FFECT OF RURAL FINANCE INSTITUTION (RUFIN) SERVICES ON RURAL HOUSEHOLD POVERTY REDUCTION IN ANAMBRA STATE

Okafor Ifeoma Pethronila PhD, Prof. Onugu Uchenna Charles and Anunobi Chizoba Pamela

[1]Department of Business Administration and Management, Federal Polytechnic Oko, Anambra State, Nigeria
[2]Department of Cooperative & Economics Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
[3]Department of Agricultural Economics and Extension Michael Okpara University of Agriculture Umudike, Umuahia
[1]okaforifeoma95@yahoo.com,
[2]Challibee4u@yahoo.com & [3]Chizzie@gmail.com

Abstract

The study evaluated Effects of Rural Finance Institution services (RUFIN) in reducing rural household poverty. Multistage sampling technique was adopted to select 347 respondents (members of agricultural cooperative societies that are rural households' heads). Primary data was sourced through the use of structured questionnaire. Data collected were analyzed with both descriptive and inferential statistics with the help of SPSS version 20. The descriptive statistics used include frequency tables, simple percentage, weighted mean and Likert scale measure, while the inferential statistics used include Correlation, T test statistics model and ANOVA were used to test the hypotheses formulated. The result revealed, that most of the Rural Finance Institution (RUFIN) services (educational; technical support services (health) and credit were accessible to rural households. The study also revealed that Rural Finance Institution (RUFIN) educational services have greatly impacted (grand mean(x) = 3.273) positively on the rural household literacy level. Similarly, the result of hypothesis one also affirmed the significant influence of educational services on the improved rural household literacy level. Evidence from the study also revealed that technical support of Rural Finance Institution (RUFIN) services have effectively enhanced the rural household health conditions (grand mean(x) = 3.418). This evidence was further strengthened with result of hypothesis two tested which affirmed the linear (positive) relationship between the Rural Finance Institution (RUFIN) technical support services and improved health conditions of rural households. Evidence from the field survey revealed that the rural household's standard of living was highly okay after they have accessed the credit services of RUFIN. Since the RUFIN services were greatly accessible to many rural households, therefore the following recommendations are made; RUFIN should improve on monitoring and supervision of credit utilization among the rural households who are the beneficiaries of the services, this will enhance effective utilisation and by extension it will generally improve their standard of living.

Key words: *Rural Finance, Poverty, Household poverty and Rural finance institutions*

Introduction

Awotide, Aihonsu and Adeokoye (2011) affirmed that in most developing countries (Nigeria inclusive), agriculture dominates their economy. It has been established that about 70 percent of Nigerian population are engaged in agriculture, while 90 percent of Nigeria's total food production comes from small farms, and 60 percent of the country's population earn their living from small farms (Oluwatayo, 2008).

The nature of agricultural production imposes significant discontinuities between the times the resources are committed in production at planting and in the generation of resources after harvest. Farmers who do not have sufficient resources to invest in such commitment (productive resources) will depend more on people in other sectors for the availability of credit. Facilitation of access to agricultural credit for rural farmers has, therefore, played a major role in the policy instrument for reducing rural poverty. As such, International Fund for Agricultural Development (IFAD) recognised this challenge, as well as the vast potential to improve the livelihoods of rural households by increasing their access to a wide range of financial services and sound institution through IFAD subsidiary programme called Rural Finance Institutions (RUFIN). RUFIN is operating in 12 out of the 36 states of the federation and Anambra State is one of the recipients. RUFINs objective is to develop and strengthen microfinance institutions (MFIs) and establish linkage between them and formal finance institutions, in order to create a viable and sustainable rural finance system. RUFIN's target group consists of women, youth, physically challenged and farmers.

According to Macheka (2013), Rural Finance Institutions (RUFIN) comprises credit, savings, and insurance (or insurance substitutes) in rural areas, whether provided through formal or informal mechanisms. RUFIN tends to be associated with enterprises development, which also includes savings and insurance mechanisms used by the poor to protect and stabilize their families and livelihoods (Malaba, 2012).

Anambra State rural areas are characterized by higher transaction costs for both financial institutions and their clients (World Bank, 2010). These rural economies have higher systematic risks, more volatile cash flows, and economic agents with lower risk bearing ability and higher vulnerability to economic and natural shocks due to higher incidence and depth of poverty, and the situation becomes even more complicated in Anambra State because of erosion, flood and consequences of climatic change.

To overcome these crucial challenges, increasing efforts are being made to involve in the provision of financial services by various rural organisations, such as cooperative societies. Cooperatives permit economies of scale for their members to have access to financial services. They (cooperatives) are particularly well suited to providing financial services to rural people as they operate at grassroots level among

people who know each other well, which is a basic condition for trust. Often, a cooperative is the only financial institution in a rural area and is, therefore, an obvious structure for the operation of new financial services to complement the efforts of RUFIN in Anambra state.

The IFAD Rural Finance Institution (RUFIN) policy provides guidance to IFAD-supported rural financial services programme and projects, and their components, given its focus on women, young people, indigenous people and very poor households. IFAD concentrates on rural microfinance with "micro" referring to the relative size of the financial transactions, including savings, remittances, leasing and risk management services, small-scale farmers and livestock producers. (IFAD, 2014). Similarly, the provision of financial services to poor rural households face many challenges, including weak infrastructure, the limited capacity of financial service providers, and low level of clients education.

