SUSTAINABILITY OF RURAL BANKING INSTITUTIONS AND FUNDING OF AGRICULTURE IN BENUE STATE, NIGERIA: 2012-2014

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ABSTRACT
The study was conducted to determine the sustainability and performance of selected rural banking institutions in funding agriculture in Benue state; Nigeria. Multistage sampling involving purposive and simple random sampling was adopted. Primary data were collected through the use of structured questionnaires administered on 180 loan beneficiaries from the banks in the selected communities. The data were analyzed using both descriptive and inferential statistics. On the levels of sustainability achieved, the results showed that only Deposit Money Bank was self sustainable and never depended on any subsidy. With respect to funding Agriculture, deposit money bank was highest (53%) followed by Bank of Agriculture (42%), and the least was microfinance bank (4%). The study recommended that increased financial resources should be made available by the state and donor agencies to Rural Banking Institutions (RBIs). The RBIs should also embark on aggressive mobilization of savings and recovering of their loan to enable them become self sustainable.

Keywords: Sustainability, Rural Banking Institutions, Credit, Benue Sate.

INTRODUCTION

Rural banking can be seen as the business of accepting money deposits and giving out advances as well as performing other services to customers in rural areas. Rural banking can be realized by either of two ways (a) persuading, coercing or directing existing banks to open rural branches or (b) creating special banks that will establish their presence in the rural areas

(Ojo and Adewunmi, 1982). Thus a rural bank is that sited in a predominantly subsistence agricultural community for mobilizing and re-lending idle funds within the community so as to develop, modernize, and raise the living standards of the ruralites.

A rural banking institution is said to be financially sustainable if it has the ability to cover all its costs from its own generated income from operation (Thapa *etal*, 1992) without depending on external support or subsidy. Dunford (2003) also defines financial sustainability as the ability to keep on going towards Rural Banking Objective without continued donor support. These definitions centre on one point, that is, the ability to depend on self operation and also imply the possibility of making profit out of RBIs operation.

These definitions of financial sustainability imply that a loss making RBI with poor financial performance will not be classified as financially sustainable. Again a profit making RBI whose profitability is determined after covering some of the operating cost by subsidized resources or funds will also not be considered as financially sustainable.

Financial analysts in the past used low rates of delinquency and default as criteria for assessing the performance of financial institutions. The criteria are favoured based on the argument that low delinquency rate implies that lenders are careful in selecting borrowers and in recovering loans. Vogel (1981), opined that, low rate of loan delinquency suggests that loans are allocated to productive activities. Financial ratios are another tools used in the assessment of financial institutions. This method of analysis had attracted much criticism based on the fact that the tools do not take subsidy into account. This becomes a major lapse when Government owned financial institutions are being evaluated. Moreover, by the use of ratios, the extent to which the objective of a financial institution is achieved could not be ascertained. Ratios are mostly suitably used when assessing financial performance of profit maximizing organizations. This tool is not designed to measure the financial performance of financial status of Community or State owned development financial institutions which are not profit maximizers and which benefit from subsidies that carry opportunity cost to the society.

Therefore, some adaptations of the ratios have been made to focus on the real financial cost of continued operations, particularly when subsidies to the RBIs concerned constitute common practice.

A framework introduced by Yaron (1992), for assessing the performance of rural financial intermediaries ensures the unearthing of all subsidies associated with RBI operation. The framework proposes two primary criteria: Outreach and self-sustainability index. Outreach is a general term for a hybrid index which takes into account the extent of market penetration and the quality of financial service provision. Self-sustainability measures the RBIs‟ subsidies received against the interest earned and is captured by the composite subsidy dependence index, (SDI) (Yaron, 2002). This type of analysis takes into account the overall social cost of operating a RBI, including the full value of subsidies received by the institution. In particular, the SDI makes explicit the subsidy needed to keep the RBI afloat, much of which is not reflected in conventional accounting and unable to be captured by traditional financial ratio analysis (Yaron, 2000). These criteria provide quantifiable proxies for assessing the extent to which rural banking institutions have achieved their objectives and justify the social costs associated with supporting such institutions.

Profit figures are of limited use as an indicator of self sustainability. While traditional financial ratio analysis can be used to gauge the success: of financial intermediaries operating without substantial subsidy in developed economies, differences in accounting standardsand operating procedures of the RBIs make the meaningfuluse of traditional financial ratios difficult or impossible. Therefore, some adaptations of the ratios have been made to focus on the real financial cost of continued operations, particuar1y when subsidies to the RBIs concerned constitute common practice. A framework Introduced by Yaron (1992, 1994) and Gurgand *et al*, (1994) for assessing the performance of RBIs ensures the unearthing of all subsidies associated with RBIs operation. The framework proposes two primary criteria, outreach and self-sustainability. Self-sustainability measures the RBIs subsidies received against the interest earned and is captured by the composite Subsidy Dependence Index (SDI)

