

## **Diversification of Nigerian Agricultural Credit and Rural Development Bank's Credit for Agricultural Production: A Sub-Sectoral Analysis**

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**Abstract:** Agricultural credit plays a crucial role in economic development and the process of socio-economic transformation. This study assessed the diversification of credit granted to farmers by Nigerian Agricultural Credit and Rural Development Bank (NAC and RDB). Data obtained from NAC and sRDB, covering the period 1981-2006 were analysed using descriptive statistics, Analysis of Variance (ANOVA) and Least Significant Difference (LSD) techniques. Results showed that the crop sub-sector had more projects funded than the livestock and services sub-sectors despite having fewer enterprises than the former and about the same as the latter. The number of funded projects, volume of credit approved and disbursed, volume of credit repaid and volume of credit outstanding were found to be significantly different ( $p < 0.01$ ) for the sub-sectors during the period under study. Average of 47 projects for three enterprises was funded in the sub-sector while only 6 projects were funded for the seven enterprises in the livestock sub-sector. The number of projects funded for the livestock sub-sector was relatively stable over time (1.46 variability) than the crop and services sub-sector (2.63 and 2.87 variability, respectively). However, the crop sub-sector fared better than other sub-sectors by having a higher rate of repayment (35.01%) and lower rate of outstanding balance (64.99%). The loan profile of the bank could be said to have paid much more attention to the crop sub-sector probably due to repayment performance by the sub-sector, however better attention need be paid to diversification of credit disbursement for agricultural projects to boost rural prosperity.

**Key words:** Credit, NAC and RDB, diversification, agricultural projects, rural prosperity, livestock, Nigeria

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### **INTRODUCTION**

Agricultural credit implies specifically, the process of obtaining control over the use of money, goods and services on the farm in the present to stimulate a positive change to the welfare of the beneficiary in exchange for a promise to repay at a later date (Adegeye and Dittoh, 1985). Rural diversification in agriculture can be regarded to refer to the varying or spread of agricultural projects or enterprises among farmers in the rural areas.

Agricultural diversification serves as insurance to the farmers when an eventuality occurs for instance an incidence of crop failure (Eswaran and Kotwal, 1990). The same can hold true for agricultural credit because if there is diversification of credit on various farm enterprises then there will be a cushioning effect in case of loan defaults leading to bad debts. This can ensure loan repayment without jeopardy to farm businesses instead of a total loss when credit is not varied for funding different projects. The need for agricultural credit cannot be overemphasised in the Nigerian economy and there is also

no doubt about its crucial role in economic development and its indispensability in the process of socio-economic transformation. Provision of credit is regarded as next in importance after deposit taking by any financial intermediary, especially the banks. Households have an identified need for credit even in order to maintain production at a reasonable level (Akinyele, 1996).

Studies have shown that credit holds one of the greatest potentials to household growth and development (Ogundele *et al.*, 2004). The forms and sources of credit to farmers for financing their projects and enterprises include the formal and informal sources (Adegboye, 1969; Ogunfowora and Olayide, 1972; Osuntogun, 1973; Udry, 1990; Lawal and Sanusi, 2003). The formal comprises of rural banks, commercial banks, Non-governmental organisations, Nigerian Agricultural Credit and Rural Development Bank (NAC and RDB), State Credit Corporation and the Agricultural Credit Guarantee Scheme Fund (ACGSF). The informal sources include self-help groups, Ajo, Esusu and farmers' cooperative groups. Credit is needed to expand the scale of the farm

operations and for introducing supplementary enterprises that could increase labour utilisation and promote steady flow of income and in turn better quality of life for the people (Miller, 1977; Eswaran and Kotwal, 1990; Kochar, 1997; Diagne and Zeller, 2001; Lawal and Shittu, 2006). Many farmers' do complain of lack of credit to finance their agricultural production activities but this is found to vary in several dimensions among farmers in terms of sub-sector and scale of operation (Lawal and Sanusi, 2003; Lawal and Shittu, 2006). In view of the foregoing, this study examined the level of diversification in credit granted for agricultural projects/enterprises by NAC and RDB.