In a changing global economy and in the context of the widening financial crisis, volatile food and agricultural commodity prices and the perils of climate change, developing inclusive rural financial systems and fostering innovations to increase the access of poor and marginalized women and men to a wide range of financial services is central to IFAD's mandate (IFAD, 2014). Giving the numerous challenges inherent in remote marginal areas in conflict and post conflict situations, and areas recovering from natural disasters (flood and erosion) in Anambra State, the development of innovative products and delivering mechanisms is critical to meeting the needs of RUFIN target group.

Statement of the Problem

The poverty line represents the value of basic needs (food and education, low income and savings, health care, shelter) considered essential for meeting the minimum socially acceptable standard of living within a given society (UNDP, 2006). The National Poverty Rate is the percentage of a population of a country living below the poverty line (Uche, 2000). According to World Bank (2015), the number of people living below the poverty line in Nigeria is estimated to be 97 million as at 2014.

According to Soludo (2005) "robust economic growth cannot be achieved without putting in place well focused programmes to reduce poverty through empowering the people by increasing their access to factors of production, especially credit. The latent capacity of the poor for entrepreneurship would be significantly enhanced through the provision of rural finance services to enable them engage in economic activities and be more self-reliant; increase employment opportunities, enhance household income and create wealth.

In order to enhance the flow of financial services to Nigerian rural areas, the Federal Government both present and the past, initiated a series of publicly-financed micro/rural credit programmes and policies targeted at the poor. Notable among such programmes were the Rural Banking Programme, Sectorial allocation of Credits, a concessionary interest rate, and the Agricultural Credit Guarantee Scheme (ACGS).

Other institutional arrangements were the establishment of the Bank of Agricultural (BOA), Bank of Industry (BOI), the National Directorate of Employment (NDE), the Nigerian Agricultural Insurance Corporation (NAIC), the Peoples Bank of Nigeria (PBN), the Community Banks (CBs), and the Family Economic Advancement Programme (FEAP). In 2000, Government merged the NACB with the PBN and FEAP to form the Nigerian Agricultural Co-operative and Rural Development Bank Limited (NACRDB) to enhance the provision of finance to the agricultural sector. It also created the National Poverty Eradication Programme (NAPEP); National Economic Empowerment Development Strategy (NEEDS) with the mandate of providing financial services to reduce poverty. But all these have not really yielded much result in the reduction of rural household poverty in Nigeria (Ayeyomi, 2003; Awotide and Adekoya, 2013; Zakaree, 2014). Anambra State rates low in household poverty level, but when comparing the urban to rural household poverty level the urban poverty level is okay and the rural household is fairly okay compared to some states in the north (Annual Abstract of Statistics, 2012).

As a result of the challenge faced by rural households, many researchers (Kareem, Arigbabu, Akintayo and Badmus, 2012; Adetiloye, 2012; Awotide and Adekoya, 2013; Egbetunde, 2012; Zakaree, 2014) also have conducted a lot of studies for policy implications on how to reduce rural household poverty, but majority of these studies focused on Agricultural Credit Guarantee Scheme fund and Bank Credits, cooperative credit and there is no documented evidence so far of any study conducted on IFAD's Rural Finance in Anambra State due to perhaps the fact that RUFIN is still a new intervention scheme when compared with programmes mentioned earlier. Specifically, and to the knowledge of the researcher, studies have not been really conducted to assess the contributions of RUFIN in providing financial services; technical services; educational services to rural households' literacy level and their standard of living in Anambra State. The communities in the State are known for their agricultural potentials, but rates low in the United Nations Organisation (UNO) Multidimensional Poverty Index. Multidimensional Poverty Index (MPI) is the function of quality education; health and household standard of living (UNDP, 2006). Therefore, the drive to conduct this study is motivated by the need to examine the impact of RUFIN programme on poverty reduction (MPI) in the State especially in aspects of rural literacy; health condition and their standard of living. The study hence explored the contributions of RUFIN in these regards and hopes to strengthen its services towards the promotion of rural household socio-economic well being through its financial services and projects delivering for the poverty reduction of these rural farmers' households who are cooperative members in Anambra state.

Objective of the Study

The broad objective of this study is to evaluate the contributions of RUFIN services to rural household poverty reduction in Anambra state.

The specific objectives are to:

i. ascertain the RUFIN services (educational and technical support) rendered to the rural households;

ii. determine the effect of RUFIN educational services rendered on rural household literacy level;
iii. determine the effect of RUFIN technical support services on the rural household health conditions.
iv. compare the rural households standard of living before and after accessing RUFIN services (credit services).

Hypotheses of the Study

H_{01}: RUFIN educational services rendered have no significant relationship to improved rural household literacy level.

H_{02}: The RUFIN technical support services rendered have no significant relationship with the rural household health conditions

H_{03} Household heads access to credit services under the RUFIN programme have not significantly impacted on their standard of living

Review of Related Literature

Concept of Rural Finance

The term Rural Finance refers to the financial transactions related to both agricultural and non-agricultural activities that take place among households and institutions in rural areas. In some cases, rural finance has been wrongly equated with agricultural credit, based on the assumption that credit is the binding constraint to achieving project objectives related to agriculture. A more effective and comprehensive view of rural finance encompasses the full range of financial services that farmers and rural households require, not just credit.

