

BANK LOAN REQUIREMENT AND AVAILABILITY FOR NIGERIAN SMALL FARMERS: A COMPARATIVE ANALYSIS OF EXPERIENCES

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1. Introduction

Agricultural loan is a crucial input in small holder agriculture. Small-scale farmers need loan to establish and expand their farms. Yet the size of loan required by small farmers and the size of loan available to them in various banks, knowing their position in terms of collateral security, are still weakly understood. Consequently, questions about small farmers' bank loan requirement and availability remain imperfectly answered. How much loan do the small farmers need? How much loan can the banks offer them without collateral security? What is the difference (if any) between the two quantities — small farmers' bank loan requirement and availability? Answering these questions provides an interesting focus for this study.

Olayide *et al* (1979) asserted that over 90% of Nigerians total food production comes from small farms and that small farmers are those having the size of farm ranging from 0.10 — 5.99 ha. Oni (1987) also maintained that in order to improve agriculture, there is need for increased farm loan for small farmers. Osuntogun (1973), further affirmed that "unless production loan is made available on suitable terms, the majority of small farmers will be seriously handicapped in adopting profitable technology". Ezeugoh (1981) contended that the loans granted to small farmers by banks have been inadequate due to the inability of small farmers to offer adequate collateral securities acceptable to the banks.

What then is the most appropriate source of agricultural loan to small farmers? Apart from owned sources resulting from savings, two major sources of loan exist for Nigerian small farmers. These are the informal sources (money lenders, "esusu" credit institutions, relations, friends, etc) and the formal sources (banks and cooperative societies). It should be noted that unlike the informal loan sources, the formal has legal existence, which means it can sue and be sued in a law court. This makes it the most appropriate source of credit for small farmers inspite of its complicated loan procurement procedures (Famoriyo and Imoudu, 1988).

In reviewing the contribution of various banks to the growth and development of agriculture, Table 1 shows that there has been a remarkable increase in commercial and merchant banks loan advances to the agricultural sector. The reason is to achieve self-sufficiency in food and fibre production. In 1981, commercial and merchant banks' loan to agriculture stood at 8% and 5% respectively. These figures rose to 15.9% and 13.4% for commercial and merchant banks respectively (CBN, 1989).

It is pertinent to mention here that farm input cost which is necessary for computing

the loan size of small farmers has also increased considerably due to the Structural Adjustment Programme (SAP) introduced in the country in 1986 (Akinbami, 1988).

Table 1

PERCENTAGE OF LOAN TO AGRICULTURAL SECTOR (1981-89)

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989
Commercial Banks	8	8	10	10	12	15	15	15.6	15.9
Merchant Banks	5	5	5	5	6	8	8	10.5	13.4

Sources: (i) CBN, Economic and Financial Review (1989)
(ii) The Nigerian Banking Almanac (1985)

2. Objectives of the Study

The major objective of the study was to compare the size of bank loan required by small farmers with that available to them.

The minor objectives included, quantifying the amount of bank loan required by small farmers, the amount of bank loan available to them, and the relationship between farmers bank loan requirement and farm size.

3. Data and Methodology

Ondo state was chosen for this study because, apart from being a major food producing area for the country, various banks involved in lending to the agricultural sector are located therein. Eighty-four (84) farmers in five (5) towns/villages (Akure, Iju, Oda, Ayele-Ogbese and Oba-Ile) for 1989/90 cropping season and eight (8) banks were randomly selected and interviewed.

The study ignored consumptive credit requirement of the farmers since this is not necessary for computing the actual credit required for farm production by the farmers. Both primary and secondary data were used for the purpose of this study.

Frequencies and percentages were used to tabulate each variable measured, some of which were presented graphically.

Test of hypothesis was used to determine the difference between bank loan requirement by small farmers and bank loans available to them.

This was done by establishing a representative mean per hectare for the eighty (80) small farmers studied through which a composite mean of 5 ha was projected for each farmer. This projected sample mean was chosen for this test because it represented the size of loan required by each small farmer growing arable food crops (Maize, Cassava, Cowpea, Rice, Mellong, Tomatoes, Pepper, Yam etc) with a farm size up to 5 ha. Similarly, a mean was established for the eight (8) banks studied as regards the size of loan they had available for small farmers. This mean was used for the test because it represented the maximum loan size banks were willing to disburse to small arable crop farmers.

Pearson's product moment correlation coefficient (γ) was the statistical function employed to investigate the existence of linear relationship between loan requirement and farm size of the small farmers.

4. Results and Discussions

4.1. Farm Sizes of Respondents

This varied between less than 1.99 hectares and 5.99 hectares. 5% of the respondents had their farm sizes between 4.00 — 5.99 hectares, 30% and theirs between 2.00 — 3.99 hectares, while 20% had their farm sizes less than 1.99 hectares (Table 2).

