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EFFECT OF AGRICULTURAL CREDIT ON THE DEVELOPMENT OF SMALL-SCALE FARMING IN LAVUN LOCAL GOVERNMENT AREA, NIGER STATE, NIGERIA

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ABSTRACT

The study examined changes in production levels of farmers as a result of their access to credit facilities. The study area is Lavun LGA, Niger State Interview schedule used to elicit information was subjected to reliability test using test – retest method (r = 0.87), while stratified random sampling was used to select 152 respondents from four strata. Data collected were analysed using descriptive (frequency, percentages and mean) and inferential statistics (ANOVA) to test hypotheses stated. Findings revealed that 55.9% of farmers with access to credits recorded large increase in production level. A significant difference for both production (F = 15.094, P<0.05) and income levels (F = 163.566, P<0.05) of farmers with and without credit facilities were also confirmed by ANOVA. Therefore, it was recommended that farmers should be encouraged to form themselves into groups and saving associations so as to facilitate their access to credit.

INTRODUCTION

It has been observed that the bulk of food production in Nigeria is being carried out by small holder farmers who rely more on manual labour than labour saving devices which often results in low output. Therefore, there is a need for adequate provision of credit facilities, skilled manpower, extension services, research linkages and expansion of agro-allied businesses among others (Babajide, 1999).

Since farm size is an important element in the evaluation of farm financing and credit requirements, small-scale farmers whose patterns of agriculture are characterized by low operating capital, low fixed capital, labour intensive production and small farm size, usually have difficulties which tend to inhibit the flow of credits to them.

Moreover, difficulty in obtaining cheap supplies which could have been possible for a large-scale farmers taking advantage of economy of scale, marketing of farm produce and infrastructural deficiency hamper efficiency (Edordu et al, 1981). Therefore, the demand for credits by farmers is potentially high because capital is required to purchase implement, seeds and agro-chemical among others. Meanwhile, as a result of increase in population and real income, the demand for food will continue to increase. It appears, therefore, that

improved technology and enhanced productivity offer the country the best prospect (Olayide et al, 1980).

However, Burdhan (2005) stressed that output depends more on what happens to rural infrastructure, credit and inputs delivery system. Hence, agricultural credit encompasses all loans and advances granted to farmers to finance and service agricultural production activities relating to processing, marketing, storage and distribution of products resulting from these activities (CBN, 2004). For a credit to be desirable and worthwhile, Akanji (1999) stated that small holder farmers must intensify production and operate economies of scale which reduce unit cost of production thereby improving farm income. Indicators of improvement in life styles attributed to micro credit facilities include evidence of various dimensions of empowerment such as improved income, education for children, good health care, relatively suitable housing, adoption of family planning and less fatalistic approaches to life, opportunities and challenges (Vonpischke, 2005). According to Olaleye (2003) ,between 14 and 19 percent of sampled rural women obtained capital through credits and savings group , cooperatives and personal savings.

Recent trends in credit impact assessment focus on the evaluation of the performance of the credit institutions. This argues that rural financial institutions which provide a broad range of services to the targeted clientele in an efficient manner are likely to have the desired impact of expanding income and reducing poverty (Yaron et al, 1998).

However, some problems associated with the use of credit by farmers and indeed for all investors are derived from the tendency to use the credit for purposes other than what it is granted. There is also the problem of information about sources of credits or terms of loans among farmers because of their low literacy level (Abe, 1981)

Moreover, Ibru (1981) stressed that the main problem areas are delay by financial institutions in reaching and implementing decisions on loan application, inadequate amounts of loans granted and rigidity that prevents financial institutions from adapting their actions to the changing circumstances of the farm and farmers promptly. In case of informal credit sources, they are grossly inadequate and ill-prepared to meet the needs of most farmers even when such credits attract uneconomic interest charges (Akande et al, 1999).

Therefore, inadequacy of credit facilities has been one of the problems facing small holder farmers which eventually translates into low output as a result of utilization of small amount of credit to finance their farm operations (Adegeye et al, 1985). This study aims at examining the effects of agricultural credit in the development of small-scale farming in Lavun Local Government Area, Niger State, Nigeria.

Objectives

The broad objective is to determine the effects of agricultural credit facilities on the development of small-scale farming.

The specific objectives are to

i. identify the socio-economic characteristics of farmers in the study area;

ii. examine the changes in production levels of farmers as a result of access to agricultural credit facilities.

Hypothesis

i. There is no significant difference between the production levels of farmers with and without credit facilities.

ii. There is no significant difference between the income levels of farmers with and without credit facilities.

