing showed that livestock feed business(93.3%) was the most Agropreneurs ventures existing in the study area and interest rate (74.2%) the major factor that influence Agropreneurs accessibility to credit source. Also, majority (86.7%) demanded for ₦151,000 and above. Results on factors militating against access to credit by Agropreneurs showed that strict terms and condition of the financial institution (mean=2.34) and fear of risk (mean=2.29) were the very serve factors militating against access to credit by Agropreneurs. The results of the hypothesis showed that there were significant relationship between the socio economic characteristics of the respondents and their demand for business loan by Agropreneurs in the study area with  $R^2$  of . From the finding of this study, it is recommended that; financial institution should reduce their strict terms and conditions as this will enable the Agropreneurs to acquire credit they need for their business.*

### Introduction

Agropreneurs are innovators who drive change in the economy by initiating new idea and creating new ways of carrying out different activities in input supply, production and marketing in agriculture (Olatomide and Omowumi, 2015). In fact, Agripreneurs should be proactive, curios, determined, persistent, visionary, hardworking, honest, integrity with strong managerial and organizational skills in order to identify and exploit available opportunities in agriculture (Olatomide and Omowumi, 2015).

Agropreneurship which simply means entrepreneurship in agriculture can be seen as a

process whereby farmers become determined, creative, innovative, willing to take calculated risk, always looking for opportunities to improve and expand their farm business (Sancho, 2010). Agropreneurship is the profitable fusion of agriculture and entrepreneurship as it turns farm into an agribusiness. It is synonym with entrepreneurship in agriculture and refers to agribusiness establishment in agriculture and allied sector. agropreneurship is a concept specific to agriculture and drawn from wider entrepreneurship (Shailesh *et al.*, 2013). The concept is used to describe dynamic process of creating incremental wealth from agricultural sector (Shailesh



*et al.*, 2013). The wealth is created by individuals who take the major risks in terms of equity, time and carrier commitment of providing value to some products or services. The product or service itself may or may not be new or unique but value must somehow be infused by an agropreneur who secures and allocates the necessary skill and resources (Olatomide and Omowumi, 2015).

Despite the participation of rural households in agropreneurial activities, its development has not been fully embraced. Employing entrepreneurship skill in farming lead to reduction in poverty among the rural households, but the extent of poverty reduction is still very insignificant, which is an indication that farmers have not fully taken advantage of some of the agropreneurial activities or have participated to a less extent (Olatomide and Omowumi, 2015).

According to Omonona *et al.* (2010), access to credit enhances the production efficiency of Agropreneurs thereby reducing rural poverty and food insecurity. It influences farm productivity since credit-constrained farmers are more likely to use lower levels of input in production compared to those who are not. Improving access to credit therefore has the capacity to facilitate optimal input use leading to a positive impact on productivity (Omonona *et al.* (2010). Despite the importance of credit to farmers and some credit institutions created by the government, Agropreneurs still face challenges in the acquisition of credit which makes most of them to get easily discouraged and relent in their effort to contribute to the productivity of the agricultural sector (Olatomide and Omowumi, 2015). Based on the above fact, this research analyzed the determinants of agropreneurs accessibility to credit sources in Egbeda Local Government Area of Oyo State and specifically,

- i. described the socio economic characteristics of Agropreneurs in the study area,
- ii. identified the credit sources among Agropreneurs in the study area,
- iii. identified the Agropreneurs ventures existing in the study area,
- iv. determined the demand for business loan for Agropreneurs in the study area,
- v. examined the factors that influence Agropreneurs participation in credit market in the study area,
- vi. determined the factors militating against access to credit by agropreneurs in the study area,

#### **Hypothesis of the study**

Ho: There is no significant effect of socio-economic characteristics of Agropreneurs on their demand for business loan in the study area

#### **Methodology**

##### **Study area**

The study was carried out in Egbeda Local Government Area. Egbeda Local Government was created in 1989 with the administrative Headquarters situated at Egbeda. *Egbeda. The study area is on latitude 7°22'46.55"N and longitude 3°58'2.88"E or 7.379596 and 3.967468 respectively* It covers a landmass of 185.508 square kilometers with a population density of 1,722 persons per square kilometer. The estimated figure population of the Local Government as at 2010 was 319,388 people based on a growth rate of 3.2% using 2006 census figure. The Local Government Area shares boundaries with Osun State to the east, Ibadan North Local Government area to the north, Ibadan North East Local Government Area to the west and OnaAra Local Government to the south.

