

Improving Rural Household Income Through Microcredit Scheme Focused On Women in Northern Cross River: A Statistical Analysis

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Abstract

The study objective is statistical analysis of the effect microcredit scheme on household income in Northern Cross River State. The convenient sampling technique was used in collecting data from three Local Government Area that make up Northern Cross River State. The Survey Monkey Sample Determinant Technique was used to arrive at a sample size of 1515, selected using a stratified and convenience sampling technique from Northern Cross River State, Nigeria. A self-developed semi-structured questionnaire was used as the instrument of data collection. Data collected was analyzed using descriptive statistics and Linear Regression. Out of the 1515 instrument distributed, 1306 was returned and used for analysis. The result revealed that all the participants were beneficiaries of Microcredit Scheme. 95.02 per cent reported that since benefitting from Microcredit scheme, their businesses have improved, and 96.78 per cent reporting that their family's living condition has improved since benefitting from microcredit scheme. The results from the descriptive analysis were subjected to parametric statistics using simple linear regression. The results review that woman involving in microcredit scheme has significantly improved household income in the Northern Cross River. This is because the result indicated an R-value of .245^a. The regression ANOVA revealed that the $F(1, 1307) = 83.345$; $p < .05$, is significant. Based on this result, the study recommends a need for various enlightenment programmes to educate rural people on the benefit of obtaining microcredit for businesses and economic activities that will help move them out of poverty.

Keywords: Microcredit Scheme, Household Income, Women, Northern Cross River.

1. Introduction

Poverty remains a problem in Nigeria. The national bureau of statistics argued that more than 40 per cent of the country's population live below the poverty line of 38175 united states dollars a year (NBS, 2020). According to Iheonu and Urana (2019), Nigeria has the highest number of living in extreme poverty, with more than 86.9 million, approximately four out of every ten Nigerian has a per capital expenditure of 352 dollars per annum (World Bank,2020). The country is rich in natural resources and a top oil exporter in the world. A failure to diversify the country's economy has created wealth for a few. Rapid population growth stands at 2 per cent, outstrips economic development (Mohamed,2019; World Bank, 2020). The United Nation (2020) argued that the nation's population would exceed 400 million by 2050.

Rural Nigeria is home to most of the country's poor, with 52 per cent of people living in this area impoverished (World Bank, 2020). Women make up a large number of rural poor (Dapel, 2018; Jung, Barros, Pattussi, Pauli & Nentzling,2016) and makeup 79 per cent of the rural labour force, but are primarily found in casual employment, low skilled and low paying jobs (Oxfam, 2020) caused by a myriad of discriminatory socio-economic practices that puts them at an advantage. While the nation's government have made attempts to lunch various attempts to alleviate the poverty issues, its attempts have not been good enough. This programme, as a result, corruption, inequalities and bad

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governance have failed -to lower the poverty rates, with Nigeria now seen as the poverty capital of the world (World Bank, 2020; United Nation, 2020).

Globally, microcredit schemes have been acknowledged as an effective means of combatting poverty. As a result of government failures to address the poverty issue, various international or private body has produced various micro-credit schemes to mitigate against the growth of poverty, especially for women in rural areas. The rapid growth of microcredit scheme is because removing constraints to access to microcredit for the poor, especially women, will improve the wellbeing, as well as improve the income of their household.

Various studies have documented the success of microcredit scheme in rural areas. Busigye and Kazooba (2018) study on microcredit and women empowerment in households in Uganda found that microcredit for women enables them to start projects, leading income generation, training and development, and improve household welfare. Choudhary, Das and Ralman (2017) study the effectiveness of microcredit scheme on household income, expenditure and savings in Bangladesh. Result revealed a significant impact of ASA microcredit on household income, expenditure and savings. Khan (2014) assessed the effect of microfinance on household income and consumption in Danyore found that microcredit significantly improved household income and consumption level. Ajayi (2016) study focused on the impact of microcredit scheme on households' livelihood in Oyo State. The study was focused on rural women. Findings revealed that microcredit has a significant effect on women household income and welfare.

In Northern Cross River State, despite microcredit scheme permeating rural areas, relatively little evidence exists on the impact of these microcredit schemes on families in these areas. Also, most of the microcredit scheme studies do not focus on women or their household income effect. This study assesses the impact of women microcredit scheme on household income.

