**EFFECTS OF FINANCIAL INCLUSION SERVICES ON INCOME SECURITY STATUS OF WOMEN RICE PROCESSORS UNDER IFAD/VCDP IN NIGER STATE, NIGERIA**

**Jibrin, S., Muhammad, H.U., Abdullahi, A., Ahmed, I. I., Shuaibu, U. and Ibrahim. M.**

**1** Department of Agricultural Extension and Rural Development,

Federal University of Technology, Minna, Niger State, Nigeria.

\*Corresponding author: safil4real@gmail.com, +234 703 064 8457

**ABSTRACT**

*The study examined the effects of financial inclusion services on income security status of women rice processors under IFAD/VCDP in Niger State, Nigeria.* *Multi-stage sampling technique was used to select 188 women rice processors of which structured questionnaire complemented with interview schedules was employed to collect primary data. Data collected was analyzed using descriptive and inferential statistics. The result of the analysis obtained shows that, the mean age of the respondents was 41 years; about 78% were married with an average household’s size of 10, however, more than half had one forms of formal education and the other. The average processing experience was 8 with about 96% engages on rice processing on full time bases while about 68% engages on trading as secondary occupation. The results of various financial inclusion services reveal that unified payment interface (*$\overbar{X}$*= 4.1), overdraft (*$\overbar{X}$*= 4.0), payment and remittance services* $(\overbar{X}$*= 3.5), entrepreneurial credit (*$\overbar{X}$*= 3.5), and internet banking facility (*$\overbar{X}$*= 3.1) were the prevalent financial services utilized by women rice processors.* *The results for factors influencing extent of women participation in financial inclusion services under IFAD/VCDP showed that Pseudo R2 of 0.3351 which shows* *a relatively good fit for the probit regression model while the chi-square results show that the likelihood ratio statistics was statistically significant at 1% level of significance, suggesting that the probit regression model has strong explanatory power of the variables included in the model. However, age, level of education, collateral required, occupation, membership of associations and distances to financial service were the significant factors influencing women participation in financial inclusion*.*The study recommended that micro-finance bank should be established in rural areas and all the required impetus to ensure smooth running of such institutions like electricity and accessible roads among others should be put in place to facilitate high participation of women in financial services.*

**Keywords:** ***financial, income, security, processors, women, rice***

**INTRODUCTION**

Agriculture is a major source of livelihoods for women especially in the rural areas. Women comprise 43% of the world’s agricultural labour force. In Nigeria, 80% of the agricultural production comes from small holder farmers, while the processing is largely done by rural women. With the continuous growth in the population dynamics of Nigeria, rice (Oryza glaberrima) has become an increasingly important commodity for majority of Nigerians and it constitutes about 20% of total food expenditure (Braun, 2006). Women’s contribution to agriculture and the rural economy is considerable in these countries, however, unlike men, they have a lesser access to productive resources and employment opportunities. The National Bureau of Statistics in 2014 (NBS) revealed that women involvement in Agricultural activities has increased compared to men and these women mostly carry out the task of off-farm activities such as processing using traditional and rudimentary technologies (Ademilua *etal.,* 2017). Financial Inclusion is a state where financial services are delivered by a range of providers, mostly the private sector, to reach everyone who could use them (Omoare, 2017). Specifically, it means a financial system that serves as many people as possible in a country. In recent time, financial Inclusion has assumed a critical development policy priority in many countries, particularly in developing economies (Oyediran, 2016). The demand for local rice is increasing day by day as people are becoming more enlightened and informed about the nourishment. As a result of the growing population as well as the federal Government policy ban on rice importation, the Nigerian rice sector has witnessed a remarkable improvement both in terms of production, processing and consumption. Nigeria has become a major consumer and importer of rice in Africa and indeed is classified among the top four Agricultural imports in the country.

**METHODOLOGY**

The study was undertaken in selected Local Government Areas (LGAs) of Niger State, Nigeria. Niger State is located between Latitudes 8022ꞌN and 11030ꞌN and Longitudes 3030ꞌE and 7020ꞌE. The State is bordered by Zamfara and Kebbi States in the North and North-west respectively, Kogi State and Kwara State in the South and South-west respectively; while Kaduna State and the Federal Capital Territory, Abuja, border the State to the Northeast and Southeast respectively. The State shares an international boundary with the Republic of Benin at Babanna, in Borgu LGA. Currently, the State covers an estimated total land area of 74.244sq.km, which is about 8% of Nigeria’s total land area. Multi-stage sampling technique was used to select 188 women rice processors of which structured questionnaire complemented with interview schedules was employed to collect primary data. Data collected was analyzed using descriptive and inferential statistics. The results for factors influencing extent of women participation in financial inclusion services under IFAD/VCDPwas achieved using binary probit Regression. The probit regression model is specified explicitly as follows:

 Y = f (X1, X2, X3, X4, X5, X6, X7, Xe) ---eqt (3.2)

Y = level of participation (High level 1 and 0 if otherwise)

X1 = Age (years)