According to Zakaree, (2014), rural financial services is about providing financial services such as secure savings, credit, financial transactions, money transfer services for remittance and insurance in rural areas. The ability of rural households to make long term investments to ensure time-patterned income flow is shaped by an economy's financial services. Despite the rapid development of financial services, majority of smallholders around the world, especially third world countries, remain without access to financial services that they need to improve their livelihoods. Despite the significant demand for financial services in rural areas, institutions offering financial services such as banks, credit unions, cooperatives, microfinance institutions (MFIs) or insurance companies are typically reluctant to serve in rural areas due to precarious nature of agricultural production (Egbetunde, 2012). As a result, the majority of the developing world's resource- poor households are bereft of financial access to the formal financial system. With this lack of access, households, farmers, as well as small rural entrepreneurs rely on costly source of accessing financial services especially through informal sources. Most loans from informal sources, especially from money lenders are too expensive to be profitable, and debt can lead to permanent dependency of borrowers on money lenders and thereby entangling them in the vicious cycle of poverty (Egbetunde, 2012).

Thus, the overall financial sector development can be viewed as an important catalyst for economic growth and development for three reasons. These reasons according to (IADB, 2001) are, financial sector development ensures accelerated economic growth thorough efficient intermediation and risk management. Countries with developed financial markets with greater financial depth have high economic growth than the countries with less developed financial markets. Second, lack of adequate financial services hinder the formation of new enterprises and the modernization of existing ones. Third, improved financial intermediation could directly reduce vulnerability and reduce poverty. Microfinance, as a tool of rural financial services, has clear impact on poverty by positively affecting the household economic development, ensuring Income Generating Activities (IGA), sources of income, reducing vulnerability, housing tenure and enterprise growth.

Experience from Bangladesh shows that, formal financial institutions like government and private commercial banks, State-owned agricultural or rural development bank (for example, BRDP in Bangladesh), savings and loan cooperatives, microfinance banks, leasing, housing and consumer finance companies can offer a wide range of financial products. In between stand financial Non-government Organizations (NGOs), self-help groups, small cooperatives and credit unions. Formal services such as microfinance cannot replace loans from relatives, friends, and moneylenders but they do complement them and enable the liquidity constrained rural population to access a wider range of financial services. Rural finance emerged as a noble substitute for informal credit and is considered to be a powerful instrument for poverty reduction among people who are economically active but financially constrained (Murdoch and Haley, 2002). According to Eadgerwood, "Formal financial institutions are defined as those that are subject not only to general laws and regulations but also to specific banking regulations and supervision. Semi-formal institutions are those that are formal in the sense being registered entities subject to all relevant general laws, including commercial laws, but informal insofar as they are, with few exceptions, not under bank regulation and supervision. Informal providers (generally not referred to as institutions) are those to which neither special bank law or nor general commercial law applies, and whose operations are also informal so that disputes arising from contract with them often cannot be settled by recourse to the legal system'"(Eadgerwood. 1999).

Rural finance has become a buzzword among development practitioners. The term rural finance' means providing very poor families with very small loans (microcredit) to help them engage in productive activities or develop their tiny businesses (The Microfinance Gateway, 2008).

According to the Consultative Group to Assist the Poor (CGAP), rural finance is the supply of loans, savings and other basic financial services to the poor, including working capital loans, consumer credit, pensions, insurance and money transfer services. Similarly, Hossain (2002) defines Rural Finance as, the practice of offering small, collateral-free loans to members of cooperatives who otherwise would not

have access to the capital necessary to begin small business or other income-generating activities. The term 'rural finance' is often used in a much narrower sense, referring principally to microcredit delivered through NGOs for tiny informal business of micro-entrepreneurs (Christen et al. 2003). The term rural finance institution now refers to a wide range of organizations dedicated to providing these services like NGOs, credit unions, cooperatives, private commercial banks and parts of the state-owned banks, and non-bank financial institutions.