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To calculate the SDI for a RBI, all the subsidies received by the institution must be aggregated. Total subsidies are then compared to the RBI's average annual yield obtained on its loan portfolio multiplied by its average loan port folio. The ratio of a RBI's annual subsidies to its average annual yield obtained on its loan portfolio indicates the percentage by which the RBI's average annual yield on its loan portfolio would have to increase in order to eliminate the need for subsidy (Yaron, 1992). An SDI of zero means that the RBI achieved full self sustainability while an SDI of 100 percent or more indicates that a doubling of the average on-lending interest rate is required if subsidies are to be eliminated. A negative SDI indicates that the RBI as not only fully achieved self-sustainability, but that its annual profits, minus its capital (equity) charged at the approximate market interest rate, exceeded the total annualvalue of subsidies, if subsidies were received by the RBI (Gurgand *et al*, 1994).

In recent years the performance of most of these institutions has generally been disappointing. While some of these formal financial institutions may have done relatively well, others have not made any impact to improve the condition of the small scale farmers who are their primary clientele. The question is: are the Rural Banking Institutions self sustainable to fund agriculture in Benue State? It is against this background that the study seeks to determine the sustainability of Bank of Agriculture, Micro finance Banks and Deposit money Banks established in the Rural Areas in Benue State.

METHODOLOGY

The Study Area

Benue State derives its name from River Benue, the second largest river in Nigeria. The State created in 1976 is located in the Middle Belt of Nigeria. It is an area within the quadrilateral formed by latitudes 4° and 14° North of the Equator and longitudes 2.75° and 14.5o East of the Greenwich Meridian. (NPC, 2006) The State shares boundaries with five other States, namely: Nasarawa to the North, Taraba to the East, Cross River to the South-East, Enugu to the South-West, and Kogi to the West. The South-East part of the State also shares boundary with the Republic of Cameroon. The State is also bordered on the North by 280km of River Benue, and is traversed by 202 km of River Katsina-Ala in the inland areas.

The State has a total area of about 30955 square kilometers and administratively it is divided into 23 Local Government Areas with its Headquarters at Makurdi. According to the 2006 census results, Benue State has a population of about 4.8 million (NPC 2010).

There are two main ethnic groups in Benue State, namely Tiv, who represent about 72 percent of the total population and the Idoma who constitute slightly over 21 percent of the population. The Igede tribe represents 6 percent of the population; smaller communities of Hausa, Fulani, Jukun, Abakpa, Nyifon, Etulo and Igbo traders account for the remaining 1 percent of the population. About 75 percent of the populations live in the rural areas and the main occupation is farming.

Benue State is referred to as the *"Food Basket of theNation"* because of the abundance of its agricultural resources. About 80 percent of the State population is estimated to be involved directly in subsistence agriculture. The State is a major producer of food and cash crops like yam, cassava, rice, groundnuts and maize. Others include sweet potatoes, millet, sorghum, sesame and a wide range of others like soyabeans, sugar cane, oil palm, mango, citrus and banana. Irrigation farming along the bank of Rivers Benue and Katsina-AIa is becoming a common feature. The State can boast of a great deal of livestock resources like goats, poultry, sheep, pigs and cattle which are traditionally reared on free range by small holder farmers.

Sampling Technique and Data Collection

The population of this study encompasses all the rural farmers who obtained loans from the banks in the communities under study in Benue State. Multistage selection involving purposive and simple random sampling techniques were adopted. First, all the three agricultural zones A, B and C were purposively selected based on the high concentration of loan beneficiaries in the zones. The second stage involved purposive selection of three (3) Local Government Areas from each of the zones namely; Ukum, Katsina-Ala and Vandeikya in zone A, Gboko, Gwcr and Makurdi in zone B, and Otukpo, Okpokwu and Oju in zone C. In stage three, two communities in each of the Local Government Areas were randomly selected. Having drawn the sampling frame of agricultural loan beneficiaries in these communities, 10% of the agricultural Loan beneficiaries were randomly selected. A total of 180 agricultural loan beneficiaries were selected from 1804 agricultural loan beneficiaries for the study. Secondly, the list of all banks, Deposit Money banks, development banks Bank of Agriculture and microfinance banks was obtained from the Central bank of Nigeria, Makurdi Branch. Selection of the banks was done using the stratified and purposive sampling method. The banks were stratified into: (a) Deposit Money banks (United Bank for Africa or Union Bank of Nigeria). (b) Micro-finance bank; (c) Agricultural development bank (Bank of Agriculture).

