

Socio-economic Factors Influencing Farmer's Participation in Rural Financial Institution Building Programme (RUFIN) in Zamfara State, Nigeria: Policies for a Resilient Future

Jaafaru, A. K., Yakubu, L. L., Akinola, M. O. and Yusuf, O. H.

National Agricultural Extension Research and Liaison Services/ Ahmadu Bello University, Zaria.
akjaafaru@abu.edu.ng Phone Number: 08066067824, 08080709269

Abstract

This study was conducted to determine the socioeconomic factors influencing farmer participation in Rural Financial Institution Building Programme (RUFIN) in Zamfara State, Nigeria. Two hundred and sixty-one farmers were purposely selected and interviewed for this study while Frequency distribution and multiple regressions were used to analyze the data. The study findings indicate that more than 97% of respondents were economically active, 88.7% had formal education, 83.0% managed their own farm and 86.3% were currently married. Multiple regressions revealed that the level of participation in RUFIN was significantly associated with education, farm ownership, farm size, and residency period. In addition, the data showed that the level of participation in RUFIN activities was significantly associated with educational level, farm ownership, farm size, and total income of the programme participants. Thus, the participation of farmers in RUFIN can have profound positive effects on poverty reduction. The study recommended more interventions areas to improve and develop the livelihood and poverty of the beneficiaries.

Keywords: Rural Financial Institution Building Programme; socioeconomic factors; participation; Zamfara State, Nigeria.

Introduction

Poverty reduction is to all rural development programs, it is imperative to note that poverty reduction is one of the brightest indicators of human progress (Oyekale, 2011). The Rural Financial Institutions' focus is to improve the poverty status of the rural societies; this is by improvement of their agricultural businesses. Federal Government of Nigeria (FGN) in collaboration with International Fund for Agricultural Development (IFAD) had come up with Rural Financial Institution Building Programme (RUFIN) to enable rural farmers' access to financial service (IFAD, 2013).

The Rural Financial Institutions Building Programme (RUFIN) was designed to enhance access to financial services for rural farmers and agricultural communities in developing countries. It typically aims to build local financial institutions and improve the financial literacy of farmers, enabling them to access credit, savings, and insurance products that can support their farming activities and broaden economic well-being. The impact of farmers' participation in such programs on poverty status can be significant, and here's an overview of key potential effects:

To effectively address the impact of farmers' participation in the RUFIN on poverty status, we need to consider both empirical studies and theoretical frameworks that have examined the effects of financial inclusion and rural financial programs on poverty alleviation. To achieve this in simpler way, we categorized in a nutshell under the following sub themes:

Improved Access to Credit: Impact on Productivity and Income: Access to formal credit allows farmers to invest in better agricultural inputs (seeds, fertilizers, machinery) which in turn increases their productivity. A study by Akinmoladun et al. (2022) found that rural financial institutions in Nigeria significantly enhanced agricultural productivity and income among smallholder farmers by providing easier access to credit. A Positive Impact on income could result in increased income levels, helping farmers move out of poverty.

Thus, Reduced Reliance on Informal Loans: By accessing formal financial services through rural institutions, farmers can avoid high-interest rates and exploitative terms typically offered by informal moneylenders. This is in accordance with Ravallion et al. (2021), access to formal credit channels reduces farmers' dependence on high-interest informal loans, which are often exploitative and put farmers in a cycle of debt.

Enhanced Financial Literacy and Capacity Building: Better Financial Management: Participation in RUFIN often includes training on financial literacy, enabling farmers to manage their resources more effectively. By

saving and investing wisely, farmers can build a safety net against unforeseen challenges like poor harvests or fluctuating market prices.