However, it has 11 wards namely; Erunmu, Ayede/Alugbo/Koloko, Owo Baale/Kasumu, Olodan/Ajiwogbo, Olodo/Kumapayi I, Olodo II, Olodo III, Osegere/Awaye, Egbeda, Olode/Alakia, and Olubadan Estate. The Local Government is dominated by Yoruba's and endowed with a wide expanse of land for the production of livestock and arable farming such cassava, maize e.t.c. About half of the Local Government Area is rural in nature and suburb to Ibadan Metropolis. Subsistence farming is common among the people. The fertile soil and climate favoured the growing of maize, cassava, yams, cocoa, oil palm vegetables and citrus fruits.

##### **Study Population.**

The population of the study consists of agropreneurs in Egbeda Local Government area of Oyo State

##### **Sampling techniques and sample size**

Multi-stage sampling techniques was used for this study. In the first stage out of 11 wards in Egbeda Local Governments area namely: Erunmu, Ayede/Alugbo/Koloko, Owo Baale/Kasumu, Olodan/Ajiwogbo, Olodo/Kumapayi I, Olodo II, Olodo III, Osegere/Awaye, Egbeda, Olode/Alakia, and Olubadan Estate. 6 wards namely: Kereku, Erunmu, Ayede/Alugbo/Koloko, Owo Baale/Kasumu, Olodan/Ajiwogbo, Olodo/Kumapayi I, Olodo II were purposively selected due to the predominance of agropreneurs in the area. In third stage 2 villages were randomly selected from each of the 6 wards to give a total number of twelve (12) villages. In the fourth stage, twelve (10) respondents each were randomly selected from each village to give a total number of One Hundred respondents (120) respondents used for this study.

## Instruments for Data Collection

Primary data were used for this study and these were collected through a well-structured questionnaire.

## Data Analysis

Data for this study was analyzed using descriptive statistics such as frequency, mean and percentage while the inferential statistics was used to analyzed the hypothesis. Objective i, ii, iii, iv, v and vi were analyzed with descriptive statistics while the hypothesis was analyzed with regression.

## Model specification

The empirical model for the ordinary least square multiple regression

$$C = f(x_1, x_2, x_3, x_4, x_6, \dots) \dots \dots \text{implicit form} \dots \dots (1)$$

$$C = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + B_7 X_7 + \mu \text{ explicit form} \dots \dots (2)$$

Where

C = demand for business loan among agropreneurs in credit market (naira)

X<sub>1</sub> = Age of the farmers (in years);

X<sub>2</sub> = Sex (1=male, 2=female)

X<sub>3</sub> =Marital status (married=1, single=2, divorced=3, widowed=4)

X<sub>4</sub> = Educational level (Adult education=1, primary education=2, secondary education=3, Tertiary education=4)

X<sub>5</sub> = Secondary occupation (Farming=1, Trading=2, Civil servant=3)

X<sub>6</sub>=Farming experience (Years)

X<sub>7</sub>= Access to extension services

μ = Error term

## Results and Discussion

### Socio economic characteristics of the respondents

#### Age

Result in Table 1 revealed that 34.2% of the respondents were within the age of 31-40 years, 30.0% were within the age of 41-50 years, and 21.7% were within the age of 51 years and above 14.2% were within the age of 20-30 years. The mean age is 38 years. This implies that youth Agropreneurs dominated the study area and being young will give them the ability to improve their business and they will have the ability to source for credit facilities

#### Marital status

Result in Table 1 showed that majority (76.7%) of the respondents were married, 11.7% were single, 6.7% were divorced while 5.0% were widowed. This implies majority of the Agropreneurs are married. Timothy (2010) who reported that married people

have more responsibilities in taking care of their family members

#### Religion

The results in Table 1 revealed that above average (55.8%) were Christians, 42.5% were Muslims and 1.7% were traditionalist. This implies that both Christians and Muslims were Agropreneur

#### Sex

Results further showed that above average (58.3%) were male while 41.7% were female. This implies that majority of the respondents are male. This could be explained by the fact that, agriculture in most of developing countries is dominated by male farmers (Yegbemey *et al.*, 2014). In addition, male farmers in developing countries have more access to agricultural resources (Khan *et al.*, 2017).