**MATERIALS AND METHODS**

Secondary data used for this study were obtained from NAC and RDB zonal headquarters in Ibadan. The data covered the period 1981-2006 for the six South-West states of Nigeria (i.e., Oyo, Ogun, Lagos, Ekiti, Ondo and Osun states). Three states (namely, Ondo, Osun and Lagos) were randomly selected and data for the states analysed to achieve the stated objective. The data was analysed using descriptive statistics (mean, percentages and frequencies), Analysis of Variance (ANOVA) and Least Significant Difference (LSD) statistics. The SPSS Version 16 was used in the analysis of the secondary data obtained to test for the significance between the various enterprises and this was ran on the program and different results were obtained.

**RESULTS**

Table 1 showed that there were significant differences ( $p < 0.01$ ) in NAC and RDB credit parameters (number of projects, volume approved, disbursed, repaid and outstanding) between the various sub-sectors funded. This implies that the sub-sectors had one or few edges over one another in terms of attention by the bank. Table 2 and 3 showed that NAC and RDB credit parameters for the crop sub-sector were significantly different ( $p < 0.05$ ) from that of the other two sub-sectors while that of livestock and services sub-sectors were not significantly different from each other. This shows that more priority was given to the crop sub-sector.

From Table 4, it could be seen that the crop sub-sector had the highest (mean) number of projects (46.98) funded by NAC and RDB credit than the other two sub-sectors despite having a lower number (3) of enterprises than the livestock sub-sector (7) and about the same number with the services sub-sector (2). This implies that the crop sub-sector was given much

Table 1: ANOVA result for NAC and RDB fund variables (1981-2006)

Statistic	NP	AAP	ADB	ARP	AOS
F-ratio	7.2783***	16.7030***	11.5116***	8.0289***	9.2600***
p < 0.01					

Table 2: Mean differences for NAC and RDB fund by project category (1981-2006)

Project categories	NP	AAP	ADB	ARP	AOS
Crop/livestock	40.98	273094.06	189446.39	112389.75	179909.85
Crop/services	46.80	287998.93	236466.25	122931.46	276499.36
Livestock/services	5.82	14904.87	47019.86	10541.71	96589.51

Table 3: Pair-wise comparison of variables for NAC and RDB funded projects (1981-2006)

Project categories	NP	AAP	ADB	ARP	AOS
Crop	46.98 <sup>a</sup>	233455.81 <sup>a</sup>	237157.03 <sup>a</sup>	123022.57 <sup>a</sup>	277848.87 <sup>a</sup>
Livestock	6.00 <sup>b</sup>	42212.71 <sup>b</sup>	47710.64 <sup>b</sup>	10632.82 <sup>b</sup>	97939.01 <sup>b</sup>
Services	0.18 <sup>bc</sup>	845.35 <sup>bc</sup>	690.78 <sup>bc</sup>	91.11 <sup>bc</sup>	1349.50 <sup>bc</sup>
LSD (0.05)	26.98	86646.23	83119.10	54173.64	103890.19

Table 4: Analysis of number of projects funded by NAC and RDB by category (1981-2006)

Project categories	NPT	Mean	CV
Crop sub-sector	3	46.98	2.63
Livestock sub-sector	7	6.00	1.46
Services sub-sector	2	0.18	2.87

Table 5: Analysis of funding of projects by category by NAC and RDB (1981-2006)

Project categories	NPT	AAP		ADB		(ADB/AAP %)
		Mean	CV	Mean	CV	
Crop sub-sector	3	233455.8	1.67	231634.20	1.68	99.22
Livestock sub-sector	7	42212.71	1.81	41876.33	1.82	99.20
Services sub-sector	2	845.35	2.99	845.35	2.99	100.00

Table 6: Analysis of fund (NAC and RDB) repayments by category (1981-2006)

Project categories	NPT	ARP		AOS	
		Mean	CV	Mean	CV
Crop sub-sector	3	163225.96	2.26	302999.67	1.84
Livestock sub-sector	7	14090.34	1.85	81048.57	1.81
Services sub-sector	2	255.25	3.60	1905.54	2.96

priority over and above the other two sub-sectors in terms of number of projects funded by NAC and RDB credit. More credit (on the average) was approved and disbursed to the crop sub-sector than the other two sub-sectors (Table 5).