Better Financial Management Skills: RUFIN's integration of financial literacy training equips farmers with essential skills for managing savings, investing in income-generating activities, and building resilience. A study by Akpan et al. (2021) highlighted that farmers who participated in rural financial programs experienced improved financial literacy, which contributed to better decision-making and enhanced financial outcomes

Better Financial Management Skills: Farmers who gain financial literacy and better access to banking services can plan more effectively, reducing financial vulnerability and building long-term sustainable farming practices. Zeller et al. (2022) emphasized that the training components of financial inclusion of programs like RUFIN lead to more sustainable farming practices, helping farmers plan for both short-term challenges and long-term needs.

Improved Savings Behavior: Development of a Savings Culture: Rural financial institutions encourage farmers to save, which could provide a buffer against seasonality in farming incomes. This savings, in turn, help improve financial security and resilience against external shocks.

Increased Savings Capacity: Through programs that encourage saving, farmers have access to tools that help them accumulate savings in secure ways. Tadele, (2023) concluded that “Farmers participating in financial literacy programs that include savings components are more likely to set aside funds for emergencies and investment.”

Poverty Alleviation via Asset Building: The ability to save also provides farmers with the opportunity to accumulate assets that can protect against unforeseen risks. Elliot et al., (2022) found that savings accounts and insurance mechanisms, offered through rural financial institutions, help farmers build resilience to climate shocks and avoid slipping back into poverty.

Therefore, Opportunities for Asset Accumulation: as farmers save, they may accumulate resources for investments that allow them to diversify their income streams and enhance their standard of living, reducing poverty over time. Thus, participation of farmers in the Rural RUFIN can have profound positive effects on poverty reduction. This ultimately helps to break the cycle of poverty in rural areas, fostering economic stability and long-term development.

The main objective of this study was to investigate the socioeconomic factors influencing farmers' participation in RUFIN. The specific objectives were as follows: identify the socioeconomic characteristics of the respondents; determine farmers' level of participation in activities and programs provided by RUFIN and examine the relationship between some socioeconomic factors (age, education, and income and farm size), influencing participation in activities and programs provided by RUFIN in the study area

Methodology

This study was conducted to determine the socioeconomic factors influencing farmer participation in RUFIN in Zamfara State, Nigeria. One hundred and twenty-seven farmers were purposely selected from three participating LGAs that are in the programme and interviewed for this study. A random sampling of four percent (4%) of participating respondents from selected LGAs using the Viechtbauer, *at el* (2015), Chow, *at el* (2017) respectively was used.

Table 1: Sampling Procedure and Sample size

State	RUFIN Participating LGAs	Sampling Frame	Sample Size (4%)
Zamfara	Gusau	1140	46
	Bukkuyum	945	38
	Talata Mafara	1065	43
	Total	3150	127

Both primary and secondary data were collected and used in this study. Primary data were obtained through a direct interview schedule and observation, while secondary data were obtained from relevant sources.

Descriptive statistics such as frequency distribution and percentages as well as multiple regressions were adopted for data management, analysis, and discussion,

Results and Discussion

Respondents' Socioeconomic characteristics

Table 2 indicates that more than 95% of respondents were economically active; they were between 20 and 49 years of age; 88.7% were educated at different levels, while only 11.3% had no formal education. Data in the table also shows that 83% of respondents owned their farm, and 60% had a farm of more than 1-1.5 hectares in size. These are promoting factors for the farmers to participate in RUFIN. The finding is in line with that of Mcelfish, (2018), Oyeka, (2024) whose findings revealed that the respondents' socioeconomic features are relatively towards his influence in the participation and implementation of an innovation or intervention. About 86.3% of the respondents were currently married and were residents in the same area for more than 10 years and 65% had an annual income exceeding ₦141513.41. According to Ochago et al. (2017), findings from various countries are mixed; ownership of assets such as arable land, labor, equipment, and wealth status have been found to influence farmers' participation in groups/programmes. The results in Table 2 also revealed that 97.5% of respondents had more than 10 years of experience in agricultural production in the area.

