Focus on Agricultural Loan Administration in the Nigerian Economy — Survey Findings: A Case Study of Anambra State of Nigeria[@]

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Introduction

Small farmers who constitute the bulk of the Nigerian agricultural population are confronted by structural and institutional problems—such as illiteracy and ignorance; possessing small-sized and fragmented farm holdings with no clear title to land; capital inadequacy; low level of productivity-cm-low income and consequent low savings capacity; and inadequate infrastructural facilities. All these factors have tended to make the services of formal sources of finance less accessible to the small farmers.[1] The resultant effect is that the small farmers become exposed to informal sources at exhorbitant costs.

Regardless of the above constraining forces some farmers still avail themselves of the services of formal sources of finance. Investments in the agricultural sector are met with high risk of default resulting from the effect of these constraints, which serve to reduce further loan extension to the sector to achieve the objectives of increased output and improved rural incomes.[2] In the words of a well known African agricultural economist, Ijere,

credit* is a powerful agency for good in the hands of those who can use it well. It is equally dangerous in the hands of those who do not understand it[3]

Nurkse[5] observed that most farmers in the underdeveloped countries are engulfed in the vicious cycle of poverty, a situation in which low incomes result in low savings and low investment which in turn results in low incomes. Due to inadequate internal resources, the farmer finds it difficult to finance investment and cash costs of his difficult occupation. The farmer, in the circumstances, is forced to rely heavily on informal sources to satisfy his credit needs because of inadequacy of institutional credit agencies.[5] In contrast, Shultz asserts that there are few, if any, invest-

ment opportunities: in his opinion, traditional agriculture has exhausted most investment opportunities and settled and stabilised at a low equilibrium level[6]. As a result he opines that any further employment of capital for traditional inputs will not lead to any significant increase in output. Long,[7] Akinyosoye[8] Ogunfowora, et al.[9] have stressed the need for adoption of improved practice and scale expansion to benefit from increased agricultural credit. Swamy[10] has also shown that commercial bank loans to agriculture in Nigeria increased substantially from N 7 million (0.5 per cent of lending) in 1970 to N 485 million or 7.5 per cent of their total lending in 1980 Thus the farm sector absorbed substantially increased credit over the ten-year period.

In this paper, problems of loan administration and default rates in the agricultural sector of Anambra State of Nigeria are identified and analysed. The analysis is based on a sample survey of farmers in Anambra State.

Methodology Used

Methods of Data Collection: Both primary and secondary sources of data were employed in the study. In choosing the method of investigation and in particular, the design of the questionnaire, cognisance was taken of the main target group, the peasant farmers.

Two sets of questionnaires were used to collect the primary data: One set was administered on a sample of farmers in the state; the other set on officials of some agricultural credit institutions and agencies in the State. In the case of the first set of questionnaires, four zones out of the five zones in the State, namely, Awka, Enugu, Onithsha and Nsukka were chosen as quartiary units. The choice of the zones was actually judgemental. Out of each zone a local government

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@ The authors own full responsibility for the contents of the paper

* Agricultural credit encompasses all loans and advances granted to borrowers to finance and service production activities relating to agriculture, fisheries, forestry and also for processing, marketing, storage and distribution of products resulting from these activities[4]

area selected as the tertiary unit and a town or are within each local government became the secondary unit. The primary unit consisted of individual farmers. The towns, Local Government Area (LGAs) and Zones are as shown in table I below.

Table 1
Areawise Administration of Questionnaires:Anambra State (September-December 1988)

Zones	Awka	Enugu	Onitsha	Nsukka	
Local Government Areas (LGAs)	Awka Njikoka	Enugu	Idemili	Isiuzo Eha-	
Towns	Nawgu	Emene	Umunga	Amufu	
Number of farmers	49	45	48	47	189

In all, 189 farmers were contacted as predetermined by the sample size. To administer the questionnaire, a panel of interviewers comprising secondary school-leavers and undergraduates was used. They were instructed on how to administer the questionnaire to get a high level of reliability.

With respect to the second set of questionnaires, some officials of agricultural credit institutions and agencies were contacted. Data collected was used to analyst responses from agricultural credit institutions.

Determination of Sample Size: From a survey carried out in 1987 by the Ministry of Finance and Economic Planning Government of Anambra State of Nigeria, it was found out of the State's estimated rural population of 1.2 million, about 850,000 were found to be full-time farmers and 180,000 part-time farmers* engaged in agriculture and together accounted for 86 per cent of the State's rural population.

