

Agricultural Loan a Means to Increase Agricultural Production in Ekiti State, Nigeria

Oluwatusin Femi Michael Department of Agricultural Economics and Extension Services, University of Ado-Ekiti, Ekiti State, Nigeria

Abstract: The study was undertaken to examine and compare the socio-economic characteristics of agricultural loan beneficiaries and non-beneficiaries in Ekiti State, Nigeria. Four villages were selected randomly from two randomly selected Local Government Areas in the state for the study. Structured questionnaires were used to collect information from 150 rural farmers. Analytical tools employed include descriptive statistics such as: frequency counts, tables and percentage and multivariate regression analysis. The estimated regression equations for the 2 categories of farmers (beneficiaries and non-beneficiaries of agricultural loan) were tested for equality of the corresponding coefficients through the Chow Test. The descriptive statistics reveals that majority (63%) of the respondents had access to agricultural loan. But 93% of the loan beneficiaries claimed that non-institutionalized organizations and individuals remain regular sources of loan to them. Seventy percent of the respondents were unaware of the Agricultural Credit Guarantee Scheme (ACGS). Seventy seven percent of the beneficiaries maintained that most of the loan collected were used to purchase planting materials and paid hired labour. The modal age group for the beneficiaries was 40-49 years while majority (77%) of them had not less than primary education. In addition many (70%) of them had been farming for 11-15 years. For the nonbeneficiaries the modal age was 50-59 years. Most (80%) had no formal education and 70% had been farming for over 20 years. The regression analysis shows that the 8 postulated independent variables [Age (X₁), Household Size (X_2) , Educational Status (X_3) , Farm Size (X_4) , Hired Labour (X_5) , Family Labour (X_6) , Farming Experience (X_7) and Distance of Residence to Farm (X_8) explain 55-63% of the variation in logarithm of the gross output value. The coefficient of multiple determination of 0.632 for the beneficiaries connotes that about 63% of the observed variation in gross output value were occasioned by change in the eight-selected variable. Based on the findings of the study, certain recommendations were made that will help to unlock agricultural and rural potentials. There is need for urgent and concerted action to enlighten rural farmers about the importance of Agricultural Credit Guarantee Scheme.

Key words: Agricultural loan, farmers, guarantee, farm sizes

INTRODUCTION

Nigeria, the giant of Africa, has all it takes (material and human resources) to become the strongest economy in Africa. The country had an estimated population of over 140 million in 2006- nearly one-quarter of sub-Saharan Africa's population and spans an area of 924, 768 square kilometers. Nigeria produces over 2 million barrels of oil per day, her proven reserves of oil amount to 34 billion barrels, enough to last for just 37 years at the current rate of production. Also the country proven natural gas reserves amount to 174 trillion cubic feet, which will last for 110 year at the current rate of production. This shows that our oil and gas could not last for ever and hence there is need to unlock the agricultural and rural development potentials before is too late. If this is done, it would offer our children a better prospect than those they may be tempted to seek in the United State of America and other advanced countries.

Moreover, in Nigeria, it has been shown that agriculture is the dominant economic activity in term of employment and linkages with the rest of the economy. About 75% of Nigeria land is arable of which about 40% is cultivated. It is because of the importance of agriculture as well as the fact that significant improvement in rural welfare depends upon its development that the governments (Federal, State and Local) over the years have pursued policies and programmes aimed at the expansion and modernization of agriculture. These programmes and policies all have the bottom line of trying to unlock the agricultural and rural development potentials by enhancing the capacity of the rural dwellers, making agriculture more profitable, providing infrastructural facilities and hereby raising the rural people standard of living.

Furthermore, rural development has been taken to be synonymous with the development of agriculture. But researchers have realized that agriculture is by no means the only possible occupation for people living in the rural areas.