2. Methods

2.1. Study Setting

Northern Cross River State is found in the northern part of Cross River State and use to be part of the defunct Ogoja Province. The area currently comprises five local government areas, including Ogoja, Yala, Obudu, Bekwarra and Obanliku, under which are several tribes and languages. The area epitomizes ethnic and cultural pluralities, with several distinct linguistic and cultural practices. The area is agrarian, with most of its inhabitants engaging in agriculture. The major ethnic group in the area is Mbube, Ishiboni, Bette, Yache, Alege, Bekwara, Obanlikwu and Afuke. The people of Northern Cross River are amiable, highly accommodating, and caring. They have an attachment to family ties.

2.2. Study method

The study adopts the survey research method in the process of data collection. This method allows the researcher to use a standardized survey instrument to gather data about a population and their preference, thoughts, and behaviours about a phenomenon in a systematic manner. The method allows a researcher to adopt various approaches to recruit participants, gather data, and utilize instrumentation. In adopting the technique, a semi-structured self-developed questionnaire was used to collect data from the population under study.

2.3. Sample

The study population are women in Northern Cross River State who have benefited from microcredits offered by various micro institutions situated in the study area. One thousand five hundred fifteen (1515) samples were selected for the study from three of the five local government area that makes up the Northern Cross River. Northern Cross River was divided into five strata, according to the five local government area that makes up cross river state north, from this strata, four local government were conveniently selected. The selected local governments are Ogoja, Obudu, Bekwara and Obanliku. From the selected local government area, three wards were also selected. The wards were chosen because they were in areas where the Micro Finance banks under study were situated, and the banks, the snowball sampling technique was used to select 126 respondents from 9 wards area and 127 from 3 wards.

Table 1. Showing the sample selection process.

S/N	Local Government Area	Wards	Sample Size
1.	Bekwara	Abuochiche.	126
		Gakem	127
		Afrike Ochagbe	126
2.	Obanliku	Bebi	126
		Bendi I	126
		Busi	126
3.	Obudu	Obudu Urban I	127
		Ipong	126
		Obudu Urban II	126
4.	Ogoja	Ogoja Urban I	126
		Mbube West I	126
		Ogoja Urban II	127
		Total	1515

2.4. Data Analysis Process

A letter of approval was obtained from the management of the Local government councils where the study was carried out. The researcher also, attached a letter of approval to the instruments given to the research participants. The researchers also verbally obtained the approval of the researchers, while also assuring their anonymity. Data collection was a two-month process with the researchers employing the assistance of two research assistants. Data collected was coded and then subjected to the Statistical Package for Social Sciences (SPSS) version. analysis was carried out using descriptive and parametric statistics at 0.05 confidence level.

3. Findings and Discussion

3.1. Findings

Out of the 1515 research instrument distributed by the researcher, only 1306 was return, representing 86.2 per cent of the total number of the instruments distributed. This figure was used for analysis. The questions in the instrument were based on the aim of the study. Data collected was subjected to descriptive statistics such frequency distribution, simple per centage and graphical illustration.

Table 2. Response on type of micros scheme.

S/N	Item	Category	Frequency	Per centage
1	Which of the microcredit scheme did you profit from	LAPO	312	23.89
		Unical Microcredit scheme	176	13.48
		Obudu microfinance bank	376	28.79
		FCE microfinance bank	313	23.97
		Commercial banks	87	6.66
		others	42	3.22
		Total	1306	100