Sample size is determined by the use of confidence interval of 95 per cent (estimated error of 0.05 per cent). N is large and so the normal approximation is applicable. For a 95 per cent confidence interval

$$P - 1.96\delta k < pu < p + 1.96\delta k \quad\quad (1)$$

where p = sample proportion
k = standard error
pu = population proportion

The maximum likelihood estimator of the population proportion pu, is the sample proportion p, i.e., pu = p. (1) may be rewritten as

$$-1.96 \ k \ \delta \leq p - pu < 1.96\delta k \quad\quad (2)$$

p = pu is the error of estimation
putting e = p - pu, (2) becomes
$$-1.96\delta k < e < 1.96\delta k$$

Since the situation is symmetrical, one tail (upper in this case) will be considered.
That is e = 1.96k

$$e = 1.96\sqrt{pu(1-pu)} \div n$$
$$e^2 = (1.96)^2 \ pu (1-pu) \div n$$

And considering the finite population correction
$$e^2 = (1.96)^2 \cdot \frac{pu(1-pu)}{n} \cdot \frac{N-n}{n}$$

where N = population
pu = p = 0.86   1 - pu = 0.14

e = 0.05
N = 1,030,000
n = sample size

$$e^2 = (1.96)^2 (0.86) (0.14) \cdot \frac{1,030,000 - n}{1,030,000}$$

$$(0.0025) (1,030,000)n = (0.4625) (1,030,000 - n)$$

The above works out to
$$n = 185$$

Analysis of Data
Analysis of Responses From Agricultural Credit Institutions

Average Farm Size of Farmers: From Table 2 it can be seen that the average farm size of the farmers is 2.5 acres of land for crop production, 62 birds for poultry production and 7 sheep/goats for livestock.

Table 2
Average Farm Size Distribution of Farmers

Units of measurement	Zones				Average Size
	Awka	Enugu	Onitsha	Nsukka	
Area of land (acres)	1.8	3.2	2.3	2.7	2.5
Poultry size (No. of birds)	50	67	85	46	62
Livestock (No. of Sheep/goats	6	8	10	5	7

The average sizes recorded were too small and this is indicative of the peasant nature of agricultural activities in the rural communities.

Awareness of Availability of Institutional Credit Facilities : The availability of institutional credit sources is one thing and the farmers or prospective borrowers knowledge of their existence is quite another issue. Some farmers appear to have latent demand for credit (to increase their scale of farm operations)which have not been satisfied due to their ignorance about the existence of institutional credit facilities. However, due to their illiteracy and ignor-

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* Part-time farmers were included in the working population in view of the fact that ,was larger (bigger) than of full-time farmers.

ance of such facilities availability they seem content with the current scale of production which their own personal savings could only support.

Table 3
Awareness of Credit Facilities Availability

Response	Zones					
	Awka	Enugu	Onitsha	Nsukka	Total	Percent
Yes	27	40	45	38	150	79.36
No	22	5	3	9	39	20.64
Total	49	45	48	47	189	100.00

As shown in Table 3, 150 out of 189 farmers were aware of the availability of institutional credit facilities; while 39 denied knowledge of such facilities. It shows the extent to which more enlightenment campaigns need be mounted to inform them of channels from which they can augment their own funds for increased production.

SOURCES OF FUNDS

Sources of Financing : Data in Table 4 reveal that 58.5 per cent of the farmers use personal savings/family account for financing their farm activities. The next commonly used source of finance is friends and relations which account for 24.75 per cent, while the institutional credit sources are used by 14 per cent of the farmers. Money lenders credit claimed only 2 per cent.

Table 4
Sources of Financing Farm Activities

Sources of Financing	Zones					
	Awka	Enugu	Onitsha	Nsukka	Total	percent
Personal savings Family Account	44	42	44	45	175	58.53
Friends and relations	25	31	6	12	74	24.75
Money lenders/ merchants	3	—	1	2	6	2.01
Co-op. societies /farmers association	3	—	15	6	24	8.02
NACB/SACS*	2	1	1	3	7	2.34
Commercial banks	7	1	1	4	13	4.38
Total:	84	75	68	72	299	100.00

Notes: *NACB = Nigerian Agricultural and Co-operative Bank; SACS = Supervised Agricultural Credit Scheme.

Reasons for Non-use of Institutional Credit (Farmers Responses)

The respondents were additionally asked reasons for non-use of institutional credit facilities and below is a tabulation of their responses:

- Don't know how to borrow: ignorance of loan application procedure
- Not able to meet requirements for borrowing
- Afraid that there was too much favouritsm and corruption by officials of credit institutions
- Tried many times but failed
- It is time-consuming and too bureaucratic
- High interest rate being charged
- Don't want to borrow for fear of default in repayment

The respondents offered the following reasons for the incidence of loan default delayed repayment:

Wilful default by farmers believing that the loan is a part of national cake; Crop failure arising from bad weather; Diversion of funds to other purposes; Natural hazards and epidemics; and Price fluctuations, reducing drastically the incomes of the farmers.