Alao (1987) referred to an area to be rural when most people live in small communities or villages with recognizable geographical boundaries; agriculture is the main if not the sole occupation for most of the population and is at subsistent level; social control mechanisms is rooted in traditional norms; few or non-existent private sector in the economy resulting in low economic activities; lack of modern amenities such as good drinking water, electricity; poor roads, inadequate health facilities; fatalism or resignation to fate resulting in little or no ability to control the natural environment; and the government is the sole employer of labour outside the family farm. According to the census, an area is said to be rural when it has less than 20,000 inhabitants (NPC, 1998). Unlocking the rural development potentials poses tremendous challenges to Nigeria in order to stem down the rural-urban migration.

United Nations (1973) showed that in 1965, 80% of Africa's population was residing in rural areas and by 1985 the proportion had declined to about 70% due to rural-urban migration as a result of poor infrastructural facilities that exist in the rural area. Orubuloye (1981) argued that, people's decision to migrate from rural to urban areas with a view to achieving economic improvement is a function of 2 variables: Rural income differentials and the urban employment rate which largely determines the probability with which the migrants could secure employment.

In addition, it was argued that if the rural-urban movement is to be reduced, the development of rural areas would not have to be limited to agricultural development alone, but also an overall development (Orubuloye, 1987). In contrast, the 1991 Nigerian Population Census (NPC) revealed a national average of 63.72% living in the rural areas (NPC, 1998). But in 2000, about 65% of the population reside in these areas. This increase may be due to people's political awareness.

Ninty percent of the rural labour force of Ekiti State is engaged in agriculture, operating less than 5 ha of land. Also, the farmers in the state find it difficult to buy or hire modern equipment due to their low level of income. This has contributed to the persistent usage of primitive hand tools such as cutlass, hoe and pick axe to cultivate the land. This makes food production to lag behind population growth in the state. Also, some of the agriculturally oriented villages are not accessible due to the poor condition of roads. This hampered the movement of the agricultural products from the producers in the rural areas to the consumers in the urban centre. Also, the establishment of large-scale farming is an illusion in this

state at present. This is due to inadequacy of two vital factors of production; land and credit facilities. The capital with which farmers can purchase or hire machinery and land is in short supply.

Furthermore, the problems of agricultural and rural development in Nigeria are inexhaustible but if the problems are tackled from the grassroots level by unlocking the potentials there is hope for recovery. Unlocking potentials in anything requires credit. It is to this end that this study was designed to: examine and compare the socio-economic characteristics of farmers who benefited from one agricultural loan or the other with the non-beneficiaries.

The null hypothesis tested with Chow Test is that the estimated relationship between gross output value and socio-economic characteristics are the same for both agricultural loan beneficiaries and non-beneficiaries.

MATERIALS AND METHODS

The study was carried out in Ekiti State, Nigeria. A multi-stage sampling technique was employed in selecting 150 respondents. The first stage involved the random selection of two Local Government Areas (LGAs) namely, Irepodun/Ifelodun and Ijero Local Government Areas. In the second stage of the sampling, two villages were randomly selected from each LGA. The villages selected were, Ara-Ijero-Ekiti, Araromi-Ijero-Ekiti, Iropora-Ekiti and Awo-Ekiti. The third stage involved random selection of 150 farmers from the 4 villages chosen. On the whole, a total of 150 copies of questionnaire were printed out of which 136 were collected for the analysis. This was due to lack of cooperation from some farmers and incomplete information from some others. The well structured questionnaire was used to obtain information on the socio-economic characteristics such as, age, educational level, household size, farm income, amount of credit used, sources of agricultural loan, farm size, farming experience, distance of household residence to farm and so on. Also farm inputs and outputs data were collected.

The data collected from the respondents were analyzed using descriptive statistics such as, frequency counts, percentages and tables. The multiple regression analysis was used to examine the impact of selected socio-economic characteristics on gross output value. The socio-economic characteristics were the explanatory variables while the gross output value was used as the dependent variable. The postulated model expressing the relationship between the explanatory variables and the dependent variable was expressed as:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, U_i)$$

Where

Y = Gross output value (Naira).