X2 = Marital status (1=married, 0= otherwise)

X3 = Household size (Number)

X4 = Level of education (years of schooling)

X5 = processing experience (years)

X6 = financial awareness (Aware = 1, Not aware=0)

X7 = financial literacy (Yes =1, otherwise=0)

X8= Amount of credit (₦)

X9 = Membership of association (Yes =1, otherwise=0)

X10 = Labour (Man-days)

X11 = occupation (rice processing =1, otherwise=0)

X12 = collateral required (yes =1, otherwise=0)

X13 = Extension visits (Number of visit)

X14 = savings (₦)

X15 = distance to financial service (km)

X16 = bank account ownership (Yes =1, otherwise=0)

e = error term,

β0 = Intercept to be estimated and

β1 - β16 = coefficients to be estimated.

**RESULTS AND DISCUSSION**

**Socio-economic Characteristics of Women Rice Processors**

This section presents and discusses the results of the study on socio-economic characteristics of the women rice processor in the study area which comprises of the age, marital status, level of education, processing experience, primary occupation, extension contact, access to credit and membership of cooperative among others. The result of the analysis obtained shows that, the mean age of the respondents was 41 years; about 78% were married with an average household’s size of 10, however, more than half had one forms of formal education and the other. The average processing experience was 8 with about 96% engages on rice processing on full time bases while about 68% engages on trading as secondary occupation. In addition, the entire respondent (100%) had extension contact mostly fortnightly; also, about 90% had access to credit with an average ₦198686.26 credit assessed mostly from micro-finance bank (54%).

Table 1. reveals that trading was the most common secondary occupation in the study area, accounting for nearly 67.6% of all women rice processor under IFAD/VCDP. Furthermore, approximately 16% of respondents engage in gathering, while only 3.7% of respondents were civil servant. This indicates that there are several sources of livelihood in the research locations, which may be used to supplement losses in other areas of livelihood sustaining. The rationale for this finding could be due to the fact that the women normally engage in petty trading aside their major sources of income to be able meet basic physiological demands.

**Table 1:** **Distribution of respondent according to Institutional variables**

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Frequency(n=188) | Percentage (%) | Mean |
| Extension contact |  |  |  |
| YesNo | 1880(0) | 100.00(0) |  |
| Freq. of extension contact |  |  |  |
| Weekly | 44 | 23.4 |  |
| Forth nightly | 137 | 72.9 |  |
| Monthly | 7 | 3.7 |  |
| Access to credit |  |  |  |
| Yes | 170 | 90.4 |  |
| No | 18 | 9.6 |  |
| Sources of creditNo credit  | 18 | 9.6 |  |
| commercial bank | 11 | 5.9 |  |
| BOA | 29 | 15.4 |  |
| Cooperative | 36 | 19.1 |  |
| friends & Relation | 9 | 4.8 |  |
| Govt program | 2 | 1.1 |  |
| micro finance | 83 | 44.1 |  |
| Access to collateral No credit | 18 | 9.6 |  |
| Yes | 48 | 25.5 |  |
| No | 122 | 64.9 |  |
| Membership of cooperative |  |  |  |
| Yes | 188 | 100.0 |  |
| Years of cooperative membership |  |  |  |
| 1-3 | 8 | 4.3 |  |
| 4-6 | 27 | 14.4 |  |
| 7-9 | 138 | 73.4 | 8 |
| 10-12 | 15 | 8.0 |  |

**Source: Field survey, 2022**

**Financial inclusion services for women rice processors**

The results of various financial inclusion services as presented in Table 2, reveals that unified payment interface ($\overbar{X}$= 4.1), overdraft ($\overbar{X}$= 4.0), payment and remittance services $(\overbar{X}$= 3.5), entrepreneurial credit ($\overbar{X}$= 3.5), and internet banking facility ($\overbar{X}$= 3.1) were the prevalent financial services utilized by women rice processors in the study areas. Unified payment interface (UPI) which allows users to send and receive money across bank accounts was ranked the most prevalent financial services women rice processors participated on. Among the UPI women rice processor participated majorly was the Point of Sale (POS). This can be attributed to cashless policy of Central Bank of Nigeria which permits the adoption of POS. It eliminates the tedium of going to bank to queue, available and accessible across the study areas, these attributed for their higher participation by women. Overdraft which allows an account holder to withdraw more money than they have in their account up to the allowable amount was ranked the second financial resources participated by women rice processor.