#### Educational status

Table 1a revealed that half (55.0%) of the respondents had tertiary education, 37.5% had tertiary education. 5.8% had primary education while few (0.80%) of the respondents had no formal and primary education. This shows that nearly all of the respondents had were literate who had one form of education or the other. This could possibly make them understand the terms and condition of credit accessibility. Farmers with formal education have the ability to understand the credit scheme and their terms and conditions (Hananu *et al.*, 2015).

#### Household size

Results on household size showed that most (65.8%) of the respondents had 1-5 household members, 31.7% had 6-10 household members, 2.5% had 11 and above household members. The mean household size was 5 which is lesser than the national average household size of seven (7) people (Salami A, Arawomo (2013). Although, a higher household size (large family) could increase farmers' poverty status (Olatomide, and Omowumi, 2015), in the study area on the contrary, it is a key source of labor that helps support the respondents in their activities

#### Secondary occupation

Results on secondary occupation showed that average (50.0%) of the respondents had farming as their secondary occupation, 40.8% had trading as their secondary occupation while 8.3% were artisan. This implies that the Agropreneurs have farming as their secondary occupation and this will bring another source of income to fasten the credit repayment.

#### Member of cooperative society

Results in Table 1 showed that majority (86.7%) were member to cooperative society while 13.3% were not member cooperative society. This implies majority of the respondents are members of cooperative society and this will always give them access to credit facilities

### Years of experience

The result in Table 1 showed that 40.8% of the respondents had 11 and above years of experience, 35.0% had 1-5 years of experience while 24.2% had 6-10 years of experience. The mean year of experience is 12 years. This implies that higher experience will enable them to strategies and make decision on credit sources, access and mode of repayment.

### Mode of land ownership

Result of mode of land ownership in Table 1 showed that half (43.3%) of the respondents purchased the land they used for their farming activities, 39.2% inherited their lands, 12.5% were rented their farm

land, 1.7% gifted their land while 3.3% leased the land they used for their farming activities.

### Access to extension services

Table 1 showed that majority (56.7%) of the respondents had no access to extension services while 43.3% have access to extension services. This could possibly decrease the chances of the respondents in having aces credit from government. This is in accordance with the work of Salami (2013) supported Food and Agricultural Organization (FAO) recommendation that farmers are expected to be visited at least once in every two weeks (fortnightly), which translates to a minimum of 15 extension contacts in a farming season.

**Table 1: Socio-economic characteristics of the respondents**

Variable	Frequency	Percentage	Mean
<b>Age</b>			
20-30	17	14.2	
31-40	41	34.2	38years
41-50	36	30.0	
51 and above	26	21.7	
<b>Marital status</b>			
Single	14	11.7	
Married	92	76.7	
Divorced	8	6.7	
Widowed	6	5.0	
<b>Religion</b>			
Islam	51	42.5	
Christianity	67	55.8	
Traditional	2	1.7	
<b>Sex</b>			
Male	70	58.3	
Female	50	41.7	
<b>Educational status</b>			
No formal education	1	0.8	
Primary education	7	5.8	
Secondary education	45	37.5	
Tertiary education	66	55.0	
No formal education	1	0.8	
<b>Household size</b>			
1-5	79	65.8	5
6-10	38	31.7	
11 and above	3	2.5	
<b>Secondary occupation</b>			
Farming	61	50.8	
Trading	49	40.8	
Artisan	10	8.3	
<b>Member of cooperative society</b>			
yes	104	86.7	
no	16	13.3	
<b>Years of experience</b>			
1-5	42	35.0	
6-10	29	24.2	
11 and above	49	40.8	12
<b>Mode of land ownership</b>			
purchased	52	43.3	
inherited	47	39.2	
rented	15	12.5	
Gifted	2	1.7	
leased	4	3.3	
<b>Access to extension services</b>			
Yes	52	43.3	
No	68	56.7	