 $X_1 = Age of household head (Years).$

 X_2 = Household size (number).

 X_3 = Educational status of the household head (Years).

 X_4 = Farm size (Hectare).

 X_5 = Hired labour (Man days).

 X_6 = Family labour (Man days).

 X_7 = Farming experience (Years).

X₈ = Distance of household residence to farm (Kilometers).

U_i = Error term.

Chow Test was conducted on the regression coefficients of loan beneficiaries and non-beneficiaries in order to test the null hypothesis (Koutsoyannis, 1977).

RESULTS AND DISCUSSION

Socio-economic background of the respondents interviewed: A study of the problems of farmers in acquiring and using loan for agricultural activities goes beyond mere identifying their needs, sources and uses; it also include understanding the underlying socio-economic characteristics that condition their abilities to acquire and use such funds effectively. Among the factors that presumably affect a farmer's agricultural productive capacities are the, age educational background, farming experience, household size and farm income.

The respondents were questioned on their access to agricultural loan or credit for their agricultural activities. Table 1 shows that, the majority of the respondents (63%) had access to the use of agricultural loan or credit while 37% did not. But for any small scale farmer to grow to become medium and eventually large scale farmer, he must have among other incentives an assured supply of credit for short, medium and long term.

Lack of credit has been one of the several problems that have trapped down Nigeria agriculture into a net of subsistence and peasantry. The few (37%) that did not obtain loan or credit may have been put off by lack of acceptable collateral securities, high interest rates and unnecessary red-tapism amongst the lending bodies. Over the years, these problems have denied the farmers credit facilities with which they could have developed there farms and break away from the vicious cycle of poverty.

Table 2 shows the sources of agricultural loan/credit for respondents who had access to it. The field survey conducted by the author in 2005 showed that informal sources had been the most popular among the farmers;

Table1: Distribution of respondents by access to agricultural loan

Access	Absolute frequency	Percentage frequency
Yes	86	63
No	50	37
Total	136	100

Source: Field survey, 2005

Table 2: Sources of agricultural loan/credit for respondents

	Absolute	Percentage
Sources of loan	frequency	frequency
Co-operative produce marketing society	10	12
Money lenders and general merchants	5	6
Cooperative thrift and credit society	15	17
Friends, neighbours and relatives	50	58
Banks	6	7
Others	-	-
Total	86	100

Source: Field survey, 2005

this might not be unconnected with their inherent and essential advantages of being quicker, more personal and less formal. Notwithstanding, however, the noninstitutionalized, particularly the licensed money lender and the general merchants charges exorbitant rates of interest. Out of 86 respondents that had access to agricultural loan, 50 respondents (58%) maintained that friends, neighbours and relatives remain regular sources of credit/loan while just 6(7%) said that banks were relatively regular in granting credit facilities to them. The past performances of the commercial banks in respect of farm credit have not been too impressive, promising and encouraging. This may be due to the fact that they are operating for profit. Most of their lending activities are concentrated in non farm investment opportunities where the rates of returns on capital are quicker and highest. Another reason for their attitudes which has led to inability to grant more agricultural loan to farmers may not be unconnected with the facts that marginal productivity of capital is higher for non agricultural investment. In addition, the commercial banks believe that non-farm enterprises have adequate and more acceptable collateral securities, which they can use in case of default.

Despite the fact that Agricultural Credit Guarantee Scheme (ACGS) established by the Federal Government of Nigeria encourages banks to lend to all those who intend to or are engaged in meaningful agricultural activities by accepting maximum liability of 75% of any amount in default; the banks still find ways of not complying entirely with the instructions. Also 25 respondents (29%) claimed to obtain loan for their farming activities from the cooperative societies.