Table 2: Socio-economic Characteristics of Respondents

Variables	Freq.	%	Variable	Freq.
Age			Education	
20–29	8	6.2	Illiterate	5
3.9				
30–39	58	45.7	Primary	46
36.2				
40–49	48	37.8	Secondary	65
51.2				
50+	13	10.2	University	11
8.7				
Farm Size (hectares)			Farm Ownership	
5–9	55	43.3	Own	97
76.4				
10–14	62	48.8	Rent	30
23.6				
15–19	9	7.1	Total	127
100				
20+	1	0.8	Marital Status	
Total	127	100	Never married	3
2.3				
Period of Residency			Married	99
78.0				
10–19 years	120	94.5	Divorce/widow	25
19.7				
20 years and more	7	5.5	No stated	0
0				
Total	127	100.0	Total	127
100				
Annual Income			Agricultural Experience	
Less than 14,0000	104	81.9	Less than 10 years	2
1.6				

500,000–900,000 17.3	18	14.2	10–19 years	22
More than 900,000 75.6	5	3.9	20 years and more	96
Total 100	127	100	Total	127

Source: Field Survey, 2024

Farmers' Level of Participation in RUFIN

Data in Table 3 indicates that 67.5% of the group members participated in RUFIN at different levels: 53.7%, 33.3% and 13% for constantly, sometimes and rarely, respectively. The Table also shows that 88.5% of non-participating respondents did not participate in RUFIN activities due to being busy or not interested in the program activities.

Table 2: Respondents' Participation in RUFIN (n=127)

Variables %	Frequency
Extent of participation	
Yes 67.7	86
No 32.3	41
Level of participation	
Rarely 8.7	11
Sometimes 37.8	48
Continuously 53.5	68
Reasons of not participating	
Busy 73.1	93
Lack of interest 15.4	19
Do not know about the program 11.5	15

Source: Field Survey, 2024

Determinants of Participation in RUFIN

The results of the multiple regression analysis in Table 3 indicated that the length of residency, farm size, agricultural experience, and annual income variables had significant positive regression weights (0.044, 0.059, 0.009 and 0.001 respectively). This indicates that higher participation levels in RUFIN are expected among interviewed farmers with higher scores on these scales, after controlling for the other variables in the model. It is also revealed that education level, marital status, and farm ownership had positive regression weights (0.435, 0.609 and 0.59, respectively), which indicates that the respondents who are more educated, married and with large size farms are expected to have more desire to participate in RUFIN.

This result is in line with Davis et al. (2010) who showed that household heads with primary and secondary education were more likely to participate in an intervention like RUFIN than those with no education. The

Table also shows that respondents' age and agricultural experience had a significant negative regression weight, indicating that the older participants and those with more agricultural experience are expected to participate less frequently in the activities of an intervention such as RUFIN, (this is based on the other schedules such individuals were engaged elsewhere). In other words, young farmers are more willing to participate in RUFIN than older farmers because young farmers are expected to look for agricultural information and new innovations as it is their time for struggling to establish more opportunities. This finding is in line with Davis et al. (2010) who found that younger farmers in Uganda, Tanzania, and Kenya were more likely to participate in farmers' field school groups compared to older farmers.

Table 4. Multiple Regression Analysis of RUFIN participation

Variable	Unstandardized Coefficients		Standardized Coefficients		t
Sig	B	Std. Error	Beta		
(Constant)	1.086	0.669			1.623
0.109					
Age	-0.020	0.082	-0.028		-0.250
0.003					
Education level	0.089	0.113	0.090		0.786
0.435					
Marital status	0.038	0.074	0.062		0.514
0.609					
Period of residency	0.439	0.214	0.204		2.052
0.044					
Farm size	0.276	0.194	0.186		1.424
0.059					
Farm ownership	0.083	0.155	0.065		0.535
0.594					
Agric. experience	0.295	0.110	0.311		2.673
0.009					
Annual income	0.395	0.113	0.438		-3.497
0.001					

Source: Field Survey, 2024

Conclusion

The level of participation in RUFIN activities was significantly associated with education, farm ownership, farm size, and the period of residency. Also, the level of application of received RUFIN packages was significantly associated with education level, farm ownership, farm size, and total income. The participation of farmers in the RUFIN can have profound positive effects on poverty reduction. By improving access to credit, savings, insurance, and financial literacy, farmers can increase their income, stabilize their financial position, and develop sustainable farming practices.