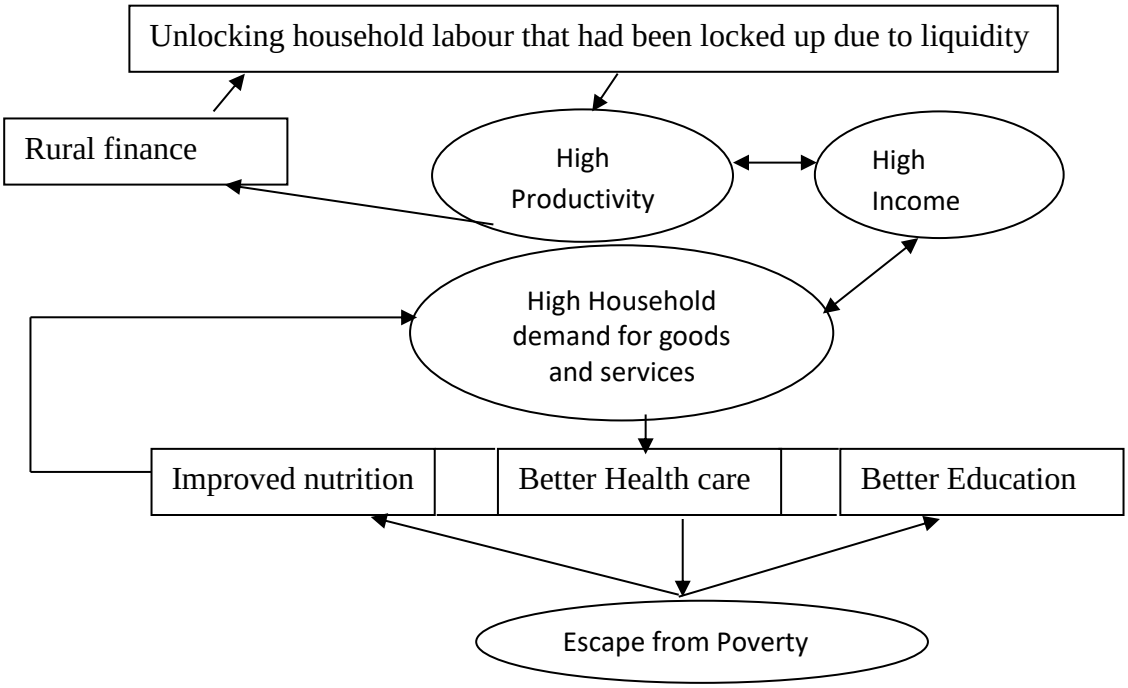

Figure 1: Impact of Rural Finance on Rural household poverty

Source: (Kiiru, 2012)

Materials and Methods

Anambra State is located between latitude $6^0$4S and $5^0$44N with annual average rainfall of 1800mm and 2000mm that distributed through March to November. The State is located in South East of Nigeria with Igbo ethnic majority. Anambra State occupies an average 4.416 square kilometers with 70percent arable land that are under cultivated, and there are 338721 farm families in Anambra State with an average size of eight persons per farm family or household (ASADEP cited in Ugbajah and Ugumba, 2013). The State is situated on a fairly flat land with tropical vegetation. Agriculture is predominant occupation in the rural areas of the state engaging more than 70 percent of the rural population.

The study population comprises rural households of the entire registered and existing Farmers' Cooperative Societies (FMCS) that are clients and beneficiaries of IFADs Rural Finance Institutions (RUFIN) facilities in Anambra State. IFAD has 3 RUFIN

sites in Anambra State which covers only 3 local government areas of the State. These include Aghamelum; Awka North and Orumba North LGAs. According to the information gotten from the Anambra ADPs office and Divisional Cooperative Officers in these LGAs, there are 680 groups (cooperatives) who are clients and have benefited from RUFINs activities in the State. These 680 groups (cooperatives) have membership strength of 14,612 farmers who are household heads.

Sample Size Determination and Sampling Procedure Techniques

The researcher adopted judgemental sampling technique and selected 30% *(14,612)* of the membership size of the 680 groups (cooperatives) for the study. Therefore, the 30% of 14,612 is 0.3 multiply by 14,612 which is equal to *4,383.6* members.

Taro Yamane was used to determine the concise respondents sample size.

4 = 366.55 approximately 367

Thus, 367 copies of questionnaire were randomly distributed among 367 respondents (household heads) that cut across 680 groups (cooperatives) in 3 (Anyamelum; Awka North and Orumba North LGA) LGAs of the State. The respondents filled the questionnaire, the enumerators retrieved it from the respondents and submitted to the office of DCOs, while the DCOs collected these copies of questionnaire on behalf of the researcher. They were all correctly filled.

The researcher sourced for data from primary sources. Primary source consists of those first-hand information that are gotten directly by the researcher and this was sourced basically from the use of a structured questionnaire which was used extensively for this study.

The data gotten from the field were analysed with both descriptive and inferential statistics. The descriptive statistics was used to analyse the specific objectives (1 – 3). The descriptive tools that were used include frequency table, simple percentage, mean and five (5) point likert scale analysis with conventional mean of 3.0 that is any variable > 3.0 is negative while any ≤ 3.0 will be positive. The inferential statistics were used to test the formulated hypotheses. The T-test was used to test Ho_1, Pearson Correlation was used to test hypothesis two (Ho_2), while ANOVA was used to test hypothesis three(Ho_3).

Result And Discussion

Table 1: Distribution of Responses Based on RUFIN Services that are Accessible to Farmers in Anambra State

S/N	RUFIN Services Indices	Mean	Decision
A	Educational Service Rendered		
i	Agric Extension service delivery	4.09	Accessible
ii	Adult education	3.88	Accessible
iii	Financial Empowerment training	3.60	Accessible
iv	Skills acquisition programmes	3.32	Accessible
v	Training on how to establish small scale business	3.44	Accessible
vi	Training on how to manage micro credit	3.19	Accessible
viii	Facilitates community Group formation	4.45	Accessible
ix	leadership development training	3.11	Accessible
B	Technical Support Services Rendered:		
x	Health sensitisation on household healthy living	3.69	Accessible
xi	Health care awareness campaign to rural households(farmers) on the family planning	3.08	Accessible
xii	Health care awareness campaign to rural households(farmers) malnutrition,	3.16	Accessible
xiii	Health care awareness campaign to rural households(farmers) HIV	3.41	Accessible
xiv	Health care awareness campaign to rural households(farmers) mortality	2.84	Not Accessible
xv	Health care awareness campaign to rural households(farmers) disease control	2.58	Not Accessible
xvi	Supply of farm inputs (fertilizer, pesticides; seedling etc)to farmers	3.87	Accessible
xvii	Facilitation of access to improved agricultural technologies	3.62	Accessible
xviii	Support on the use of farm machinery and equipments	3.24	Accessible
C	Credit Services Delivery:		
xix	Facilitates savings mobilization among rural households	4.37	Accessible
xx	Provision of Loan and credit facilities to households	4.58	Accessible
xxi	Pre loan training on credit utilisation	3.91	Accessible
xxii	Monitoring and supervision of credit utilization among households	2.53	Not Accessible
	Grand Mean (x)	**3.580**	**Accessible**