Table 3 indicates that 70% of the respondents were unaware of the government agricultural loan under ACGS. This is really significant as one wonders for whom the loan was established then. It shows that information about the loan was not made available to them. Just 30%

Table 3: Government agricultural loan under agricultural credit Guarantee scheme awareness

Awareness	Absolute frequency	Percentage frequency
Yes	41	30
No	95	70
Total	136	100

Source: Field survey, 2005

Table 4: Purpose for which the Loan is required

	Absolute	Percentage	
Purpose	frequency	frequency	
Purchase of seeds, seedlings			
and other planting materials	36	42	
Purchase of chemicals	15	17	
Payment for labour	30	35	
Expanding the farm	3	4	
Replacing stocks	2	2	
Total	86	100	

Source: Field survey, 2005

of the respondents were aware of the Federal Government guaranteed agricultural loan. Respondents were asked to indicate specifically the farm uses of the loans granted to them. Table 4 reveals that a large percentage (42%) of them reported that seeds, seedlings and other planting materials accounted for the main reasons why the loans were sought.

This shows a high level of commercialization among the respondents. Another top farm-use of loans is the payment for labour (35%). This stems from the increasing cost of available local labour due to unrestricted ruralurban migration. Some of the respondents argued that labour cost is now threatening cultivation of local crops because mechanization has not been embraced due to inadequate credit facilities. This shows that in the rural areas the influence of modern civilization is yet to be appreciated. But 23% of the respondents used the loan for the purchase of chemicals, expansion of farmland and replacement of old livestock. According to one of the respondents he said, atimes he may be tempted to use the loan received for their children education. He believed that no one would like to see his children uneducated like himself. In Ekiti State, the author observed that an average father no matter the odds would like to see that his children know at least how to read and write.

Moreover, the respondents were asked on their access to 6 different types of agricultural inputs apart from loan/credit. Table 5 shows that access to high yielding seed/planting materials was poor with the result that about 71% had no access to them. This is similar to access to fertilizer, pesticides and extension services. With regards to access to labour, 73% had access to the use of family labour while 27% did not. About 38% made use of paid labour on their farms while 62% did not. This implies that respondents generally have limited access to productive inputs. This will lead to low output and low farm income.

Table 5: Distribution of all respondents by access to agricultural inputs apart from loan

	Yes		No		
Access	Absolute frequency	Percentage frequency	Absolute frequency	Percentage frequency	
High		•			
yielding seeds	40	29	96	71	
Fertilizer	37	27	99	73	
Pesticides	43	32	93	68	
Extension					
services	50	37	86	63	
Family labour	100	73	36	27	
Paid labour	51	38	85	62	

Source: field survey, 2005

Table 6 reveals the age structure of the respondents. The modal age group for the farmers who had benefited from one agricultural loan/credit or the other was 40-49 years with a frequency of 58%. Specifically, 12% were in the age group 20-29 yeas, 17% were in the age bracket 30-39 years; 9% were between 50 and 59 years; and 4% were 60 years and above. In addition, the modal age group for the non-beneficiaries was 50-59 years with a frequency of 60%. The study reveals that about 80% of all the respondents fell within the age group 40 and above years. This clearly shows that the farming population is really ageing. The younger ones have left the rural areas for the urban in search of non-existent urban employment. When the two age distributions were compared, younger farmers had interest in the use of loan to pursue their daily agricultural activities than the aged farmers. Though the age distribution is fairly normal, one would have expected a distribution towards the age bracket 30-39 years in view of our underdeveloped state of agriculture which demands the use of physical human labour in cultivation. The inadequacy of young and energetic people in the farming business may lead to low farm output. This unpleasant development is due to inadequate infrastructural facilities in the rural areas. This study reveals that age played a leading role in ability of any farmer to obtain loan/credit.