Actual releases to all sub-sector is about 100% meaning that the bank ensured that all the sub-sectors obtained actual allocation to them (Table 5).

However in terms of stability, the crop sub-sector has more stability than the other two sub-sectors with regards to approved credit volume and actual releases (Table 5). This further confirms the emphasis placed on the sub-sector by the bank. Table 6 shows that the mean volume of credit repaid and outstanding

Table 7: NAC and RDB repaid and outstanding fund as percentage of credit value (1981-2006)

Project categories	ARP	AOS	CTV	ARP/CTV (%)	AOS/CTV (%)
Crop sub-sector	163226.96	302999.67	466225.63	35.01	64.99
Livestock sub-sector	14090.34	81048.57	95138.91	14.81	85.19
Services sub-sector	255.25	1905.54	2160.79	11.81	88.19

were higher for the crop sub-sector than the other two sub-sectors. However, except for the services sub-sector, repayment of credit from the crop sub-sector is lower in stability (Table 6). This shows evidence that at least the livestock sub-sector remit payments back to the bank in much more discernible and stable pattern.

Table 7 shows that the crop sub-sector performed far better than the other two sub-sectors in times of proportion of credit repayments. However, the level of repayment was generally low for the three sub-sectors. This implies that a large proportion of the bank's credit fund may end up as bad debts.

**DISCUSSION**

The results shows that the sub-sectors had one or few edges over one another in terms of attention by the bank with more priority given to the crop sub-sector in terms of number of projects funded by NAC and RDB credit this result conforms with the results of Akinyele (1996) on agricultural credit diversity among enterprises.

Actual releases to all sub-sector is about 100% meaning that the bank ensured that all the sub-sectors obtained actual allocation to them. More credit (on the average) was approved and disbursed to the crop sub-sector than the other two sub-sectors, this result conforms to that of Lawal and Sanusi (2003). However in terms of stability, the crop sub-sector has more stability than the other two sub-sectors with regards to approved credit volume and actual releases. This further confirms the emphasis placed on the sub-sector by the bank.

However, except for the services sub-sector, repayment of credit from the crop sub-sector is lower in stability. This shows evidence that at least, the livestock sub-sector remit payments back to the bank in much more discernible and stable pattern.

The rational explanation for this could be that the bank wishes not to spread its fund on too many projects so as to achieve the expected returns from the fund. However, this could have a serious implication on the

income generating capacity of rural entrepreneurs since, many might have been incapacitated due to lack of fund for diverse agricultural operations.

**CONCLUSION**

The parameters of NAC and RDB credit exhibited high level of instability implying that the availability of credit in terms of sufficiency and timeliness might have been very haphazard. Furthermore, the credit profile cannot be said to really take cognisance of (the benefit of) diversification because the number of projects, credit volume approved and credit volume disbursed were found to favour the crop sub-sector than the other two sub-sectors notwithstanding that the sub-sector had a lower number of enterprises considered for funding than the livestock sub-sector and about the same as the services sub-sector.

To really achieve the policy objective of improving the agricultural sector through provision of (cheap) credit to agricultural entrepreneurs which is to ultimately enhance the economic well being of Nigerians through sustainability of food production, enhanced per capita Gross Domestic Product (GDP) and improved rural livelihood. There is the need to review the administration and use of agricultural credit in Nigeria. Particular attention need be given to provision of credit to diverse agricultural enterprises. This will ensure tangible repayment profile as well as availability of different types of agricultural output thereby paving way for enhanced rural prosperity.

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