Source: Field survey Dec; 2021

The result in Table 1 was deduced from 5-point likert scale with threshold of 3.0. That is, the opinion of the respondents on the RUFIN services that are above the threshold of 3.0 was considered to be accessible to the rural household, while those responses that are below 3.0 were considered not accessible. As such, the result revealed that almost all the RUFIN services were accessible to the rural households except Health care awareness campaign to rural households (farmers) mortality (2.84); Health care awareness campaign to rural households (farmers) disease control (2.58); and Monitoring and supervision of credit utilization among households (2.53). Meanwhile, the grand mean (x) score (3.580) shows that the majority of the RUFIN services were accessible. Some of the RUFIN services that are accessible include

Agric Extension service delivery (4.09); Adult education (3.88); Financial Empowerment training (3.60); Facilitates community Group formation (4.45); Health sensitisation on household healthy living (3.69); Supply of farm inputs (fertilizer, pesticides; seedling etc) to farmers (3.87); Facilitation of access to improved agricultural technologies (3.62) Facilitates savings mobilization among rural households (4.37); as well as Provision of Loan and credit facilities to households (4.58).

In summary, the evidence from Table 1 revealed that RUFIN services are greatly accessible to many rural households but (RUFIN) still needs to do more on the aspect of monitoring and supervision of credit utilization among households and health care service delivery.
Result from Imai, Arun and Annim (2010) also affirms that services from MFIs, have significant positive effect of MFI productive loans on multidimensional welfare indicator.

Table 2: Distribution of Responses Based On the Influence of RUFIN Educational Services, on Rural Household Literacy Level.

S/NO	Literacy level Indices	Mean	Decision
I	All my boy children go to school	3.38	Great Extent
Ii	All my girl children go to school	3.04	Great Extent
Iii	All my children go to school	3.64	Great Extent
Iv	All my boy children finished primary school	3.59	Great Extent
V	All my girl children finished primary school	3.33	Great Extent
Vi	All my children finished primary school	3.49	Great Extent
Vii	All my boy children finished secondary school	3.81	Great Extent
Viii	All my girl children finished secondary school	3.27	Great Extent
Ix	All my children finished secondary school	3.63	Great Extent
X	I paid my boy children school fees regularly	3.08	Great Extent
Xi	I paid my girl children school fees regularly	3.17	Great Extent
Xii	I paid my all children school fees regularly	3.14	Great Extent
Xiii	My children school fees were not regularly paid	2.81	Low Extent
	Grand Mean (x)	**3.273**	**Great Extent**

Source: Field survey Dec; 2021

The result in Table 2 shows respondents responses based on the level of their household literacy which was deduced from scale analysis of five points with conventional mean of 3.0.

Result from the Table revealed that RUFIN educational services have greatly impacted (grand mean (x) = 3.273) on the rural household literacy. Based on this, evidence shows that the majority of the respondents agreed with most indicators

(literacy level indices) except that most of them (rural household heads) don't pay the school fees of their children regularly as at when due.

With help of RUFIN educational services the rural households are able to improve the level of their education.

Result from their study Imai, Arun and Annim (2010) showed that there are significant positive effect of MFI productive loans on multidimensional welfare indicator.

Test of Hypothesis One (Ho_1)

H_{01}: RUFIN educational services rendered have no significant influence to improved rural household literacy level.

H_{A1}: RUFIN educational services rendered have significant influence to improved rural household literacy level.

In order to affirm or reject the hypothesis, data from Table 1and 2 were subjected to one sample T test statistics and the result was presented in the Table 3.

Table 3: T test Statistics Result

	N	Mean	Std. Deviation	Std. Error Mean
services	13	2.236923E0	1.8752661	.5201052
literacy	13	3.336923E0	.2877900	.0798186

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	T	Df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Services	4.301	12	.001	2.2369231	1.103711	3.370135
Literacy	41.806	12	.000	3.3369231	3.163013	3.510833

Interpretation

From the T test model statistics result, it can be deduced that RUFIN educational services has positive influence on the household literacy level. Therefore, the P- value (0.000) is less than the conventional 0.05, thus, the model is significant at 5% level of significance. As such, there is existence of enough evidence to reject the null hypothesis and conclude that RUFIN educational services rendered has significant influence to improved rural household literacy level.

Meanwhile, in order to strengthen and ascertain the T test statistics result the data was further subjected to Probability Plot Graph with Minitab statistical application. Therefore, evidence from the graph revealed that the distribution fits the data as a number of observations were made.

Decision:

Based on this evidence from the probability graph, the probability value is less than 0.05 at 5% level. This implied that the value is significant and further strengthen the T test statistics result in table 3. Therefore, the researcher affirmed that RUFIN educational services rendered have significant influence to improved rural household literacy level.