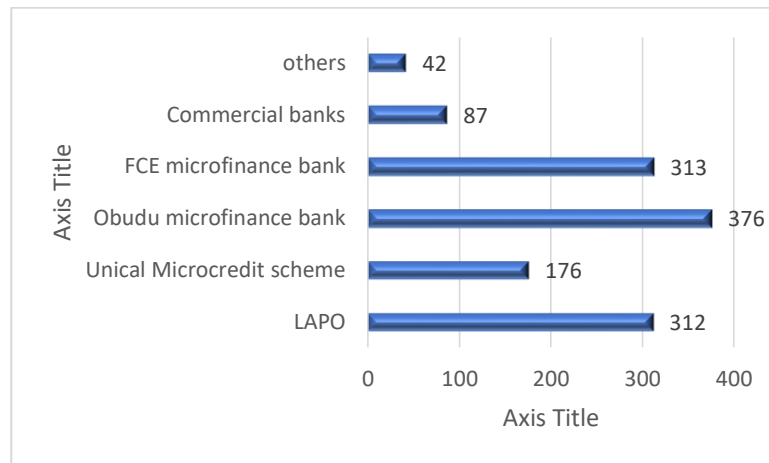


Fig. 1. Response on participants response on type of micros scheme.

Table 3. Response on Rural Household Income Through Microcredit Scheme

S/N	Questions	Comfortable	Struggling	Very poor
1	Before receiving the micro credit how was your family situation	367 (28.10)	515 (39.43)	424 (32.47)

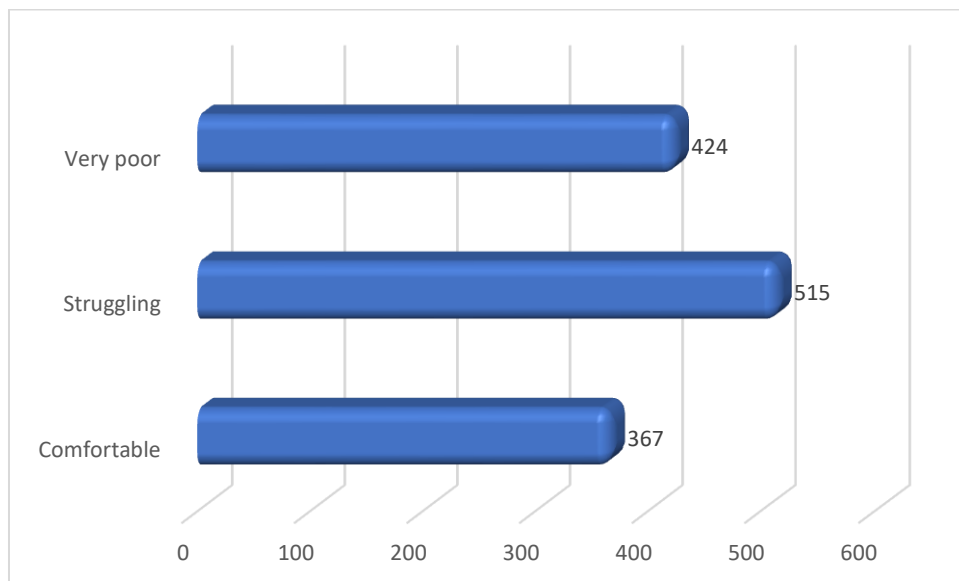


Fig. 2. Response on participants response on family situation before the Scheme

Table 4. Response on Rural Household Income Through Microcredit Scheme

S/N	Questions	Depended on spouse's income	In business	Employed	Depended on family members
3	Before profiting from the microcredit scheme, you were	631 (48.32)	398 (30.47)	43 (3.29)	234 (17.92)