Table 2
FARM SIZES OF RESPONDENTS

Farm size (Ha)	Frequency	Percentage	Cumulative %
1.99	24	30	30
2.00 — 3.99	16	20	50
4.00 — 5.99	40	50	100
Total	80	100	—

Source: Field Survey (1990)

Small scattered plots normally discouraged mechanization but mechanization is necessary for agricultural development to take place. Therefore it is important for farmers to have large holdings all in one piece to encourage mechanization and also to enable them enjoy economics of large-scale production. This can only be achieved when small farmers form cooperative societies, pool their resources together and embark on large scale production.

4.2. Cost of Farm Inputs

Data obtained from the respondents regarding the cost of inputs are presented in Table 3. Eighty-five percent claimed that farm inputs were obtained at high cost, while fifteen percent got their inputs at moderate cost.

Table 3

COST OF FARM INPUTS

Responses Frequency

Responses	Frequency	Percentage	Cumulative %
High	68	85	85
Moderate	12	15	100
Low	—	—	—
Total	80	100	—

Source: Field Survey (1990)

The implication of this is that high input costs constitutes a major constraint to agricultural production and development in the country, since the amount of loan required by farmers would bear a direct relationship to the rising cost of inputs.

This high input cost is also reflected in the high interest rates which are charged by Nigerian banks (Table 4), thus making cost of borrowing prohibitive to the farmers.

4.3. Size of Bank Loan Requirement by Respondents for 1989 Cropping Season

The data obtained showed that, 52,5% of the respondents required bank loan of bet-

ween ₦1,001 and ₦5,000; 35% required between ₦5,001 and ₦10,000; while 12.5% needed amount up to ₦1,000, for 1989 farming seasons (Table 5).

Table 4

INTEREST RATE OF SOME NIGERIAN BANKS (MAY 1990)

S/No.	Name of Banks	Interest Rate (%)
* 1	Nig. Agric Coop Bank	18.00
2	UBA United Bank for Africa	24.50
3	First Bank	24.00
4	International Bank for West Africa	25.50
5	Wema Bank	24.50
6	Union Bank	25.50
7	National Bank	25.50
* 8	Peoples Bank	5.00

Source: Field;

* Specialised government Banks

Table 5

SIZE OF BANK LOAN REQUIREMENT BY RESPONDENTS (1989)

Range of Loan Size (₦)	Frequency	Percentage	Cumulative %
1,000 or less	10	12.5	12.5
1,001 - 5,000	42	52.5	65
5,001 - 10,000	28	35.0	100
Total	80	100	-

Source: Field Survey (1990)

At this juncture, one may be tempted to conclude that the loan size required by the respondents seemed rather low considering the effect of Structural Adjustment Programme introduced by the Federal Military Government in Nigeria in 1985, on the cost of farm inputs. This is not true because consumptive loan which (according to Adegeye and Dittoh, 1985) was a lasting solution to the problem of hunger among farmers before their crops matured was not emphasized in this study. This was because excesses over and above actual loan size requirement of the small farmers might have been directed

to consumptive activities like marriage and burial ceremonies, purchase of household needs, etc, that would definitely not have contributed any financial reward to the farm business and hence would have adversely affected loan repayment.

On the other hand, banks may not accept small farmer loan requests because the loan sizes required by them as a result of their need for consumptive credit may be larger than the bank's Pre-determined loan sizes for such category of farmers, and as a result, repayment problem may ensue.

As a result, loan actually acquired or received by the farmers in 1989 was not encouraging, as 57.5% of them did not receive any form of loan, while 10% each received loans between ₦1,000 and ₦2,999, and between ₦3,000 and ₦4,999 respectively. Eighteen percent received loan of over ₦5,000.

Table 6

SIZE OF LOAN ACQUIRED BY RESPONDENTS (1989)

Ranges of Credit Acquired (₦)	Frequency	Percentage	Cumulative %
No credit	46	57.5	57.5
1,000 - 2,999	8	10	67.5
3,000 - 4,999	8	10	77.5
5,000 - 8,999	18	22.5	100
Total	80	100	-

Source: Field Survey (1990)

Therefore, small farmers should be motivated and educated on the need to realise that interest paid on loan is part of their production cost. That is, small farmers should be made to see farming as a business rather than as a way of life. The role of extension education in achieving this objective cannot be over-emphasized.