Table 4: Distribution of Responses on the Effects of Accessed RUFIN Technical Support Services on Household Health Condition

S/No	Household Health Indicator	Mean ($\underline{X}$)	Decision
i.	None of my household is suffering from lack of balance diet related diseases e.g. kwashiorkor (malnutrition)	3.62	Effective
ii.	No HIV related diseases in my household	3.44	Effective
iii.	Any time my wife get pregnant i take her to antenatal	4.07	Effective
iv.	Facilitates malaria and other diseases control and treatment	3.84	Effective
v.	Me and my household agreed on the number of children to born (rural households family planning)	2.68	Not Effective
vi.	We consume healthy foods and fruits regularly	2.46	Not effective
Vii	The death rate in my house has reduced due to proper medical care	3.17	Effective
viii.	I now take my household (wife and children) to hospital when they are sick	3.29	Effective
ix.	I can buy medical drugs for my family any time they get sick	3.58	Effective
	Mean ($\underline{X}$)	**3.4184**	**Effective**

Source, Field Survey Dec., 2021

Table 4 results revealed that technical support services of RUFIN have effectively enhanced the rural households health conditions (Grand Mean (x) 3.4184). This was reflected in the aspect that none of the respondents' household is suffering from lack of balance diet related disease e.g. kwashiorkor (malnutrition) (3.62); No HIV related diseases in my household (3.44); proper antenatal care (4.07); facilitates malaria and other diseases control and treatment (3.84); also the respondents are able to purchase medical drugs for their family any time they got sick (3.58).

As such, there are enough evidence to believe that there is a relationship between RUFIN and technical support services and household health conditions.

Result from their study Imai, Arun and Annim (2012) showed that there is significant positive effect of MFI productive loans on multidimensional welfare indicator.

Test of Hypothesis Two (H_{02})

H_{02}: The RUFIN technical support services, rendered have no significant relationship with the rural household health conditions in Anambra State.

H_{A2}: The RUFIN technical support services rendered have significant relationship with the rural household health conditions in Anambra State..

The above hypothesis statement was designed to examine the relationship between RUFIN technical support services rendered and household health condition. In order to examine that, Bivariate correlation model ***(Pearson Correlation)*** was used to determine the nature of relationship that does exist between the two variables (RUFIN technical support and household health condition).

Assumption

Pearson's correlation coefficient assumes that each pair of variables is Bivariate normal. Use symmetric quantitative variables for Pearson's coefficient and quantitative variables or variables with ordered categories for Spearman's rho and Kendall's tau-b.

Table 5: Correlations Test Result for technical and Household Health Conditions

		Technical support	**Health indicator**
Technical support	Pearson Correlation	1	.491
	Sig. (2-tailed)		.008
	Sum of Squares and Cross-products Convariance	1.388	.852
		.174	.107
	N	9	9
Health indicator	Pearson Correlation	.491	1
	Sig. (2-tailed)	.008	
	Sum of Squares and Cross-products Convariance	.852	2.169
		.107	.271
	N	9	9

The Bivariate Correlations procedure computes Pearson's correlation coefficient, Spearman's rho, and Kenedall's tau-b with their significance levels. Correlations measures how variables or rank orders are related. Pearson's correlation coefficient is a measure of linear association. Two variables can be perfectly related, Pearson's correlation coefficient is an appropriate statistic for measuring variables association.

The Pearson's correlation coefficient (0.008) is significant at the 0.05 level. These variables are positively correlated (0.91), and the correlation is significant at the 5% level of significance. Thus, there exist enough evidence to reject the null RUFIN technical services alternate; therefore, the researcher concludes that, the RUFIUN technical support service rendered has significant relationship with the rural household conditions.

In same vein, in order to affair or jmake deduction based on the result of Pearson's Pearson's corrective coefficient the date was further subjected to another test (Probability Graph Plot).

Based on the evidence from the graphs the dots on both graphs form a straight line which indicates their linear relationship. A normal distribution with a mean of 3.2773 and 3.35 with a standard deviation of 0.4166 and 0.5207 appears to be significant at 5% level of significance. Since their p-value is less than 0.05. Thus, the researchers agreed with the result of Pearson's Correlation coefficient and concludes that the RUFIN technical support services rendered has significant relationship with the rural household health conditions.

Table 6: Distribution of Respondents Rate of Household Standard Of Living BEFORE Participating and Benefiting From the RUFIN Programme

	Household standard of living indices (Before)	**Mean**	**Decision**
i	Increase in the amount of money i make monthly (income)	2.74	Not okay
ii	Increase in the amount of money i keep monthly (savings)	2.61	Not okay
iii	Ability to pay and use power (electricity)	3.18	Okay
iv	Ability to buy fuel and power my house (generator)	3.05	Okay
v	household access to clean sanitary toilet	3.27	Okay
vi	household access to clean drinkable water	3.34	Okay
vii	Households access to Basic Life Enhancing Gadgets/ Assets e.g radio; telephone; TV, Etc	3.46	Okay
viii	Clean Household Floor	4.27	Okay
ix	My household use firewood sources of energy for household cooking	3.73	Okay
x	My household use kerosene stove sources of energy for household cooking	2.66	Not okay
xi	My household use gas sources of energy for household cooking	2.44	Not okay
xii	My household use charcoal sources of energy for household cooking	2.81	Not okay
	Mean (x)	**3.13**	**Okay**

Source: Field Survey Dec; 2021

Table 6 shows the result of household responses on the level of their standard of living before they participated and benefited from RUFIN programme. Evidence from the result table revealed that the rural household's standard of living were okay to an extent (grand mean (x) = 3.13) before they participated in the RUFIN programmes. Meanwhile, result shows that they (rural households) were not okay in some aspect of their livelihood. These aspects include; monthly income (2.74); amount of money saved (2.61) as well as sources of energy for cooking.

