Impact of Rural Finance Institution Building Programme on Socioeconomic Condition of Beneficiaries in Anambra State, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Rural Finance Institution Building Programme (RUFIN) was established to improve the income, food security and general living conditions of poor rural households with financial services that will be improved in terms of quality, quantity and access to deposit, loan and transfer services. It is expected that the intervention of RUFIN should result in positive changes in the socioeconomic condition of the beneficiaries. The study evaluated the impact of RUFIN on the socioeconomic condition of RUFIN beneficiaries in Anambra State, Nigeria. Multistage, purposive and snowball sampling techniques were used to select 60 RUFIN beneficiaries (RB) and 60 non-RUFIN beneficiaries (NRB) for the study. Data were collected using structured interview schedule. Descriptive and inferential statistics were used to analyse data generated. The average amount of loan obtained by RB was N67,266.70 at an average payback period of one year. Sex (t=-5.61) and

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years of farming experience (t=2.25) significantly (p≤0.05) influenced the amount of loan obtained while age (t=2.36) significantly (p≤0.05) influenced the number of loans obtained. RUFIN resulted in positive but not significant changes on 12(52.2%) of 23 items used in assessing the impact of the programme on the socioeconomic condition of the beneficiaries. The study recommended that RUFIN should enhance the loanable amount and payback duration which may in a long run, positively affect the socioeconomic condition of the beneficiaries. Also, farmers should be educated by extension agents on all sources of agricultural loans, use of loans, loans repayment plans, and how to diversify agricultural income for lasting impact on livelihood.

1. INTRODUCTION

Rural finance covers the full array of monetary services such as savings, loans, insurance, payment and money transfer services, rendered by formal and informal financial establishments and accessed in rural settlements by farm families and enterprises as a way of enhancing or maintaining their livelihood options [1]. International Bank for Reconstruction and Development [2] established that absence of efficiently operating rural financial institution is a serious constraint on sustainable rural economic growth in Africa. More so, the Food and Agricultural Organization [3] pointed out that deficiency in access to finance in rural settlements and in the agricultural value chain can be associated to slow and irregular entry of formal institutionalized financial structures into rural areas. Subsidized loaning interventions for rural dwellers, seasonal form of farmers' income, long duration in maturity of farm produce, and high-risk factor connected to agriculture have also hindered the development of a workable rural banking sector.

While it is clear that financial marginalisation of the rural population limits development, fewer than 2% of rural households in Nigeria are appraised to have link to any sort of institutional finance [4]. The development of financial systems is cited by Obanasa and Madukwe [5] as a major driver of growth for the agricultural sector. Lack of rural access to financial facilities in Nigeria not only impedes rural economic growth, but also escalates poverty and disproportion [4]. Access to finance rises earnings through productive investment, helps create employment opportunities, expedites investments in health and education, and decreases the susceptibility of the poor to economic shocks by assisting them to smooth their income patterns over time [4].

In most rural communities of Nigeria, Anambra State inclusive, access to affordable and timely financial services is particularly difficult because of high risk associated with lending to rural people. It is unsafe because members of the communities are dispersed in many remote rural places, and are mainly uninformed and unacquainted with the terms and workings of existing financial institutions [3,6,7].

Some initiatives such as Rural Banking Programme, Community Banking System, Family Economic Advancement Programme, National Poverty Eradication Programme, Agricultural Credit Support Scheme among others have been put in place by Nigerian government to achieve sustainable rural finance but most of these interventions came to an end without accomplishing the main goal which was to enhance rural farmers' access to funding for sustainable agricultural development [4]. This is demonstrated by the amount of poverty in rural areas, which was 50% in 2018 [8] as against 41% in 1985 [9]. The failures could be linked to incoherence and/or default in implementation of programmes policy documents. It could also be associated with lack of clarity on the extent to which evaluation have informed evidence-based policy.

In an effort to address these obvious difficulties and problems, Rural Finance Institution Building Programme (RUFIN) was initiated in 2006 and became effective in 2010. The programme was financed by IFAD, the Ford Foundation, the Federal Government of Nigeria, state governments of Nigeria, Central Bank of Nigeria (CBN), participating banks and micro finance institutions (MFIs) in Nigeria [10] (RUFIN, 2010). The goal of RUFIN was to mend the earnings, food security and overall living situations of poor rural families through the infiltration of sustainable rural financial structure (RUFIN, 2010). The initiative aimed to provide financial services that would be enhanced in terms of quality, quantity, and access to deposit, loan, and

transfer services to an estimated population of 345,000 rural households, of which 40% were planned to be women-headed.