4.4. Bank Loan Available Without Collateral Security

Out of the eight respondents studied, 75% agreed to lend a maximum of ₦5,000, 12.5% agreed to lend a maximum of ₦10,000, while another 12.5% agreed to lend a

maximum of ₦2,000 to small farmers without collateral security (Table 7)

Table 7
BANK LOAN AVAILABLE WITHOUT COLLATERALS

Banks	Maximum Loan Size (₦)	Frequency	Percentage	Cumulative %
Peoples' Bank	2,000	1	12.5	12.5
Commercial Banks	5,000	6	75	87.5
NACB*	10,000	1	12.5	100

* Nigerian Agricultural and Cooperative Bank.
Source: Field Survey (1990)

The response from various banks on loan size indicated that NACB provided the largest amount of loan to small farmers, while the People's Bank of Nigeria (PBN) provided the least (Table 7). The reason may be attributable to the fact that NACB was specifically established to finance agricultural activities, while the People's bank was meant to serve the petty traders and artisans mainly.

The result of the analysis indicates that there is no significant difference between the size of loan required by small farmers and the size of loan available to them in the bank (see Tables 8a and 8b).

Table 8a
DATA COMPUTATION FOR THE TEST

Respondents	Sample Size (n)	Mean from Samples \bar{X} (₦)	Variance of Samples $s^2 \bar{X}$ (₦)	Standard deviation of samples SX (₦)
Farmers	80	5,466	294,638	543
Banks	8	5,250	4,785,714	2,188

df = 86

Table 8b

RESULT OF THE TEST

t — distribution	Value (N)
t — computed (t_c)	216
t — Tabulated (t_T)	640
$\alpha = 0.05$	

Source: Computed from Field Survey

Since t_c is less than t_T , the null hypothesis that there is no significant difference between size of loan required by small farmers and that available to them in the banks without collateral securities is accepted.

Confirmatory result could be drawn from a survey conducted at the Department of Rural Development, Akure, Nigeria (1989) on its "Back-To-Land" programme. The study revealed that between ₦3,000 and ₦4,000 was expended on a 5 hectare farm comprising maize, melon, yam, soyabeans and cassava with success result.

Although, Adegeye and Dittoh (1985) had emphasized the role of consumptive loan in alleviating the problem of hunger experienced by small farmers during the gestation period of their crops, it should be noted that if farming is to be regarded as a business that would require credit for expansion, and not a way of life, then the idea of consumptive credit should be eliminated from the system. If consumptive loan is given to farmers coupled with high interest rate, the size of loan will increase and as a result, repayment of such loan might become difficult if not impossible.

Therefore, it would not be in the best interest of the farmers to "bite more than they can chew", because of the disastrous consequences of such action. A sizable loan for production purpose is more appropriate for small farmers if it is to serve as an incentive to them rather than a disincentive caused by repayment problems.

The result of the product moment correlation coefficient (r) computed between credit requirement and farm size is presented in Table 9a, and summarized in Table 9b.

The implication of the highly positive correlation coefficient is that, larger farm holdings require higher loan sizes than smaller ones. This will serve as a guide to the banks and other financial institutions against over-lending to farmers. If the farm sizes of the farmers are known, more precise estimates of loan sizes can be determined.

Table 9a

CORRELATION COEFFICIENT BETWEEN FARMERS LOAN REQUIREMENT AND FARM SIZE

Farm size (Ha)	Class intervals		Class of credit reqd. (N)	Class interval		
X	X	X ²	Y	Y	X ²	XY
0—1.99	0.995	0.99	0.000—1,000	500	250000	495
2.00—3.99	2.995	8.97	1,001—5,000	3000.5	9006001	8986.5
4.00—5.99	4.995	24.95	5,001—10,000	7500.5	56257500	37465

n = 3

$$\begin{aligned}\bar{X} &= 2.995 \\ \Sigma X &= 8.99 \\ \Sigma X^2 &= 34.9 \\ S_x &= 1.63\end{aligned}$$

$$\begin{aligned}\bar{Y} &= 3667 \\ \Sigma Y &= 11001 \\ \Sigma Y^2 &= 65510500 \\ S_y &= 2896.5\end{aligned}$$

Table 9b

SUMMARY

Variable (N = 3)	r Value	Remark
Farm size	+ 0.987	Highly significant

Source: Computed from Field Data.

Graphical representation of the highly significant correlation is presented in Figure 1.

5. Conclusion

Small-scale farmers in Nigeria require loan to establish and expand their farms. The most appropriate source of this loan is the banks.

Findings from the study have revealed that there is no significant difference between the size of loan required by small farmers growing food crops and the size of loan available to them in the banks. Also, there is a highly positive correlation between the size of loan required and farm size. This implies that the amount of loan needed by Nigerian farmers depends on their farm sizes.