Based on the field survey evidence, researcher agree that most of the respondents basic needs to sustain their standard of living were not fully met and satisfied before their participation in RUFIN programme.

Table 7: Distribution of Respondents Rate of Household Standard Of Living AFTER Participating and Benefiting From the RUFIN Programme

	Household standard of living indices (After)	**Mean**	**Decision**
i	Increase in the amount of money i make monthly (income)	3.87	Okay
ii	Increase in the amount of money i keep monthly (savings)	4.04	Okay
iii	Ability to pay and use power (electricity)	3.88	Okay
iv	Ability to buy fuel and power my house (generator)	3.64	Okay
v	household access to clean sanitary toilet	3.94	Okay
vi	household access to clean drinkable water	3.58	Okay
vii	Households access to Basic Life Enhancing Gadgets/ Assets e.g radio; telephone; TV, Etc	4.18	Okay
viii	Clean Household Floor	3.99	Okay
ix	My household use firewood sources of energy for household cooking	2.53	Okay
x	My household use kerosene stove sources of energy for household cooking	3.57	Okay
xi	My household use gas sources of energy for household cooking	3.75	Okay
xii	My household use charcoal sources of energy for household cooking	2.66	Okay
	Mean (x)	**3.6358**	**Okay**

Source: Field survey Dec; 2021

Table 7 showed the result of household responses on the level of their standard of living after they have participated and benefited from RUFIN programme. Evidence from the field survey revealed that the rural households' standard of living was okay (grand mean (x) = 3.6358) when compared to before their participation in the RUFIN programmes. Meanwhile, result shows that they (rural households) were okay in almost all aspect of their livelihood. These aspects include; monthly income (3.87); amount of money saved (4.04), as well as sources of energy for cooking (3.57).

Based on the field survey evidence before (Table 6) and after (Table 7) result were compared, the researcher agrees that most of the respondents (rural households) basic needs to enhance their standard of living were fully satisfied after their participation in RUFIN programme.

When comparing the before (Table 6) and after effect (Table 7) of RUFIN credit services on their standard of living, according to Alam (2008) result from his study on productivity growth of households with Graheem bank showed that there was an increase in income (standard of living) of rural households.

Test of Hypothesis Four (Ho_3)

H_{03}: Household heads access to credit services under the RUFIN programme have not significantly impacted on their standard of living

H_{A3}: Household heads access to credit services under the RUFIN programme have significantly impacted on their standard of living

The hypothesis was subjected to Analysis of Variance test and the result was presented as follows.

Table 8:ANOVA

Livingstandard

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.573	5	.115	.285	.905
Within Groups	2.415	6	.402		
Total	2.987	11			

Interpreting the Results

In the ANOVA table , the p-value (0.004) for Carpet indicates that there is sufficient evidence that not all the means are equal when alpha is set at 0.05. To explore the differences among the means, examine the multiple comparison results.

Multiple comparison results are presented as a grouping table and a set of confidence intervals for the difference between pairs of means. Use the grouping information table to view, in a summarized format, groups of factor level means that are not significantly different. Levels that share a letter are not significantly different. Conversely, if they do not share a letter, the means are significantly different. Use the confidence intervals to determine a likely range for the difference between two means.

Decision

Based on the evidence presented above the researcher rejected the null hypothesis and accepted the alternate. That is, Household heads' access to credit services under the RUFIN programme have significantly impacted on their standard of living.

Summary of Findings and Recommendations

That almost all the RUFIN services are accessible to the rural households except monitoring and supervision of credit utilization among households. The grand mean (x) of 3.580, showed that the majority of the RUFIN services are accessible to the rural households.

That, RUFIN educational services have greatly impacted (grand mean (x) = 3.273) positively on the rural household literacy. Based on this, evidence showed that the majority of the respondents agreed with most indicators (literacy level indices) except that most of them (rural household heads) didn't pay the school fees of their children regularly as at when due.

That, household level of standard of living is highly okay after they have participated and benefited from RUFIN programme. Evidence from the field survey revealed that the rural households standard of living was highly okay (grand mean (x) = 3.6358) when compared to before their participation in the RUFIN programmes. Based on the field survey evidence, researcher agreed that most of the respondents basic needs to sustain their standard of living were not fully met before their participation in RUFIN programme.

Recommendations

Poverty rate is one of the indicators for measuring how a nation is growing or developing and poverty is a major problem facing Africa with reference to Nigeria. Therefore, RUFIN is a programme designed to reduce poverty among rural households. As such in order to strengthen the services of the RUFIN so as to reduce rural households' poverty the following recommendations are made necessary;

Since RUFIN services are greatly accessible to many rural households, there is need to do more on the aspect of monitoring and supervision of credit utilization among households and health care service delivery. This will facilitate checks and balances which will make the rural households utilize the RUFIN services for productive purposes.

As a matter of urgency, RUFIN should collaborate and partner with other relevant institutions and agencies. This will enhance their service deliveries that are capable of reducing poverty among rural households.