Table 7 presents the educational background of the respondent. It shows that about 23% of the agricultural loans beneficiaries had no formal education and 35% had primary education while 40 and 2% had secondary and post-secondary education, respectively. In the non-beneficiaries category, majority (80%) had no formal education while just 14 and 6% had primary and secondary education, respectively. The analysis indicates a general low literacy level among the rural farmers. This perhaps may explain why it has been difficult to reach the rural farmers, who incidentally form a large % of our

Table 6: Age (in years) distribution of the respondents

	Loan beneficiaries		Non-Loan beneficiaries		
Age group (years)	Absolute frequency	Percentage frequency	Absolute frequency	Percentage frequency	
Below 20	-	-	-	-	
20-29	10	12	-	-	
30-39	15	17	2	4	
40-49	50	58	3	6	
50-59	8	9	30	60	
60 and above-	3	4	15	30	
Total	86	100	50	100	

Source: Field survey, 2005

Table 7: Educational Status of the Respondents

	Beneficiaries		Non-beneficiaries		
Educational level	Absolute frequency	Percentage frequency	Absolute frequency	Percentage frequency	
No school training	20	23	40	80	
Primary school	30	35	7	14	
Secondary school	34	40	3	6	
Post-secondary	2	2	-	-	
Total	86	100	50	100	

Source: Field survey, 2005

Table 8: Farming Experience of the Respondents

	Beneficiaries		Non-beneficiaries	
	Absolute	Percentage	Absolute	Percentage
Farming experience (years)	frequency	frequency	frequency	frequency
1-5	8	9	1	2
6-10	12	14	2	4
11-15	60	70	2	4
16-20	4	5	10	20
21 and above	2	2	35	70
Total	86	100	50	100

Source: Field survey, 2005

farming folks, in the areas of modern innovation and big credits. It is generally believed that farmers who have obtained some level of formal education no matter how rudimentary can appreciate the demands and benefits of loan. The level of education must have assisted the loan beneficiaries from obtaining the loan because educated people understand better the importance of credit in modern farming.

Also it has been argued that education makes people to be more enlightened. Educational status of the respondents reveals a serious educational backwardness of rural farmers in a state known as fountain of knowledge. Adult literacy should be encouraged by the government in order to unlock the potentials in our farmers. This is because, the higher the level or number of years of schooling, the better exposed one is.

Table 8 shows the years of exposure of the respondents to farming. The majority (70%), of those who had benefited from loan had experience ranging between 11 and 15 years in one form of farming enterprise or the other. Nine percent of them had experience ranging between 1 and 5 years, 14% between 6 and 10 years while,

7% had between 16 and above years experience. The study reveals that the non-beneficiaries are more experienced. About 90% had 16 and above years of experience in farming while just 10% had less than 16 years experience. One expected the year of experience to assist farmers in predicting accurately the future outcome of production and hence be ready to obtain loan, but the reverse is the case. This finding conforms to a prior expectation that experienced and aged farmers are not ready to adopt new innovation.

Household size is taken as the total number of persons within the household sharing a common source of food. Table 9 shows that, among the beneficiaries of loan, the majority (60%) had between 3 and 6 people; 12% had less than 3 people; 20% had 7-10 people while 8% had more than 10 people per household. The reverse is the case with the non-beneficiaries. The majority (82%) had not less than seven people per household. This shows that the non-beneficiaries farmers have fairly large family sizes in general. The household size determines the availability of family labour for agricultural

Table 9: Distribution of Respondents by Household Size

	Beneficiaries		Non-loan beneficiaries		
	Absolute	Percentage	Absolute	Percentage	
Household size	frequency	frequency	frequency	frequency	
Lees than 3 people	10	12	4	8	
3-6 people	52	60	5	10	
7-10 people	17	20	20	40	
11-14 people	4	5	10	20	
More than 14 people	3	3	11	22	
Total	86	100	50	100	

Table 10: Distribution of Respondents by Annual Income Level

Income range (₦)	Loan Beneficiaries		Non-Loan Beneficiaries		
	Absolute frequency	Percentage frequency	Absolute frequency	Percentage frequency	
Lees than 15000	4	5	3	6	
15000-24000	10	11	2	16	
25000-34000	3	4	10	20	
35000-44000	3	4	22	44	
45000-54000	20	23	4	8	
Above 54000	46	53	3	6	
Total	86	100	50	100	

Source: Field survey, 2005

purposes. The large the household size the more the labour available.