**Table 2: Distribution of respondent according to financial inclusion services**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | SD (%) | D (%) | UN (%) | A (%) | SA (%) | WM | Rank |
| Saving account facilities | 111(61.2) | 46(24.5) | 8(4.3) | 12(6.4) | 7(3.7) | 1.7 | 13th |
| Overdraft | 15(8.0) | 4(2.1) | 13(6.9) | 89(47.3) | 67(35.6) | 4.0\* | 2nd |
| Payment and remittance services | 32(17.0) | 1(.5) | 29(15.4) | 91(48.4) | 35(18.6) | 3.5\* | 3rd |
| Affordable credit facility | 45(23.9) | 42(22.3) | 61(32.4) | 36(19.1) | 4(2.1) | 2.5 | 7th |
| Cheque facility | 81(43.1) | 100(53.2) | 1(.5) | 0(0.0) | 6(3.2) | 1.7 | 13th |
| Electronic fund transfer | 38(20.2) | 108(57.4) | 26(13.8) | 7(3.7) | 9(4.8) | 2.2 | 9th |
| Credit and debit cards | 87(46.3) | 88(46.8) | 1(.5) | 7(3.7) | 5(2.7) | 1.7 | 13th |
| Access to financial advice | 53(28.2) | 91(48.4) | 43(22.9) | 0(0.0) | 1(.5) | 2.0 | 10th |
| Financial advice | 50(26.6) | 46(24.5) | 73(38.8) | 19(10.1) | 0(0.0) | 2.3 | 8th |
| Micro credit during emergency | 29(15.4) | 6(3.2) | 79(42.0) | 59(31.4) | 15(8.0) | 3.1\* | 5th |
| Entrepreneurial credit | 16(8.5) | 4(2.1) | 66(35.1) | 70(37.2) | 32(17.0) | 3.5\* | 3rd |
| Internet banking facility | 8(4.3) | 54(28.7) | 76(40.4) | 28(14.9) | 22(11.7) | 3.0\* | 6th |
| Mobile banking facility | 76(40.4) | 90(47.9) | 9(4.8) | 1(0.5) | 12(6.4) | 1.8 | 12th |
| Unified payment interface | 10(5.3) | 7(3.7) | 14(7.4) | 78(41.5) | 79(42.0) | 4.1\* | 1st |
| Banking service | 49(26.1) | 132(70.2) | 0(0.0) | 0(0.0) | 7(3.7) | 1.9 | 11th |
| ATM services | 65(34.6) | 119(63.3) | 0(0.0) | 0(0.0) | 4(2.1) | 1.7 | 13th |

**Source: Field survey, 2022**

**\*= Significant, Decision rule:** $\overbar{X}$**>3=Agree and** $\overbar{X}$**< 3 =Disagree, SD= strongly disagree, D=Disagree, UN= Undecided, A=Agree and SA= Strongly Agree WM= Weighted Mean**

**Factors influencing extent of women participation in financial inclusion services**

Results in Table 3. Reveals the probit regression used to estimate the determinants of level of women participation in financial inclusion services under IFAD/VCDP. The results showed Pseudo R2 of 0.3351 which shows a relatively good fit for the probit regression model while the chi-square results show that the likelihood ratio statistics was statistically significant at 1% level of significance, suggesting that the probit regression model has strong explanatory power of the variables included in the model. The findings indicated that out of the twelve (12) variables included on the model only six (6) were statistically significant at various probability levels. Three (3) variables such as level of education, occupation, membership of association was positive and statistically significant at 0.10 and 0.01 probability levels thus they have direct relationship with level of participation. Although, age, distance to financial service and collateral required were negative thus they have inverse relationship with their level of participation.

**Table 3: Regression analysis of the factors influencing participation in financial inclusion**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Coefficient | Standard error | Z-values |
| Age | -.0488 | .0289 | -1.69\* |
| Household size | .3167 | .2279 | 1.39 |
| Level of education | .0388 | .0205 | 1.89\* |
| Amount of credit received | -.0012 | .0022 | -0.55 |
| Extension contact | .064 | .0722 | 0.89 |
| Collateral required | -.0425 | .0250 | -1.70\* |
| Occupation | .3390 | .1097 | 3.09\*\*\* |
| bank account ownership | .0051 | .0048 | 1.09 |
| financial literacy | .0046 | .0513 | 0.09 |
| Membership of association | .1119 | .0439 | 2.55\*\*\* |
| distance to financial service | -5.22e-0 | 3.20e-0 | -1.69\* |
| Constant  | -.8663 | .4628 | 1.87\* |
| Pseudo R2 | 0.3351 |  |  |
| LR Chi squared | 35.20 \*\*\* |  |  |
| Log Likelihood | -112.70 |  |  |

**Source: Field survey, 2022**

**CONCLUSIONS AND**

**RECOMMENDATIONS**

Based on the findings of the study, it was concluded that the respondents were in their active age, married with large family size and experienced rice processors who have access to credit and were members of cooperative and full-time rice processors as well as possessing adequate knowledge of financial services. It can also be concluded that unified payment interface, overdraft, payment and remittance services, entrepreneurial credit and internet banking facility were the prevalent financial services utilized by women rice processors while increase in households consumption, increase in productivity of rice, improve standard of living, enhance ability to take care of household’s health, increase income and enhance ability to maintain home were the commonest effects of women financial inclusion on food security. It was therefore recommended that governmental and non-governmental organizations as well as other relevant stake holders should put more efforts in creating awareness of financial services in rural areas and how it can be utilized to improve their productivity.

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