In addition, Participation in the RUFIN can significantly improve the financial well-being of farmers, reduce their poverty levels, and create a pathway to greater economic stability. By facilitating access to credit, savings, insurance, and markets, these programs enhance the productivity and resilience of farmers, which in turn supports poverty alleviation efforts. Empirical evidence suggests that programs like RUFIN help reduce vulnerability, build capacity, and foster long-term economic sustainability for rural communities.

Recommendations

Therefore, it is recommended that the concerned authorities (FGN) should develop and introduce relevant measures to accommodate more communities into intervention like the RUFIN programme. However, there is a need for concerted efforts by institutions that support RUFIN to improve access to agricultural loans, foster insurance schemes and inputs as well as outputs markets linkages in a sustainable manner and to achieve noticeable outcomes to attract more farmers.

References

Akpan, U. (2021). "Financial literacy and poverty reduction among rural farmers in Nigeria: Evidence from RUFIN." *Journal of Rural Studies*, 40(5), 34-49.

- Akinmoladun, A., et al. (2022). "Rural Financial Services and Agricultural Productivity: An Analysis of RUFIN's Effectiveness." *African Journal of Agricultural Economics*, 48(2), 102-115
- Chow, S. C., Shao, J., Wang, H., and Lokhnygina, Y. (2017). *Sample Size Calculations in Clinical Research*. Chapman and Hall/CRC.
- Davis, K., Nkonya, E., Kato, D. A., Mekonnen, M., Odendo, R. M., and Nkuba, J. (2010). Impact of Farmer Field Schools on Agricultural Productivity and Poverty in Uganda. IFPRI Discussion Paper 00992 June 2010
- Elliot, R., et al. (2022). "Savings, Insurance, and Risk Mitigation in Rural Farming Communities: A Study of RUFIN's Impact." *Journal of Rural Development*, 51(1), 88-102.
- International Fund for Agricultural Development (IFAD) (2013). Enabling poor rural people to overcome poverty in Nigeria.
- McElfish, P. A., Long, C. R., Selig, J. P., Rowland B, Purvis R. S, James L, (2018). Health Research Participation, Opportunity, and Willingness among minority and rural communities of Arkansas. *Clin Transl Sci*, 11(5), 487–97.
- Ochago, R; Mangheni, M.; Miiro and R (2017). Which Socio-economic Factors Matter in Farmer Group Participation? Evidence from Coffee Pest management Groups in Mt Elgon Region, UGANDA. *International Journal Agricultural Extension*, 05 (01), 2017. 23-38
- Oyekale, T.O. (2011) Impact of Poverty Reduction Programs on Multidimensional Poverty in Rural Nigeria. *Journal of Sustainable Development in Africa*. 13, No.6, ISSN: 1520-5509 Clarion University of Pennsylvania, Clarion, Pennsylvania
- Ravallion, M., et al. (2021). "The Role of Financial Inclusion in Poverty Reduction: Evidence from Rural Financial Programs." *World Development*, 145(4), 102-114.
- Tadele, M., and Muluaalem, K. (2023). "Financial Inclusion and Rural Poverty: The Impact of Financial Services on Farmers' Savings Behavior." *Journal of Financial Services Marketing*, 58(2), 70-85.
- Viechtbauer, W., Smits, L., Kotz, D., Budé, L., Spigt, M., Serroyen, J., & Crutzen, R. (2015). A simple formula for the calculation of sample size in pilot studies. *Journal of Clinical Epidemiology*, 68(11), 1375-1379.
- Zeller, M., et al. (2022). "Improving Financial Literacy and Building Resilience in Rural Communities: The Case of RUFIN." *Agricultural Economics Review*, 41(2), 105-118.