A simple random sampling was carried out to draw from each stratum where there are more than two bank branches in the category from the selected agricultural development zone. Six bank branches of the three categories of banks were selected per each agricultural development zone. This translates into eighteen bank branches for the three agricultural development zones. The list of all the small-scale agricultural loan beneficiaries from 2012 – 2014 was obtained from these bank categories in each of the agricultural development zones from the agricultural credit officers or bank officials. This served as sampling frames from which 180 farmers (borrowers) were randomly selected. This represents 10 small scale farmer borrowers per bank branch. Purposively, the officials of these bank categories in each

agricultural development zone were selected for questionnaire administration.

This study used primary and secondary source of data. Primary data were collected through the use of two sets of questionnaires. One set was administered to the farmers and the other set was administered to the bank officials. Questionnaires for the farmer elicit information on their socio-economic attributes, types of crops grown or livestock kept, formal and informal sources of fund, knowledge and use of banking facilities especially of the microfinance banks and the problem encountered in microfinance bank loan acquisition and terms of repayment. The second questionnaire was used to obtain information on the names and number of farmers loan beneficiaries type of farm sponsored, conditions for granting the loans, terms of repayment of loans amongst others.

Secondary data were sourced from annual reports, journals, and other published and unpublished materials relevant to the study.

Method of Data Analysis

Descriptive statistical techniques such as means, frequency distribution percentage where appropriate were applied in analyzing the data obtained from the field. To determine the level of self-sustainability achieved by these banks. Sustainabi1ity Dependence Index (SDI) model was used to address this objective.

The SDI model is expressed below;

$$S = A(M - c) + [(EM) - P] + K$$

where

S = Annual subsidy received to the RBI

A = RBI concessional borrowed funds outstanding (annual average)

M = Interest rate the RBI would be assumed to pay for borrowed funds if access to borrowed concessional funds were eliminated.

C = weighted average annual concessional rate of interest

actually paid by the RBI on its average annual concessional borrowers funds outstanding.

E = Average annual equity: (₦)

P = Reported annual profit before tax (adjusted for appropriate loan loss provisions and inflation.

K = The sum of all other annual subsidies received by the RBI. Gugard et al (1994). Meanwhile Gugard et al (1994) defined the subsidy dependence index as:

$$SDI = \frac{S}{LP_i}$$

Where

SDI Index of subsidy dependence of RBI

S Annual subsidy to the RBI

LP Average annual outstanding loan portfolio of the RBI

i. Weighted average on lending interest rate earned on the loan portfolio of the RBI.

RESULTS AND DISCUSSION

Determination of the Levels of Sustainability as Obtained in the RBIs using the Subsidy Dependence Index (SDI)

The SDI measures the percentage increase in the average lending interest rate required to compensate for eliminating subsidies, including the subsidy RBI receives through paying interest below the market rate on its borrowed funds (mostly rediscounting facilities) with the central bank or soft loan from donors, state assumption of foreign exchange losses on loans denominated in foreign, currencies, obligatory deposits of other financial or public institution at a below market rate, direct reimbursement by the state or Donor agencies or some or all operating cost (subventions) and exemption from reserve requirements or forced investment. Because dependence on subsidies is in inverse proportion to self sustainability, a subsidy dependence index (SDI) is suggested for tracking the progress on RBI rates in reducing its dependence overtime.

The SDI for the three institutions was calculated for the most recent years; 2012-2014 for which financial statements were available. The results are displayed in Table 1; the result indicated that the three RBIs differed substantially in their level of dependence on subsidies. During the period under study, the deposit money banks SDI of-2.57% - 4.37% and -7.85% in 2012, 2013 and 2014 respectively means that it had not depended on subsidy over time. The Deposit Money bank strength is on their largeasset and deposit base, (Table 1), large branch network and good public image. Access to low cost funds such asMicrofinance Banks, federal, State and Local Governments deposits has been their major competitive advantage. The research also revealed that another reason for this performance may be due to the deposit money banks having high on lending interest rate and high savings mobilization.

Second on the SDI rankings is the Bank of Agriculture. It posted positive SDI reading of 18.57, 14.62 and 11.11 percent for the years 2012, 2013, and 2014 respectively. This implies that the bank had depended on subsidies, though on a reducing level during the period under review. Though a beneficiary of subsidies such as concessionary interest rates, grants from the Federal Government, subventions to mention but a few,the

bank made relative significant progress in reducing these implicit subsidies from 18.57.percent in 2012 to 14.62 in 2013 (Table 1). The secret for this performance lies in the bank's ability to source for large low-cost credit from both local and international sources and their aggressive loan recovery performance. This was made possible in large measure by the financial discipline among the farmer borrowers which was promoted by the bank. This is perhaps the principal achievement that distinguishes the bank from the other traditional supply led credit programmes.