USES OF FUNDS

Farmers Use of Borrowed Funds and Preferred-Form of Credit Delivery: Of the respondents, 37.8 per cent apply the credit meant for farm operations on their personal expenditure. The remaining farmers or 65.2 per cent use the borrowed funds for the stipulated purpose. While some of the deviant farmers wilfully divert loans to other non-farm purposes, others were forced by circumstances to misapply such funds.

Respondents Problems with the Use of Credit: The farmers were further asked the problems they encountered with the use of credit Table 5 below shows the reactions of the respondents.

83 out of the 313 respondents complained about lack of knowledge of borrowing procedures and this represents 26.52 per cent. 18.53 per cent loans were not normally disbursed on time, while 17.25 per cent complained of loan inadequacy.

Analysis of Responses From Agricultural Credit Institutions

The following analysis is in respect of the questionnaire administered to the officials of agricultural credit institutions in the State. To be able to determine the performance of the institutional credit delivery channels, the views of

** The total number of responses sum to 299 instead of 189 because farmers use more than one source of finance and the number of responses need not be the same as the number of respondents.

The respondent farmers were also asked to indicate their preference for form of credit. 70 farmers (40.5 per cent) preferred cash credit delivery; while 13 (7.5 per cent) preferred such credit in kind; yet another 90 farmers (52 per cent) will want credit in both cash and kind.

sample of institutions were sought. Five credit institutions responded to the questionnaire, of which two of them were commercial banks.

Table 5
Problems with the Use of Credit

Nature of Problem	Awka	Enugu	Onitsha	Nsukka	Total	Per cent
			Zones			
Don't know how to borrow	24	36	7	16	83	26.52
Loans are not disbursed on time	12	13	15	18	58	18.53
High interest rate	21	4	4	12	41	13.10
Inadequate loans	11	14	12	17	54	17.25
Lenders are too far away	13	—	3	5	21	6.71
Heavy collaterals demanded	12	6	5	10	33	10.54
Cannot apply	18	—	3	2	23	7.35
Total:	111	73	49	80	313	100.00

Outcome of Applications for Loans by farmers: For five years from 1982 to 1986, 8,250 out of 23,567 applications for loans were successful while 15,377 (or about 65 per cent) were unsuccessful. The proportion of unsuccessful applications is substantial and the respondents were further asked the reasons for unsuccessful applications which are as follows:

Lack of required collateral; improper completion of application forms; unviability of projects; and status of applicants not falling within the category of people who should benefit from the Institution's credit, e.g., not being a full-time farmer.

Level of Performance of Credit Institutions: All the institutions contacted unanimously agreed that their level of performance of credit delivery to farmers was fairly adequate in quantitative terms; however the respondents' reason for a low level of performance in a qualitative sense is as summarised in Table 6

Table 6
Respondents Reasons For Low Level of Performance in Credit Delivery

Reasons for Low Performance	Credit Institutions	
	Number	Per cent
i) Lack of funds	4	26.7
ii) High incidence of loan repayment default by farmers	6	40.0
iii) High cost of credit administration	3	20.0
iv) Lack of personnel, etc	2	13.3
Total	15	100.0

The table reveals that 40 per cent of the institutions contacted considered high incidence of loan default as contributing to their low performance in giving financial assistance to the farmers. Other reasons include lack of funds (26.7 per cent), high cost of credit administration (20 per cent). Thus, high incidence of loan default relatively accounts for the credit institutions' low performance than the other reasons.

Loan Default Experience: Credit institutions have been known to complain of incidence of default associated with loans to agricultural production. To verify the loan default experience in connection with loan delivery to farmers an appropriate question was put to the officials of the institutions. Their reactions are as displayed in Table 7 On the average, individual farmers recorded the highest default of 69.2 per cent for the five years put together. Next to the individual farmers were the co-operative/farmers associations with average of 51.6 per cent default rate. Companies and other incorporated bodies showed 43.2 per cent default rate. The above results are consistent with those of an earlier study by the author[2].

The Year, 1984 experienced the highest default rate 59.3 per cent, while the other years' default rate fluctuated between 52 per cent and 55 per cent.