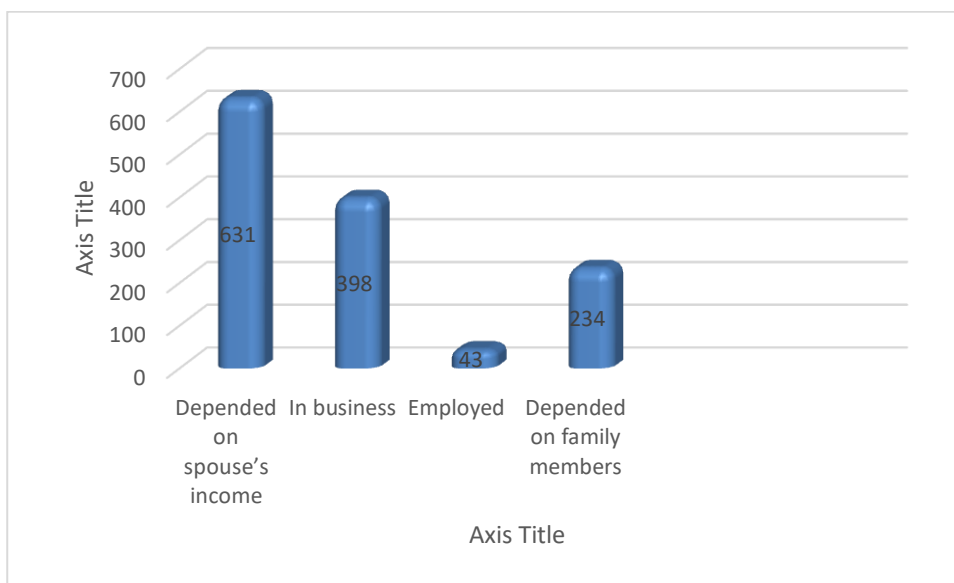


Fig. 3. Response on participants response on family situation before the Scheme

Table 5. Response on Rural Household Income Through Microcredit Scheme

S/N	Questions	Yes	No	Not Sure
4	The money from the credit scheme was used to start or improve my business	1306 (100.00)	0 (0.00)	0 (0.00)
5	The profit from my business has improve since benefitting from the credit scheme	1241 (95.02)	44 (3.37)	21 (1.61)
6	The living condition of my family has improved since improving my business from the credit scheme	1264 (96.78)	12 (0.92)	30 (2.30)
7	I now support my spouse from my business	1189 (91.04)	24 (1.84)	93 (7.12)

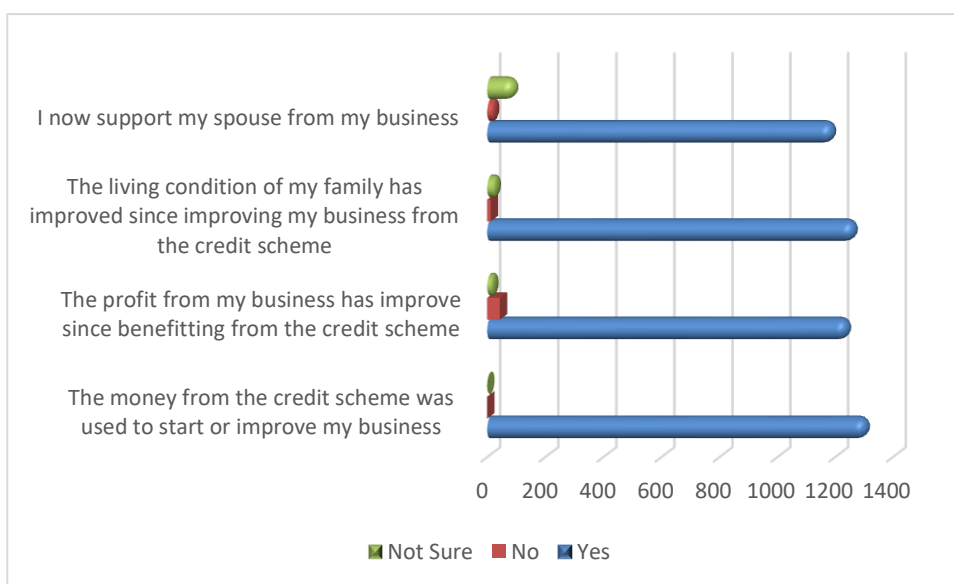


Fig. 4. Response on participants response on family situation before the Scheme

Descriptive analysis was used to analyses data gathered from the field. Results were presented in tables, charts, frequency distribution and per centages. On which of the microcredit scheme did you profit from; 312 (23.89 %) participants reported Lift Above Poverty, 176 (13.48%) reported Unical Microfinance Bank, 376 (28.79%) reported Obudu Microfinance Bank, 313 (23.97%) reported Federal College of Education Microfinance Bank, 87 (6.66%) participants reported Commercial Banks and 42 (3.22%) participants reported others. On before receiving the micro credit how was your family situation; 267 (28.10%) participants reported comfortable, 515 (39.43%) reported struggling, and 424 (32.47%) reported very poor. On before profiting from the microcredit scheme, you were; 631 (48.32%) participants reported depended on spouse’s income, 398 (30.47) participants reported in business, 43 (3.29%) participants reported employed and 234 (17.92%) reported depended on family members. On The money from the credit scheme was used to start or improve my business; All the participants 1306 (100.00%) participants reported Yes. On the profit from my business has improve since benefitting from the credit scheme; 1241 (95.02%) participant reported Yes, 44 (3.37%) participants reported No and 21 (1.61%) participants reported Not Sure. On the living condition of my family has improved since improving my business from the credit scheme; 1264 (96.78%) participants reported Yes, 12 (0.92) per cent reported No and 30 (2.30%) reported Not sure. On I now support my spouse from my business; 1189 (91.04%) participants reported Yes, 24 (1.84%), 24 (1.84%) reported No and 93 (7.12%) reported Not Sure.