It is anticipated that the recipients' socioeconomic initial conditions will improve as a result of participation in RUFIN intervention. Hence, the study sought to determine the impact of the programme on beneficiaries' socio-economic condition. It hypothesized that there is no significant influence of the socioeconomic characteristics of the beneficiaries on access to loan facilities.

2. MATERIALS AND METHODS

The study was carried out in Anambra State, located between latitude 5°80^1 and 6°10^{1}North and longitude 6°85^1 and 7°60^1 East. The state has rural population which is characterized by farming as major occupation, though there are diversifications into non-farm occupations such as petty trading, handicraft, among others [11]. There are 21 local government areas (LGAs) in Anambra State. The state has financial institutions comprising commercial banks, microfinance banks, Bank of agriculture, bank of industry, cooperatives and thrift societies, with most located in major cities. Three LGAs (Awka North, Orumba North and Ayamelum) participated in RUFIN programme.

All beneficiaries and non-beneficiaries within the state constituted the population for the study. The beneficiaries' population were those privileged by virtue of location and were registered members of any village saving and credit group (VSCG) that was under RUFIN supervision and have collected loan while non-beneficiaries were credit groups that were not under RUFIN loan.

Beneficiaries were selected using multistage, purposive and snowball sampling techniques. In the first stage of beneficiaries' selection, all the 3 LGAs participating in the programme in the state were used. In the second stage, four VSCGs that had accessed the loan were purposively selected from each LGA. In the third stage, five respondents from each VSCG were proposed for random selection, on the basis that each VSCG had membership strength of 20-25 persons, but it was revealed in the field that not all members of each group were available at the period of interview. Some beneficiaries were said to be deceased, while some others were reported to have departed for distant land on the ground of

commerce or social call. Accounts have also shown that nonpayers of loan contract usually dodge interview [12,13]. Therefore, using snowball sampling technique, 20 beneficiaries that were reachable in each LGA were interviewed. This gave a total of 60 respondents for the beneficiaries' category.

In the non-beneficiaries' selection, all the 3 participating LGAs in the state were used. Snowball sampling method was used to select 20 respondents that were members of any village saving and credit groups that were not under RUFIN loan, giving a total of 60 respondents. The total sample size for the study was 120 respondents.

Data were collected using structured interview schedule. The instruments were subjected to both content and face validity by experts in the Department of Agricultural Extension University of Nigeria and RUFIN office in Anambra State before administering to respondents. Baseline data were generated through recall approach. The approach was implemented after much effort at reaching the programme coordinator for data collected before the inception of RUFIN failed. Recall approach has also been adjudged to be better when dealing with adults. This because they can correctly estimate their situation in context before and after an intervention unlike pre-intervention data where estimates are given out of context.

Respondents were required to provide the average amount of loan in naira that was obtained from financial institutions linked to RUFIN. The payback period in years was obtained. The average number of times respondents received loan in a period of five years was also obtained. To determine the impact of the project on the beneficiaries' socio-economic life; changes on the beneficiaries' various livelihood assets such as total farm size, household assets among others were measured using the difference in difference method of evaluation also known as double difference. This estimates the differential impact of the programme on the beneficiaries by comparing the mean differences of the beneficiaries' livelihood assets with the non-beneficiaries over time. That is, difference in the beneficiaries' livelihoods assets, before and after the intervention, minus the difference in the non-beneficiaries' livelihoods assets before and after.

The significance of the influence of socio-economic characteristics of RUFIN beneficiaries (RBs) on their access to loan facilities (amount and number of loans obtained) was tested using a multivariable regression analysis. The regression model is stated in explicit form as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \mu$$

Where:

Y = amount of loan obtained or numbers of loan obtained (dependent variable);
α = Constant
β_1 to β_6 = regression coefficients (to be determined)
X_1 = age (years)
X_2 = sex (Male = 0; female = 1)
X_3 = marital status (married = 1; not married = 0)
X_4 = years of formal education (years)
X_5 = household size (numbers)
X_6 = years of farming experience (years) and
μ = error term. All statistical analyses were performed at 5% level of significance.

3. RESULTS AND DISCUSSION

3.1 Socioeconomic Characteristics of the Respondents

The majority of RUFIN beneficiaries (RB) (76.7%) and non-beneficiaries (NRB) (61.7%) were female. This could be linked to the special interest the programme has for women over men; where 40% minimum participation was allotted to women [14]. It could also be associated with dogged commitment of women to group related activities above men which may be driven by their quest for access to productive assets [15]. About 86.7% of RB and 88.3% of NRB were married. The mean years spent in acquiring formal education for RB was 8.9 years while that of NRB was 9.8 years. The mean household size for each of RB and NRB was 6 persons. A preponderance of RB (55%) and NRB (56.7%) were farmers. The average years RB and NRB had farmed were 17.3 years and 15.9 years, respectively. The average amount of loan obtained by beneficiaries was ₦67,266.7. This amount looks so small when viewed in the lens of current economic realities in Nigeria. Agricultural inputs are constantly rising coupled with the cost of labour. On the average, beneficiaries were given one year to pay back loans and they were only able to access loan once since the inception of the programme.