This would have far reaching implications for agricultural development in Nigeria and

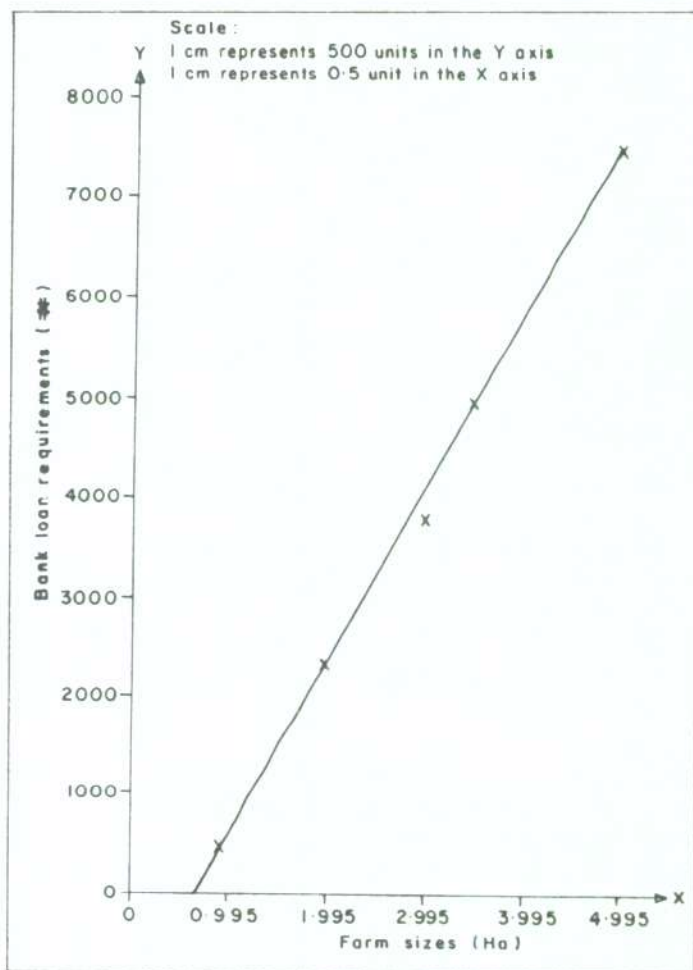


Figure 1 - Graph showing the relationship between Bank loan requirements and farm size.

the consequent emancipation of the small farmers who produce the bulk of the food in Nigeria with little or no credit facilities available to them. Government should be able to identify the actual loan requirement of these farmers and come to their aid promptly if the country's much desired goal of self-sufficiency in food production is to be achieved by the year 2,000.

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Abstract

This study compares the size of bank loan requirement vis-a-vis its availability among Nigerian small farmers growing arable food crops, using Ondo State as a representative sample area. The state is a major food basket area for Nigeria, particularly the Southern parts.

Various works which have been done on the need, inadequacy, appropriate sources of loan and the contributions of Nigerian banks to the overall national growth and development of agriculture were reviewed.

The study concentrated on small farmers and banks as units of analysis. The size of loan required by small farmers and the size of loan available to them without collateral security were determined via statistical tests. It was revealed that there is no significant difference between the size of loan required by small farmers growing arable food crops and the size of loan available to them in the banks. Consumptive loan was not included in the representative mean size of loan used for the test for reasons well documented in the paper. The role of extension services in motivating small farmers towards bank borrowing was found to be inadequate. Bank loan was found to be essential for the growth and development of the Nigerian small farmers in particular and the agricultural sector at large.

LES BESOINS DE CREDIT BANCAIRE ET LEUR DISPONIBILITE PARMIS LES PETITS AGRICULTEURS AU NIGERIA: UNE ANALYSE COMPARATIVE DES EXPERIENCES

RESUME

L'étude compare l'importance des besoins de crédit bancaire vis-à-vis de leur disponibilité parmi les petits agriculteurs du Nigeria, en prenant l'Etat de Ondo comme échantillon représentatif. Cet Etat, surtout dans sa partie Sud, est un important centre de production alimentaire du Nigeria.

Une revue a été effectuée des recherches qui ont été faites sur les besoins, les manques et les sources de prêts appropriés et la contribution des banques nigériennes au développement national et plus spécialement au développement de l'agriculture.

L'étude a focalisé ses recherches sur les petits agriculteurs et les banques. L'importance du prêt demandé par les petits agriculteurs comparée au montant disponible de prêt fourni par les banques (il s'agit de prêts accordés sans garantie) ont fait l'objet de tests statistiques. On a découvert aussi qu'il n'y a pas de différence notable entre le montant du prêt demandé par les petits agriculteurs et le prêt qui leur est proposé par les banques. Les prêts à la consommation n'ont pas été inclus pour des raisons largement expliquées dans l'article. Le rôle d'offre de services de la part des banques pour motiver les petits agriculteurs dans leurs emprunts a semblé inadéquat. Le prêt bancaire a été considéré comme essentiel pour le développement et la croissance des petits agriculteurs nigériens dans le secteur agricole en général.