Respondents annual income analysis on table 10 shows that 5% earned less than ₩15, 000 per annum; 11% earned between ₩15, 000 and ₩24, 000 and about 8% earned between ₹25,000 and ₹44,000 per annum in the agricultural loan beneficiaries category. In the relatively higher income class, the majority (76%) of the loan beneficiaries earned ₹45, 000 and above per annum. Among the non-beneficiaries, 6% earned income less than ₩15, 000 per annum, 36% earned between ₩15, 000 and ₦34, 000, 44% earned between ₦35, 000 and ₦44, 000 while just 14% earned income ₹45, 000 and above. This shows that income is more robust among the loan beneficiaries than the non-beneficiaries. Comparing the income of the beneficiaries with the non-beneficiaries, the result reveal that while 53% of the beneficiaries earned above ₹54,000, only 6% of the non-beneficiaries were in that income bracket. This again reflects the importance of loan for the development of our agricultural sector.

Regression analysis of gross output value by socio-economic variables: This study is to show whether or not the socio-economic characteristics of the farmers have significant impact on the values of their outputs. Multiple regression analysis was used to explore the relationship. Four functional forms: exponential, semi-log, linear and double log were tried on the data. The one producing the best fit was chosen based on the following criteria.

These are: Number of estimators that are statistically significant; value of F-ratio; magnitude of coefficient of

multiple determination R^2 and the reasonableness of the magnitude of the coefficients and the signs on the estimated parameters. The double log form was chosen based on the above specified criteria.

Table 11 shows the regression analysis. The values of coefficient of multiple determination (R2) in all cases turn out to be high and statistically significant. This shows the variations in the explanatory variables included in the analysis explain 55-63% of the variations in the logarithms of the gross output value of agricultural production in the sampled area. This implies that for those farmers who had benefited in one kind of loan or the other, 63% variations in their gross output value is brought about by the variation in the explanatory variables included. Also for the non-beneficiaries, 55% variation in their gross output value is brought about by the variation in the independent variables included in the regression analysis. For both beneficiaries and nonbeneficiaries, 60% of the variance in their gross output value is explained by differences in the socio-economic variables contained in the regression equation. In addition, when F-statistics are considered in order to know whether or not all the partial regression coefficient are equal to zero, F-statistics computed i.e. 15.21, 13.51 and 12.42 for beneficiaries, non-beneficiaries and both, respectively are all greater than the F-theoretical. One may conclude that every partial regression coefficient is important.

Furthermore, according to Table 11, for the beneficiaries, all the explanatory variables included in the regression are positively related to the gross output value (Y) except household size (X_2) , which is negatively

Table 11: Regression (Double-Log) for Farmers in the study area

	Loan beneficiaries		Non-loan benefic	Non-loan beneficiaries		All respondents	
Variables	Coefficient	T-statistics	Coefficient	T-statistics	Coefficient	T-statistics	
Constants	2.362	1.231	-2.763	1.340	3.480	1.240	
Age	0.256***	1.980	-0.345	0.921	-0.300*	2.430	
Household size	-0.410	0.301	0.532**	2.340	0.630	1.241	
Educational status of							
the household head	0.034*	2.641	0.647	0.310		2.601	
Farm size	0.347*	2.621	0.371***	1.970	1.310*	1.990	
Hired labour	1.635**	2.310	0.432	0.112	1.431**	2.010	
Family labour	2.461	0.422	-0.511**	2.134	1.521 **	1.340	
Farming experience	0.413	1.330	1.242	1.281	1.765	1.450	
Distance of household					0.346		
residence to farm	0.534**	2.101	0.631	0.321	1.340*	3.137	
R2	0.632		0.550		0.604		
F-statistics	15.21		13.51		12.42		