Source: Field survey, 2022

### Credit sources among Agropreneurs

Results in Table 2 showed the credit sources among Agropreneurs. The results revealed that personal savings (95.0%) had the highest percentage, closely followed by farmers group/cooperative societies (87.5%), agricultural banks (75.0%), private money lender (73.3%), commercial banks (60.8%), micro finance institution (58.3%) and government aided scheme (53.3%). Furthermore family and friends (32.5%) had the least percentage as the credit source among agropreneurs. This implies majority of the respondents source their credit from their personal savings and group/cooperative societies, this might be due to the fact that personal saving requires no collateral or interest rate while group/cooperative societies provide them long term loan with little or no interest

**Table 2: Credit sources among agropreneurs**

Credit Sources	Yes	No
Personal Savings	114(95.0)	6(5.0%)
Family & Friends	39(32.5)	81(67.5)
Commercial banks	73(60.8)	47(39.2)
Agricultural banks	90(75.0)	30(25.0)
Government aided scheme	64(53.3)	56(46.7)
Micro finance institution	70(58.3)	50(41.7)
Private money lender	88(73.3)	32(26.7)
Farmers group/cooperative societies	105(87.5)	15(12.5)

Source: Field survey, 2022

Multiple responses

Figures in parenthesis are in percentage

### Agropreneurs ventures existing in the study area

Results in Table 3 showed that the agropreneurs ventures existing in the study area. The results showed that livestock feed business (93.3%) had the highest percentage. Others agropreneurs ventures existing were small scale poultry business (87.5%), fish farming (84.2%), vegetable farming (80.0%), farm input (chemicals, fertilizer e.t.c) (78.3%), food processing (71.7%), field crop farming (65.8%), dairy farming (65.0%) and snail farming (62.5%). The results implies that livestock feed business, small scale poultry business and fish farming are the agropreneurs ventures existing

**Table 3: Agropreneurs ventures existing in the study area**

Agropreneurs ventures existing	Yes	No
Small scale poultry business	105(87.5)	15(12.5)
Livestock Feed business	112(93.3)	8(6.7)
Fish farming	101(84.2)	19(15.8)
Snail farming	75(62.5)	45(37.5)
Bee keeping	60(50.0)	60(50.0)
Honey production	65(54.2)	55(45.8)
Farm input (chemicals, fertilizer e.t.c)	94(78.3)	26(21.7)
Vegetable farming	96(80.0)	24(20.0)
Dairy farming	78(65.0)	42(35.0)
Field crop farming	79(65.8)	41(34.2)
Food processing	86(71.7)	34(28.3)
Oil production	54(45.0)	66(55.0)
Nursery operation	70(58.3)	50(41.7)

Source: Field survey, 2022

Multiple responses

Figures in parenthesis are in percentage

### Factors that influence Agropreneurs accessibility to credit source

Results in Table 4 revealed the factors that influence Agropreneurs accessibility to credit source. The results showed that interest rate (74.2%) had the highest percentage, closely followed by net income (65.0%), collaterals demanded (60.8%), business type trade (55.8%), occupation (53.3%) and types of agribusiness (50.0%). Mores education level (38.3%) and household size (30.8%) had the least percentage. This implies that interest rate was the major factor that influence Agropreneurs accessibility to credit source, this might be due to the low interest will prompt the

respondents to acquire the loan while high interest rate will make them not to acquire the loan, if they acquire it with high interest they might default the loan repayment which might causes chaos in the venture

**Table 4: Factors that influence agropreneurs accessibility to credit source**

Factors	Yes	No
Age	52(43.3)	68(56.7)
Marital status	41(34.2)	79(65.8)
Household size	37(30.8)	83(69.2)
Occupation	64(53.3)	56(46.7)
Net income	78(65.0)	42(35.0)
Education level	46(38.3)	74(61.7)
Types of agri business	60(50.0)	60(50.0)
Business location	53(44.2)	67(55.8)
Business activities	53(44.2)	67(55.8)
Business Age	49(40.8)	71(59.2)
Market traded	52(43.3)	68(56.7)
Interest rates	89(74.2)	31(25.8)
Collaterals demanded	73(60.8)	47(39.2)
Business location	58(48.3)	62(51.7)
Business type Trade	67(55.8)	53(44.2)

Source: Field survey, 2022

Multiple responses

Figures in parenthesis are in percentage

#### Demand for business loan by Agropreneurs in the study area,

Results in Table 5 showed the demand for business loan BY Agropreneurs in the study area. The results showed that majority (86.7%) demanded for 151,000 and above. The mean amount of loan demanded was ₦ 157, 322. More so few (6.7%) demanded for ₦ 1,000-50,000 while 3.3% demanded for ₦ 51,000-100,000 and ₦ 101,000-150,000. This implies that respondents demand for higher loan and this might be due to the fact that they want to maximize their business.