The last in the ranking of SDI is the Microfinance Banks, The figure of the bank indicates that of all the RBIs, it has the highest dependence index in 2012 (Table 1). This SDI of 62.5 percent suggest that its effective lending interest rate would have increased by 62.5 percent from 18 percent to 29.25 percent a year to compensate for full elimination of subsidies. This SDI level was however reduced to 30 percent in 2013 by increasing its lending rate to 32 percent. The bank however improved upon their 2012 performance by reducing its SDI further to 28.5 percent. Full elimination of all subsidies may be achieved by increasing their effective lending rate by 51.4 percent. The poor SDI performance of the bank could be attributed to their inability to mobilize sizeable deposits from the rural setting (Table 1), inaccessibility to low cost funds and the tendency for their reporting bunks to hold tight to their deposits as an insurance against distress.

TABLE 1: SUBSIDY DEPENDENCE INDEX OF RBIS 2012-2014

INDICATOR	DEPOSIT MONEY BANKS			NACRDB		MICROFINANCE		BANK
2012	2013	2014	2012	2013	2014	2012	2013	2014
SDI Calculated								
-257	-4.37	-7.85	18.57	14.62	11.11	62.5	30	28.5
Effective Mean			25.5	25.5	27	7	8	9	18
32	40							

Annual lending rate (%)								
Effective lending	24.86	24.43	24.88	8.30	9.17	10	29.25	41.6	51.4
Rate required to eliminate all subsidies								

Source: Field data 2014

Agricultural loans made available to Small Scale farmers in Benue State 2012-2014.

Table 2 shows that the highest amount of credit (N957.85 million) or 53% of the total fund extended to small-scale farmers in Benue State from 2012-2014 came from Deposit Money Bank. The second in the hierarchy of the credit status is Bank of Agriculture which extended ₦763 million or 42% of the total funds to the small scale farmers in rural communities of Benue State. Next on this scale were the Microfinance banks which extended a total of ₦78 million or 4% of the total agricultural loans to the rural communities. It is therefore implied that the Deposit Money Bank has remained a hallmark in the supply of credit over the past years in the State. The essence is to promote rural development through boosting agricultural production, increasing rural incomes, and achieving greater equity.

Table 2: Amount of Agricultural Loans Made Available to Small-Scale Farmers by RBIs 2012-2014

Year	Deposit Money Banks (N'000,000)	Bank of Agriculture (N'000,000)	Microfinance Bank (N'000,000)
2012	322.93	83	20
2013	414.52	579	29
2014	220.4	101	29
Grand Total	**957.85**	**763**	**78**

Source: **Field Survey, 2014**

CONCLUSION AND RECOMMENDATION

Deposit Money Bank is the only bank that is self sustainable among the banks examined and this is not unconnected to her large asset and deposit base. Basically, the performance of these RBIs in financing agriculturalproduction in Benue State is less than satisfactory and this is because microfinance banks and bank of agriculture that would have supported the money deposit banks are not self sustainable which will certainly reduce their impacts. It is however, believed that with time and policy changes, these RBIs will improve on their performance and grow to become major sources of credit to the small scale rural farmers in Benue State and Nigeria in general. Based on this finding, the following re recommended

Increased financial resources should be made available by the Stateor Donor Agencies. These resources can contribute substantially in reactivating and re-energizing some of these RBIs especially during their negative cash flow stages. On the other hand, the RBIs should embark on aggressive mobilization of savings and recovering of their loan. This is because RBIs success in mobilizing savings and recovering its debts are crucial to its becoming self-sustainable and having a better outreach.

All the RBIs should increase and maintain their interest rates on loans appreciably according to the recommendations in the Subsidy Dependence Index (SDI) calculations. The implication is that when interest rates arc positive and relatively high, it allows for improved coverage of the RBIs operational cost and loan losses, as well as leaving enough margins for profit.

The Central Bank of Nigeria should regulate these banks to support agricultural credit in the rural areas. For example before the deregulation of the economy, the rural banks were compelled to lend certain percentage of their deposit to the agricultural sector and failure to do so attracted penalty but this has changed with deregulation. The federal Government should revisit such policy since these banks (rural branches of deposit money banks in particular) were making huge profit or doing well with the policy.

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APPENDIX

TABLE 1. SAMPLE SELECTION (SAMPLING PROPORTION 10%)

Zones	LGAs	Communities	Loan	Sample Size Beneficiaries population
Zone A	Ukum	Kyado	110	11
		Gbeji	101	10
	Katsina-Ala	Abaji	102	10
		Gbor	80	8
	Vandeikya	Tsar	71	7
		Ihugh	90	9
Zone B	Gboko	Yandev	149	15
		Ipav	180	18
	Gwer	Taraku	142	14
		Ikpayongo	118	12
	Makurdi	Tatyough	79	8
		Apir	109	11
Zone C	Otukpo	Ugboju	81	8
		Otukpicho	59	6
	Opkokuu	Ugbokolo	120	12
		Ichama	83	8
	Oju	Amaka	28	3
		Ohuohuo	102	10
Total			**1804**	**180**

Source: Field Survey, 2014.