METHODOLOGY

The study area is Lavun Local Government Area of Niger State, Nigeria. The LGA has 10 wards and 4 Districts with estimated farmers population of 29,950. The wards are Kutigi South, Kutigi North, Kpizhi, Batati, Egbako, Laggun, Dabban, Panti, Dassun and Jipan, while the districts are Kutigi, Kpizhi, Dabban and Batati. Farmers were selected using stratified random sampling technique. The stratification was based on the 4 districts. Respondents were randomly selected from each of the 4 districts to. Farmers were selected using stratified random sampling technique. The stratification was based on the 4 districts. Respondents were randomly selected from each of the 4 districts to give a sample size of 150 farmers (Kutigi = 40, Kpizhi = 32, Dabban = 30 and Batati = 50).

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Interview schedule was developed to elicit information from the farmers. This instrument was subjected to reliability test using Test-retest method (r = 0.87) and validated by experts.

Regarding measurement of variables, changes in production and income levels were measured on a 5-point Likert- type rating scale and scored. (Large increase = 5 points, Slight increase = 4 points, No change = 3 points, slight decrease = 2 points and Large decrease = 1 point).

Data collected were analysed using descriptive (frequency, percentage, and mean) and Inferential Statistics (Analysis of variance) to test the hypotheses.

RESULTS AND DISCUSSION

Socio-economic characteristics of the farmers

Some of the socio-economic variables considered in this study included sex, age, marital status, educational attainment, household size, primary occupation and farming system of farmers as shown in Table 1.

Age is either directly or indirectly related to the physical fitness of the farmers in explaining whether or not the respondents are in their active economic years as this might affect their decisions to acquire credit facilities or not (Achi, 2002). Findings in Table 1 reveals that more than one-half of the farmers were between the ages of 31 and 40 years (59.90 percent) which implies that greater proportion of them were still in their economically active age. This agrees with Oviasiogie et al (2002) who stated that 32 years of age on the average implies that greater proportion of the farmers are in their active years.

Furthermore, 86.2 percent of them were married, which suggests that married people are more involved in farming activities. Adegeye *et al* (1985) observed that credit to small holder farmers helps in making them more productive because of the fact that the farm is a socio-economic and political entity, hence credit is required for purposes other than farming, especially marrying a wife.

About 46.0 percent of the farmers household size was between 6 to 10 members. This may complement labour requirements. Moreover, the findings also indicated that over one-half of the respondents were full-time farmers (52.6%). This agrees with CBN (1985) which reported that 86.5percent of sampled farmers from various states were full-time farmers.

Regarding educational attainment, 32.9% of the farmers were illiterate and this could be an indicator of low level of knowledge which might have a serious implication for their access to credits with respect to adequate information. According to Adegeye et al 1985), credits to small holder farmers in the absence of knowledge and use capability of technology could lead to high credit indebtness among farmers.

Sources of credits and changes in production levels of farmers

Findings in Table 2 showed that 61.6% out of the 117 farmers that obtained credit were from informal sources, such as group contributions and village money lenders, while 31.1% accounted for formal sources and 7.3% obtained credits from both categories. Adegeye et al (1985) observed that most of the agricultural credits were obtained from informal sources but were often characterized by low volume of credits. Delay in loan approval constitutes the major problem of formal sources of credits, while high interest rates and poor repayments characterized the informal financial sectors (CBN, 1985).

Nevertheless, the amounts advanced to farmers by these categories of financial institutions varied. For instance, the study revealed that farmers obtained between ₦10,000 and ₦100,000 from formal institutions, whereas the range was between ₦5,000 and ₦25,000 for informal financial institutions. These have effect on farmers levels of production. In Table 3, 55.9% of farmers that had access to credits indicated a large increase in their production levels, 32.9% recorded slight increase, while 11.2% did not experience any change. These changes were attributed to their access to credit facilities in financing the farm operations. However, based on the usage of loans a farmer may receive positive change, especially where major part of the loans was used for farm operations rather than marrying more wives. Adegeye (1985) stressed that demand for agricultural credit is high among small-scale farmers because of the poverty cycle which the credit is needed to help in breaking.

In explaining the effects of credits on farmers levels of production and income, results of ANOVA in Table 4 showed a significant difference for both production ($F = 15.094$, $P<0.05$) and income levels ($F = 163.566$, $P<0.05$) of farmers with and without credit facilities.

CONCLUSION

Small-scale farmers require credits to operate effectively. However, informal financial institutions were more relevant to farmers credit needs but the formal sector has much to offer. These two sources have distinct and peculiar problems which often hinder farmers access to credit facilities. Therefore, it is recommended that farmers should be encouraged to form themselves into groups and saving associations to facilitate their access.