**Table 5: Demand for business loan for agropreneurs in the study area,**

Variables	Frequency	Percentage	mean
What amount of loan can you access from your credit source			
₦1,000-50,000	8	6.7	
₦ 51,000-100,000	4	3.3	
₦ 101,000-150,000	4	3.3	
₦ 151,000 and above	104	86.7	₦ 157, 322

Source: Field survey, 2022

#### Factors militating against access to credit by Agropreneurs

Results in Table 6 showed the factors militating against access to credit by Agropreneurs. The results showed that strict terms and condition of the financial institution (mean=2.34) has the highest mean and was ranked first. Other factors include, fear of risk (mean=2.29), long distance from financial institution (mean=2.28), delays in loan acquisition and lack of collateral (mean=2.19) and high interest rate (mean=2.17) which were ranked second, third, fourth and sixth respectively. Furthermore, lack of education (mean=1.88) and gender biases (mean=1.79) had the least percentage and were the least factors militating against access to credit by Agropreneurs.

This implies that strict terms and condition of the financial institution are the major factors militating against access to credit by Agropreneurs, this might be due to the fact that loan institution lay down strict terms and condition because of those who may default the loan process. Lack of education and gender bias remain the least factors and shows that both factors have nothing to do with loan access, loan access only determine by how the Agropreneurs comply with the terms and conditions.

**Table 6 : Factors militating against access to credit to Agropreneurs**

Factors	Very severe	Severe	Not severe	Mean	Rank
Long Distance from Financial Institution	49(40.8)	56(46.7)	15(12.5)	2.28	3
Delays in Loan Acquisition	38(31.7)	67(55.8)	15(12.5)	2.19	4
Fear of risk	51(42.5)	53(44.2)	16(13.3)	2.29	2
Strict terms and condition of the financial institution	54(45.0)	53(44.2)	13(10.8)	2.34	1
Cumbersome Process	35(29.2)	60(50.0)	25(20.8)	2.08	8
High interest rate	40(33.3)	60(50.0)	20(16.7)	2.17	6
Loan Diversion	21(17.5)	81(67.5)	18(15.0)	2.03	9
Lack of Collateral	37(30.8)	69(57.5)	14(11.7)	2.19	4
Lack of information on different loan sources	35(29.2)	69(57.5)	16(13.3)	2.16	7
Ignorance	31(25.8)	59(49.2)	30(25.0)	2.01	10
Credit Default Rate	29(24.2)	61(50.8)	30(25.0)	1.99	11
Gender Biases	24(20.0)	47(39.2)	49(40.8)	1.79	13
Lack of Education	26(21.7)	53(44.2)	41(34.2)	1.88	12

Source: Field survey, 2022

Figures in parenthesis are in percentage

### Regression analysis showing the effect of socio-economic characteristics of the Agropreneurs on their demand for business loan in the study area

This section determines the significant relationship between the socio-economic characteristics of the Agropreneurs on their demand for loan in the study area. This was achieved by using multiple regression analysis and the hypothesis tested at 5% significant level. The results as presented in table 7, revealed that age Sex, Household size, Membership to cooperative society, Years of experience, Mode of land ownership, Access to extension service had positive coefficient values which had direct positive influence on demand for business loan for Agropreneurs in the study area and marital status, Religion, Educational status, Household size, Secondary occupation of the respondents had negative coefficient implying that there is an inverse effect on demand for business loan of Agropreneurs.

The adjusted R<sup>2</sup> was 0.685 indicating that 685% of the demand for business loan was explained by the influence of the socio economic characteristics. Since the p-value (0.000)<0.05), the null hypothesis was rejected while the alternative was accepted meaning that there is significant relationship between the socio economic characteristics of the respondents and demand for business loan by Agropreneurs in the study area.