^{*, **}and*** significant at 1%, 5% and 10%, respectively, Source: Survey Data Analysis; 2005

Table 12: Chow tests among beneficiaries and non-beneficiaries of agricultural loan

		Degree of f	freedom			_
Agricultural	Number of			Observed	Theoretical va	lue F ratio levels
loan	respondents	1	2	variance	of significance	:
		k	n ₁ +n ₂ -2k	Ratio F*	1%	5%
Beneficiaries	86	9	118	8.50	2.56	1.96
Non-Beneficiaries	50					

Source: Derived from Data Analysis, 2005

correlated. In order words, the more the household size (X_2) the less the gross output value (Y) and vice versa. This is due to the fact that farmers may have devoted a sizeable amount of his income for the family basic needs in order to keep the life going. This will definitely affect the amount of capital available for farming activities. Also for the beneficiaries, all the coefficients are statistically significant with exception of farm household size (X_2) , family labour (X_6) and farming experiences (X_7) coefficients.

This shows that to the beneficiaries the 3 variables $(X_2, X_6 \text{ and } X_7)$ are less important in changing the gross output value (Y). Age (X_1) is statistically significant at the 10% level. Hired labour (X_5) and distance of residence to farm (X_8) are statistically significant at the 5% level while educational status (X_3) , farm size (X_4) are statistically significant at the 1% level. Household size (X_2) and family labour (X_6) may not play a vital role because among the beneficiaries because they did not use household as labour on their farms. Also, farming experience (X_7) is less important because the majority of the loan beneficiaries are literate.

For the non-beneficiaries of agricultural loan, all the coefficients are positively signed except age (X_1) and family labour (X_6) . This shows that unit increase in each of the X_2 , X_3 , X_4 , X_5 , X_7 and X_8 increase the gross output value. In addition, X_2 and X_6 are statistically significant at 5% level while X_4 is statistically significant at the 10% level.

Finally, for all the respondents, the coefficients are positively related to the gross output value (Y) except the

variable age (X_1) coefficient. five of the coefficients (X_1, X_3, X_4, X_5) and (X_4) are statistically significant. When table 11 is considered, the importance of farm size cannot be overemphasized. The coefficient of this variable (X_4) is statistically significant with the two categories of farmers considered. This shows that the larger the farm size, the more the level of gross output value (Y).

Test of differences in gross output value of beneficiaries and non-beneficiaries of agricultural loan: In testing for difference in gross output value among the farmer sampled, Chow Tests were conducted on the regression coefficients obtained for the two categories. The result is shown in Table 12. The Chow Tests showed that some farmers have large gross output relative to others since F-Calculated (8.50) is greater than F-theoretical at both 1% (2.56) and 5% (1.96) level of significance. The null hypothesis is thereby rejected. This shows that gross output values among those who benefited from one form of loan or the other and those who did not are not the same.

CONCLUSION AND RECOMMENDATIONS

The main objective of the study was to examine and compare the socio-economic characteristics of farmers who had benefited from one agricultural loan or the other. To do this, 150 structured questionnaires were administered among randomly selected rural farmers in Irepodun/Ifelodun and Ijero Local Government Areas. Two villages were selected from each Local

Government Area (LGA) to give 4 villages. One hundred and thirty six respondents were finally used in the analysis. Eighty six of the respondents had benefited from one form of agricultural loan or the other while 50 respondents had not. Descriptive statistic such as frequency counts, percentages and tables were used to analyze the socio-economic characteristics of the respondents. Also multiple regression analysis was used to examine the effects of some selected farmers' socio-economic characteristics on the gross output value. Chow Test was administered in the test of equality between coefficients obtained for beneficiaries of agricultural loan and non-beneficiaries. This led to the rejection of the only null hypothesis stated for the study. This decision was taken because the F-calculated in the Chow Test was greater than F-theoretical at both 1 and 5% levels of significance.