TABLE 1: Socio-economic characteristics of farmers

		Freq.	Percentage
1.	**Age**:		
	41 years and above	91	59.90
	31 – 40 years	45	29.60
	30 years and below	16	10.50
	Total	152	100.00
2.	**Marital status**:		
	Married	131	86.20
	Single	21	13.80
	Total	152	100.00
3.	**Gender**:		
	Male	136	89.50
	Female	16	10.50
	Total	152	100.00
4.	**Household size**:		
	11 and above	50	32.90
	6 – 10	70	46.10
	5 and below	32	21.10
	Total	152	100.00
5.	**Educational attainment**:		
	Tertiary	11	7.20
	Secondary	15	9.90
	Primary	21	13.80
	Adult education	55	36.20
	None	50	32.90
	Total	152	100.00
6.	**Primary occupation**:		
	Farming	80	52.00
	Trading	21	13.80
	Others	51	33.60
	Total	152	100.00
7.	**Farming system**:		
	Mixed farming	75	49.30
	Mixed cropping	71	46.70
	Sole cropping	6	3.90
	Total	152	100.00

Source: Field Survey, 2005

TABLE 2: Sources of credit facilities was obtained

Sources:	Freq.	Percentage
Informal	72	61.60
Formal	36	31.10
Both	9	7.30
Total	117	100.00

Source: Field Survey, 2005

TABLE 3: Changes in production level after credit facilities

Changes	Freq.	Percentage
Large increase	65	55.56
Slight increase	38	32.48
No change	14	11.96
Total	117	100.00

Source: Field Survey, 2005

TABLE 4: Analysis of Variance (ANOVA) results

	Sum of squares	df	Mean square	F	Sig.
Production level:					
Between Groups	2321.235	1	2321.235	15.094	P<0.05
Within Groups	35677.726	232	153.783		
Total	37998.962	233			
Income level:					
Between Groups	6.69E + 08	1	669082236.8	163.516	P<0.05
Within Groups	1.24E + 09	302	4090602.126		
Total	1.90E + 09	303			

REFERENCES

Abe, S.F. (1981): Nigerian farmers and their finance problems. Proceedings of a seminar organized by Central Bank of Nigeria, April 27-30.

Achi, D.B. (2002): The use of pesticide in the production of food crops among small-Scale farmers in Bosso LGA, Niger State. Unpublished B.Agric. Tech Project, Dept. of Crop Prod., Federal University of Technology, Minna.

Adegeye, A.J. and Hah, J.S.D. (1985*); Essentials of Agricultural Economics*, Impact Publishers Nig. Ltd.

Akande, S.O. and Oni, T.O. (1999Problems militating against the supply of agricultural credit in Nigeria: Agricultural finance issue in Nigeria,Nigeria Institute of Social and Economic Research (NISER), Ibadan.

Akanji, B.O. (1999); "Problems associated with effective demand for agricultural credit in Nigeria: Agricultural finance issue in Nigeria". Nigeria Institute of Social and Economic Research (NISER), Ibadan.

Babajide, A.R. (1999*); Policy recommendations on Agriculture*. Nigeria World com. Publications.

Bardhan, P. (2005)*; Institutions, reforms and agricultural performance*. University of California at Berkeley, California, U.S.A.

Central Bank of Nigeria (1985); "Nigerian agricultural Credit System: Analysis of operation and performance" Report of the National Agricultural Credit Study Team, Macro economic analysis and recommendations Vol. 7 (2004):

_____ (2004); Contributions of the Agricultural Credit Guarantee Scheme to improve agricultural financing in Nigeria: Past, present and future" Agricultural Finance Dept., CBN.

Edordu, C.C., Ojo, M.O. and Akingbade, J.A. (1981); "Agricultural Credit and Finance in Nigeria: Problems and Prospects" Proceeding of a seminar organized by CBN, Oct 1981.

Haruna, U., Murtala, I.S. and Suleiman, H. (2000); Comparative economic analysis of Tomato wholesaling and retailing in Bauchi Markets, Nig. "Unpublished M.Sc. project, A.T.B. University, Bauchi.

Ibru, M.C.O. (1981); "Problems of agricultural finance in Nigeria" Proceeding of a seminar organized by CBN, April, 27-30.

Olaleye, R.S (2003): Analysis of rural women's access to capital and their economic decision –making power. A case study of Ondo State, Nigeria. *International journal of gender and health issues,* Vol. 1 No.1 p.156.

Oviasiogie, D.J. and Alabi, R.A. (2002); Determination of marketing margin for frozen fish in Edo State, Nigeria" Dept. of Agric. Econs. & Ext., Ambrose Ali University, Ekpoma, Edo State, Nigeria.

Vonpischke, J.D. (2005); Poverty, Human Development and financial services.

Yakon, J.M.B. and Charitonenko, S. (1998); "Promoting efficient rural financial intermediation" The World Bank Research Observer 13(2) pp.147-170.