**Table 7: regression analysis showing the effect of socio-economic characteristics of the Agropreneurs on their demand for business loan in the study area**

Variable	B	Standard error	T	Significant	Decision
(Constant)	623949.994	312393.327	1.997	0.048	significant
Age	25949.438	29554.919	0.878	0.382	Not significant
Marital status	-81079.581	32953.909	-2.460	0.015	Significant
Religion	-62946.660	41050.958	-1.533	0.128	Not significant
Sex	96797.921	51225.291	1.890	0.011	significant
Educational status	-195021.836	225218.002	-0.866	0.388	Not significant
Household size	73844.637	46228.050	1.597	0.013	Significant
Secondary occupation	-7404.216	26963.089	-0.275	0.784	Not significant
Membership to cooperative society	34511.122	68956.731	0.500	0.618	Not significant
Years of experience	17605.308	22100.547	0.797	0.427	Not significant
Mode of land ownership	58536.280	33056.248	1.771	0.079	Not significant
Access to extension services	-146248.089	41856.219	-3.494	0.001	significant
Adjusted R <sup>2</sup>	0.685				
F-value	3.460				
P-value	0.000				

Source: Field survey, 2022



## Conclusion

From the findings of the study, it is concluded that majority of the respondents are married male Agropreneurs with the mean age of 38 years. It is also concluded that personal savings are the respondents source of credit, Agropreneur existing venture in the area are livestock feed business, small scale poultry business, fish farming, vegetable farming, farm input (chemicals, fertilizer e.t.c) and food processing. The Agropreneurs demands for average loan amount of ₦157, 322. It is also concluded that strict terms and condition of the financial institution and fear of risk are factors militating against access to credit by Agropreneurs in the study area. It is also concluded that there is significant relationship between the socio-economic characteristics of the Agropreneurs and their demand for business loan in the study area.

## Recommendations

From the finding of this study it is recommended that:

1. Financial institution should reduce their strict terms and conditions as this will enable the Agropreneurs to acquire credit they need for their business
2. Proximity of loan financial institution should be considered as this will give long distance Agropreneurs access to instant loan
3. Financial institution should reduce their collateral as many agropreneurs may not afford it
4. Little interest rate should be added to loan acquired as this will prompt fast repayment of their loan.

## References

Hussein H.K, Ohlmer B.O. (2008). Influence of Credit Constraints on Production Efficiency: The Case of Farm Households in Southern Ethiopia. Swedish University of Agricultural Sciences, Sweden; 2008.

Khan N, Shafi MM, Shah M, Islam Z, Arif M, Javed R, Shah N (2011). Review of past literature on agriculture credit in rural area of Nigeria. *Sarhad J. Agric.* 27(1):103-110.

Olatomide, W.O. and Omowumi, A. O. (2015). Factors Affecting Entrepreneurship development on Agribusiness Enterprises in Lagos State Nigeria. *Global Journal of Management and Business Research* Vol. 15 issue 7 Pp 25-32

Omonona, B.T. Lawal, J.O. & Oyinlana, A.O. (2010). Determinants of Credit Constraints, Conditions and Production Efficiency among Farming Households in South western Nigeria. In: Paper Presented at the Joint Third African Association of Agricultural Economists and Forty Eight Agricultural Economists Association of South Africa Conference, Cape Town, South Africa, 19-23 October 2010. pp.22–35

Salami A, Arawomo (2013). Empirical Analysis of Agricultural Credit in Africa: Any Role for Institutional Factors?, Working Paper Series N° 192 African Development Bank, Tunis, Tunisia.

Sancho, F. (2010). Agricultural and rural entrepreneurship: concepts for modeling development. *Agribusiness Perspective*, 5(1): 64 – 78.

Shailesh, K., Gyanendra, S and VK. Yadav (2013). Factors Influencing Entrepreneurial Behaviour of Vegetable Growers. *Indian Resource Journal of Extension Education*, 13 (1)

Timothy G, Drummond S, (2000). Agricultural credit programs and production efficiency: an analysis of traditional farming in Southeastern Minas Gerais, Brazil. *American Journal of Agricultural Economics*. 2000; 68(1):110-119.