3.2 Influence of Socio-economic Factors on Access to Loan Facilities

There was a significant relationship (F = 9.98; p<0.05) between the socio-economic characteristics of RB and the amount of loan obtained as shown in Table 1. Specifically, sex (t = -5.61; p<0.05) and years of farming experience (t = 2.25; p<0.05) of the beneficiaries had significant influence on the amount of loan obtained. The adjusted R Square (0.49) which is an estimate of R Square for the population shows that 49% of the variance in the amount of loan obtained is explained by the variables included in the regression model.

The significant relationship between socio-economic characteristics of RB and the amount of loan obtained shows that sex of the beneficiaries influenced the amount of loan obtained. Being female increases the chance of obtaining RUFIN facilitated loan. This is in agreement with the programme provision of reaching out to an estimated population of 345,000 families, of which at least 138,000 (40%) was designed to be women-headed households (NIPC, 2015). This provision could be as a result of the significant role women play in rural economy development. It could also be an attempt to remedy the problem faced by women in obtaining capital for production, as the loan term is collateral free. This kind of loan arrangement if improved upon could go a long way in addressing the marginalization suffered by women in controlling productive resources. Years of farming experience also significantly influenced the amount of loan obtained. This suggests that the more experienced one is in farming the higher the amount of loan obtainable; as experience could inform or affect loan culture or attitude. Loan givers tend to garner more confidence around experienced farmers than novice. This is because experience has been adjudged as a key player in crop and livestock failure. This agrees with Nwobodo [16] who opined that year of experience translates to good knowledge of value chain activities.

There was a significant influence (F = 1.93; p<0.05) of socio-economic characteristics of RB on the number of loans obtained. Age of the RB was the only variable that had a significant (t = 2.36; p<0.05) influence on the number of loans obtained. The adjusted R Square (0.09) which is an estimate of R Square shows that 9% of the variance in the amount of loan obtained is explained by the variables included in the regression model (Table 2).

The number of loan obtained was significantly influenced by the age of RB. This corroborates with the findings of Ojo [17] who reported that age of rice farmers in Ekiti State Nigeria, influenced their adoption decision. This could be linked to the already established fact of age being associated with experience and knowledge; which could affect life decisions.

3.3 Impact of RUFIN on Beneficiaries' Socioeconomic Life

As observed in Table 3, the RUFIN programme had a positive impact on 12 (52.2%) of the 23 items used in assessing its impact on beneficiaries' socioeconomic life. It is of interest to know that the non-beneficiaries significantly (p<0.05) fared better than the beneficiaries in two of the items (total farm annual income and number of poultry owned).

The non-significant difference between beneficiaries and the non-beneficiaries' socioeconomic possessions could be associated with the average loan received (₦67,266.7), which might have been too small to produce a positive and significant difference in livelihood possessions. The non-difference could also be linked to the average number of times beneficiaries accessed loan (once), which if increased may yield more resultant effect on domestic properties. The average payback period of one year, may also be a discouraging factor in investing on fixed assets or capital demanding projects. This agrees with Attamah

and Chah [18] who pointed out a non-significant difference in the food insecurity score between beneficiaries and non-beneficiaries of a programme. This buttresses the view of Llanto [19] that there is a dearth of long-term financing in the agriculture and rural sector, e.g., financing for long-term crops such as palm oil, rubber and others. The findings negate the report of Okeh et al. [20] who recorded a significant difference in possession of household equipment under RTEP intervention programme in Plateau State, Nigeria. However, the significant difference between beneficiaries and non-beneficiaries in the number of poultry owned and total annual income from farm in favour of NRB shows that non-beneficiaries were also doing well in their farming ventures. This suggests that the non-beneficiaries were into tangible businesses that may have discouraged them from participating in RUFIN. The amount of money involved and payback period might also have discouraged the non-beneficiaries from participating. This is because every well to do farmer or business man knows the loan arrangement that will advance the course of his/her business or venture to some extent. According to International Finance Corporation [21] agricultural loan products must reflect the unique characteristics of agricultural production. Namely, products must cater to seasonal production with long and diverse gestation periods. But this is not usually the case as borrowers are always put on pressure to payback even before the expiration of term [22-24].