Table 7
Loan Default Experience

Type of Borrower	Default Rates in Percentages						
	1982	1983	1984	1985	1986	Total	Average
Co-operatives/farmers associations	55	48	52	39	54	258	51.6
Incorporated Bodies	32	43	51	47	43	216	43.2
Individual Farmers	75	68	65	70	68	346	69.2
Total	162	159	178	156	165	820	
Average	54.0	53.0	59.3	52.0	55.0		54.7

Test of Hypothesis on Default Rates: The incidence of loan repayment default is a major bottleneck inhibiting institutional credit delivery to the agricultural sector.

In Table 7 the default rates for the relevant years were computed used in computing the value of sample standard deviation S which is then used for the t - test as follows:

i) The test statistics used is the t distribution which is defined as
$$t = \frac{x - m}{s}\sqrt{n}$$

ii) We shall take 50 per cent to stand for m above

iii) Null hypothesis, HO : 50 per cent of loans to farmers result in repayment default

iv) Alternative hypothesis, H : Less than 50 per cent of loans to farmers result in payment default..

v) The test was carried out at a 5 per cent level of significance.

vi) There are (n−1) = (5−1) degrees of freedom.

Table 9
Computation of Loan Default Rates

Default Rate

x	x^2
54.0	2916.0
53.0	2809.0
59.3	3516.5
52.0	2704.0
55.0	3025.0
$\Sigma x = 273.3$	$\Sigma x^2 = 14,970.5$

Hence the observed t (1.805) is less than the critical t (2.132) at 5 per cent level of significance. Therefore, there is no reason to reject the null hypothesis that incidence of repayment default is a major bottleneck militating against institutional credit delivery to the agricultural sector.

Conclusions

- The average farm sizes are too low requiring increased finance for acquisition and consolidation of land parcels as to benefit from scale economies in production.

- The most important source of financing farm activities have been shown to be own funds (personal/family). These sources are known to be inadequate and thus militate against increased agricultural funding. Commercial banks have not played enough role in this regard as fund resources from this sector only accounts for 13 per cent of institutional credit funds to agriculture. Efforts should be made to increase formal sources and on-time delivery of such funds as untimeliness of formal sources have led to resort to informal sources at usurious rates.

- The incidence of loan diversion is high and significant. Credit in kind is utilised by most development banks around the world to reduce incidence of loan diversion to non-agricultural uses. Nigerian farmers predominantly prefer credit in cash and kind.

  Some amount of credit in cash should be given to accommodate working capital needs, the balance should be in kind with payments made to suppliers of equipment and other inputs.

- Most farmers believe that increased funding have positive impact on productivity. The earlier theoretical submissions of Nurkse, Abe, MillardLong, Akinyosoye, Ogunfowora, Swamy seem to have been given empirical validation.

- Farmers have complained about their inability to fill application forms, untimeliness of loan disbursements, inadequacy of loan amount and above all, unawareness of the existence of formal channels of institutional credit as major militating factors in the use of institutional credit. Their inability to fill forms is a reflection of their lack of formal education, and ignorance. Untimeliness of loan disbursements relate to the bureaucratic delays in the Nigerian loan administration, and inadequacy of loans granted is a financial management problem. Solution of and ignorance can be approached through adult education schemes, rural broadcasting programmes, farm extension services and enlightenment programmes. Untimeliness of disbursements and inadequacy of amounts disbursed should be approached through improved financial management practice by institutional credit agencies. Such improvements would be conducive to increased credit facilities available to rural farmers.

- Most loan applications were not successful as a result of a host of factors including absence of required collateral security, non-viability of projects, unacceptable guarantors and defaults in preivious loans. Farmers who lack collateral security could be given group guarantee. Whereby a loan to one farmer is guaranteed by three other farmers. Since they know themselves, the farmer guarantors would bring pressure to the loan beneficiary to pay up as and when due. Group guarantee schemes have been tried in Village Adoption Schemes (VAS) imported into Nigeria from India. They have been relatively successful in reducing loan defaults.

- The most significant factor militating against credit delivery to farmers has been shown to be the high incidence of loan repayment default by farmers; had been consistently above 50 per cent over the period 1982 to 1986. The hypothesis that the incidence of loan repayment default is a major bottleneck inhibiting institution credit delivery to the agricultural sector was statistically validated. Thus, efforts should be intensified to reduce this source of reduced accommodation to the agricultural sector as a means of increasing agricultural finance and hence increased agricultural output to feed the ever-growing population and for export. The use of group guarantee of the Village Adoption Scheme (VAS) may be the only remaining effective remedy to reduce loan default and channel increased finance to the agriclutural sector of the Nigerian economy.

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