In the same vein, IFAD should invest heavily in RUFIN in order to reduce poverty among the rural households. This will improve the quality of RUFIN services, as well as making the poverty reduction services more accessible to more rural households.
Finally, in order to deliver poverty reduction services effectively to rural households, RUFIN urgently requires more extension staff. This will facilitate the accessibility of poverty reduction services to rural households.

Conclusion

Poverty in developing countries, particularly in rural areas amongst households has scaled in magnitude and indeed become a developmental challenge. In Anambra State, Nigeria, various programmes have been executed in the past in addressing the situation. The RUFIN intervention though at its pilot stage has shown promise based on the findings of the study. The positive response from 367 agricultural cooperative members who are household heads, on their accessing poverty reduction services and its effects on their household health (basic nutrition and child mortality); household education (children's years of schooling and sustained attendance); and, living standards (economic assets, infrastructure); did prove the effects (efficacy) of the RUFIN programme as a poverty reduction programme in rural communities of Anambra State. However, serious efforts must be made towards addressing constraints to effectively deploying the programme in household poverty reduction. Identified challenges such as the inadequacy of funds; locational disadvantages of

RUFIN offices; low investments and assets of the household heads; and, the weak level of education of the household heads should be addressed.

Importantly, the key thrust of RUFIN which is using the financial (savings, microcredit) and non-financial (training, information, monitoring and supervision) services to upgrade to economic assets (savings, credit, investment, income) of the household heads, so as to enable them provide for quality health is commended. These advancements, as revealed in the study affirmed the ability of the household heads to reduce their poverty, through improvement in the health, educational and the living standard of their families.

References

Adetiloye V. (2012) "Challenges and Strategies for Effective Rural Finance Intermediation through Micro-Finance Banks" Report of CBN/AFRICAN Rural Agricultural Credit Association Workshop, 12th – 16th May; Abuja.

Atkinson J. E., (1998). Politics, markets, and equality in schools, in M. R. Darby (ed) Reducing Poverty in America: Views and Approaches, (pp. 121-153). Thousand Oaks, California: Sage.

Awotide, D. Ahionou and Adekoye C.E (2011). Policy and Contending issues in Nigerian National Development Strategy. John J. Classic Publishers Ltd, Enugu. Pp 161-166.

Awotide, D. O. & Adekoya A. H. (2013). Cooperative societies' effectiveness in credit delivery for agricultural enterprises in Ogun State, Southwest Nigeria. *Asian Journal of Business and Management Sciences, 2(3), 74-79.*

Ayeyomi, O. E. (2003) *An Assessment of Poverty Reduction Strategies in Nigeria (1983 – 2002),* An unpublished Dissertation submitted for award of Doctor of Philosophy of the St. Clement University.

Christen, T. U; Norton Littlefield, J., Moth, S. and Vernimi, T. (2003) *"Is Microfinance an Effective Strategy to Reach the Millennium Development Goals",* Research Paper of Consultative Group to Assist the Poor, Washington D.C.

Eadgerwood (2009) "Paradoxes of participation: Questioning participatory approaches to development", *Journal of International Development, Vol. 11, pp. 597-612.*

Eadgerwood, J. (1999) "Sustainable Banking for the Poor Project in South Asia", *World Bank Economic Review.*

Egbetunde, G. (2012) *"Role of Microfinance in Actualization MDGs"* in Paper Delivered at the Induction Ceremony of Institute of Chartered Economists of Nigeria, Port Harcourt, Rivers State Nigeria.

IFAD (20014) "Community-Based Agriculture and Rural Development Program" *Appraisal Report. Vol. 1.* Main Report. Africa division 1. Program Management Department.

Kareem, O. S., Arigbabu, A. Akintayo, W.G., Badmus, S. (2012). Urban livelihood: Urban agriculture implication in food security, a case study of Ibadan metropolis. *Journal of Applied Hytotechnology in Environmental Sanitation, Vol. 1, No 4: 155-161*

Macheka, J. (2013). *Participatory development: The Case of Zimbabwe, Harare*. University of Zimbabwe Publications.

Malaba, G., (2012) "Community-based and driven development: A Critical review", *The World Bank Research Observer*, Vol. 19(1), pp. 1-39.

Microfinance Gateway (2008). *Legal Notice on the Publication of the details of the Breakdown of National Population Commission*. The Federal Government Printer, Lagos.

Mudoch, B and Haley. (2002). *Methods for development work and research: A guide for practitioners*, New Delhi, Sage.

Oluwatayo, A. (2008). "Rural Development in Nigeria: A critical assessment of the role of agricultural programmes in rural development in Benue State, " *Nigerian journal of Rural Sociology* Vol. 4 (I) pp 70-77

Soludo, C. C. (2005) "Participatory learning for sustainable agriculture" *World Development Journal*. Vol. 23(8), pp. 1247-63

Uche, C. U. (2000) "Poverty Alleviation Programmes in Nigeria: Past, Present and Future", *Nigeria Journal of Banking and Finance*, UNEC Publication, Issue No. 3, pp 1-24.

United Nations Development Programme, (2006) "indicators of Poverty and Hunger" http/tiy uri.com/iswozs.

World Bank (2010) Fadama II Project Implementation Manual Volume I and II.

World Bank (2015) "Agriculture for Development", World Development Report. Washington: World Bank.

Zakaree, A, (2014) "*Re-Structuring of the Poverty Alleviation Activities of the Federal Government of Nigeria*". National Poverty Eradication Program, Abuja.