Table 1. Influence of socio-economic factors on amount of loan obtained

Variables	Unstandardized coefficients		Standard coefficients	t-value
	B	Std error	Beta	
(Constant)	76550.95	29802.30		2.57
Age	7.43	505.96	0.00	0.02
Sex	-54455.84	9707.53	-0.60	-5.61*
Marital status	2456.51	12103.62	0.02	0.20
Years of formal education	1434.35	1011.96	0.15	1.42
Household size	21.51	1827.62	0.00	0.01
Years of farming experience	995.64	442.36	0.30	2.25*

*Dependent variable: Amount of loan obtained; Adjusted R^2=0.49; F-value=9.98; *p<0.05; (n=60)*

Table 2. Influence of socio-economic factors on the numbers of loan obtained

Variables	Unstandardized coefficients		Standard coefficients	t-value
	B	Std error	Beta	
(Constant)	-0.14	0.57		-0.25
Age	0.02	0.01	0.40	2.36*
Sex	0.11	0.19	0.00	0.60
Marital status	0.03	0.23	0.02	0.14
Years of formal education	0.04	0.02	0.28	1.93
Household size	-0.04	0.04	-0.14	-0.99
Years of farming experience	0.01	0.01	0.13	0.72

*Dependent variable: Numbers of loan obtained; Adjusted R^2=0.09; F-value = 1.93; *p≤0.05; (n=60)*

Table 3. Impact of RUFIN on beneficiaries' socioeconomic life

Items	Before		After		t-value
	RB	NRB	RB	NRB	
Total farm size owned (Ha)	2.44	2.83	2.31	2.64	0.36
Total cultivated farm size (Ha)	1.47	1.86	2.30	4.02	-0.86
Number of crops cultivated	3.24	3.48	3.49	4.25	-1.76
Worth of trade (business) (naira)	115206.90	120333.33	141500.00	206500.00	-1.00
Total farm annual income (naira)	142304.35	236533.33	218600.00	419516.13	-2.13*
Total trade annual income (naira)	150888.89	155840.00	242923.08	225672.73	1.13
Number of cars owned	0.03	0.15	0.07	0.20	-0.19
Number of motorcycles owned	0.50	0.55	0.76	0.75	0.49
Number of wheelbarrows owned	0.53	0.65	0.88	1.00	0.00
Number of cooking stoves owned	1.42	1.38	1.78	1.88	-0.54
Number of refrigerators owned	0.48	0.52	0.77	0.82	-0.16
Number of televisions owned	0.83	0.92	1.00	1.13	-0.48
Number of radio sets owned	0.80	1.03	1.13	1.32	0.41
Number of mobile sets owned	0.90	0.97	1.38	1.28	1.26
Number of generators owned	0.77	0.75	1.07	1.03	0.13
Number of ceiling fans owned	1.23	1.37	1.78	1.57	1.84
Number of personal houses owned	0.70	0.62	0.92	0.78	0.69
Number of rooms occupied	2.88	2.68	3.40	3.12	0.41
Number of wall clocks owned	0.90	1.02	0.97	1.10	-0.14
Number of personal wells owned	0.03	0.19	0.04	0.19	-0.28
Number of mattresses owned	1.82	1.87	2.20	1.93	0.90
Number of poultry owned	15.02	4.75	9.36	12.90	-2.46*
Number of associations belonged to	0.97	0.93	2.10	1.88	1.15

*P≤0.05 *Significant*
The t-value shows the difference in difference between RB and NRB

4. CONCLUSION

Impact evaluation of programmes is essential for better future policy and development. An evaluation of the impact of Rural Finance Institution Building Programme in Anambra State, Nigeria has shown that the average amount of loan obtained was small and influenced by sex and years of farming experience, while age influenced the numbers of loan obtained. There was a short payback period of one year for loan repayment. Socioeconomic possessions were similar for both groups on most items, but non-beneficiaries differed significantly from beneficiaries in the number of poultry owned and total income from farm.

Based on the foregoing, to enable significant investment in agricultural and other household livelihood activities, RUFIN should enhance the loanable amount and payback duration which may in a long run, positively affect the socioeconomic condition of the beneficiaries. To make sure that loans obtained for agricultural and other livelihood initiatives are used for the intended purpose, RUFIN should establish an effective and efficient monitoring team made up of the Agricultural Development Programme, IFAD, and CBN. Farmers should be educated by extension agents on all sources of agricultural loans, how to use loans, how to repay loans, and how to diversify their agricultural income for lasting impact on their livelihoods.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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