The descriptive statistics reveals that the majority of the respondents had access to agricultural loan. Informal institutions such as friends and relatives, money lenders, cooperative societies constituted the major sources of agricultural loan. These institutions normally give loan at high interest rates. Also about 70% of the respondents were unaware of the Federal Government guaranteed agricultural loan. The beneficiaries used most of the loan collected to purchase agricultural inputs such as planting materials and paid for hired labour. Rural farmers generally have limited access to productive inputs. The modal age group beneficiaries was 40-49 years. It was revealed that beneficiaries were younger than the non-beneficiaries. Educational status of the respondents shows a serious educational backwardness among the rural farmers especially the non-beneficiaries.

The regression analysis indicates that the 8 postulated independent variables explain 55-63% of the variations in the logarithm of the gross output value. For the beneficiaries, all the explanatory variables are positively related to the gross output value except one variable. But for the non-beneficiaries, five of the explanatory variables were positively signed to the gross output value. The coefficient of farm size is statistically significant for both groups.

Perhaps the most important contribution of this study is that it has exposed the lack of awareness of the Agricultural Credit Guarantee Scheme by the rural farmers. In order to unlock the agricultural and rural development potentials there is need for an urgent action to enlighten rural farmers about the programme. Such educational enlightenment programme should utilize a participatory approach, which should be channeled through cooperative societies and extension agents.

Among major problems cited confronting rural farmers are lack of capital and credit facilities, infrastructural deficiencies, technological constraints, high cost of labour, institutional constraints, marketing problems and few viable rural development programmes. However, the problems should be solved by the government in order to unlock the agricultural and rural development potentials.

In the light of the findings, it becomes necessary to make some recommendations.

- Necessary prerequisites for a successful agricultural credit programme should be put in place in the rural areas. This involves the provision of infrastructural facilities such as electricity, pipe-borne water, good roads, good markets, health centers, etc; this will check the movement of youths to the urban areas and provide a suitable production environment.
- There is need for banks to employ more credit officers to ensure adequate supervision of projects being financed. Also this will enhance banks loan recovery.
- Banks should be forced by the Central Bank to decentralize their operations while local branches should be allowed to deal with loan requests at the local level rather than refer such to headquarter for approval.
- In order to allow the rural farmers to know the various sources of finance available and in particular about location of loan offices as well as their operational and administrative procedures, public enlightenment should be embarked upon.
- There is need to shift emphasis from loan in cash to credit in kind. This measure will reduce loan diversion, reduce default cases as a result of improper loan utilization and improve the repayment discipline of beneficiaries.
- Rural farmers should be encouraged to take up agricultural insurance policy.

Finally, the Agricultural Credit Guarantee Scheme should be reviewed with a view to simplifying the process to enable rural farmers to benefit from the scheme. In order to encourage banks, the scheme should be 100% guaranteed.

REFERENCES

Alao, J.A., 1987. Introduction to the problems of Rural Development. Proceedings from the 4th Annual Conference Organized by Faculty of Social Science, Ondo State University, Ado-Ekiti, pp. 1-13.

- Koutsoyannis, A., 1977. Theory of Econometrics. pp: 136-42.
- Lele, U., 1975. The design of Rural Development lesson from Africa. Baltimore-John Hopkins. University Press, pp. 10-15.
- National Populations Commission, 1998. 1991 Population Census of the Federal Republic of Nigeria, Analytical report at the National Level. National Populations Commission.
- Orubuloye, I.O., 1981. Rural Populations and their Characteristics in English speaking Western African countries FAO/UNFPA/NISER workshop on population and agricultural rural planning Ibadan.
- Orubuloye, I.O., 1987. Rural Population Characteristics and their Implications for Rural Development. Proc. 4th Ann. Conf. Organized by Faculty of Social Science, Ondo State, University Ado-Ekiti, pp. 48-63.
- United Nations, 1973. Rural Women's Participation in Development. New York.