Table 6. Summary simple linear regression analysis of women microcredit scheme and improved household income

Variables	Mean	Std. Deviation
Women microcredit scheme	20.1436	7.35414
Improved household income	36.9251	12.74361

Model	Sum of Squares	df	Mean Square	F	R	R Square	Adjusted R Square	Sig
Regression	12733.559	1	12733.559	83.345	0.245 ^a	0.061	0.059	0.000 ^a
Residual	199685.104	1307	152.781					
Total	212418.663	1308						

*significant at 0.05 level

The result of data analysis as presented in table 5, indicates an R-value of .245^a. The correlation coefficient is a standardized measure of an observed degree of relationship between variables, it is a commonly used measure of the size of an effect, and that values of ±.1 represent a small effect, ±.3 is a medium effect and ±.5 is a large effect. Also, the R² –value of .060 implies that 60% of total variance explained is accounted for by predictor variable (FHI 360 reproductive health services).

Furthermore, the regression ANOVA revealed that the F (1, 1307) = 83.345; p < .05, is significant. This implies, women micro credit scheme has significantly improved household income in Northern Cross River State, Nigeria. The adjusted R² (.059) shows some shrinkage of the unadjusted value (.060) indicating that the model could be generalized on the population. Based on the results, it was concluded that women microcredit scheme significantly contributes to improved household income.

3.2. Discussion

The data analyzed using descriptive statistics results revealed that all the participants were involved in one form of microcredit scheme. 28.79% of the respondents were involved in Obudu microfinance bank credit scheme, 23.97% of the participants were involved in FCE microfinance bank credit scheme, 23.89% we are involved in LAPO micro-credit scheme, 13.48 we are involved in the Unical micro-credit scheme, and 6.6 6% of the participants were involved in microcredit schemes of order commercial banks. Most of the participants, 71.90 per cent of the participant, were either very poor or struggling to survive, with many women (48.32%) depending on their spouse for income or

depending on family members for survival (17.92%) before benefitting from microcredit scheme. After benefitting from the Microcredit Scheme, all the participants used the money to improve their existing business. 95.02 per cent reported that since benefitting from Microcredit scheme, their businesses have improved, and 96.78 per cent reporting that their family's living condition has improved since benefitting from microcredit scheme.

The results from the descriptive analysis subjected two parametric statistics using simple linear regression. The results review that woman involving in microcredit scheme has significantly improved household income in the Northern Cross River. This is because the result indicated an R-value of .245^a. the regression ANOVA revealed that the $F(1, 1307) = 83.345$; $p < .05$, is significant. This implies, women micro-credit scheme has significantly improved household income in Northern Cross River State, Nigeria. The adjusted R² (.059) shows some shrinkage of the unadjusted value (.060), indicating that the model could be generalized on the population. Based on the results, it was concluded that women microcredit scheme significantly contributes to improved household income. Other studies have corroborated this finding.

Busigye and Kazooba (2018), in their study on microcredit and women empowerment in households in Uganda, found that microcredit for women enables them to start projects, leading income generation, training and development, and improve household welfare. Choudhary, Das and Ralman (2017) study also revealed a significant impact of microcredit on household income, expenditure, and savings. Khan (2014) found that microcredit significantly improved household income and consumption level. Ajayi (2016) also found that microcredit has a significant impact on women household income and welfare.

4. Conclusion and Recommendation

The study's finding has revealed the positive impact that microcredit scheme has had on the rural house. As the result has shown, various microcredit scheme in Northern Cross River State has improved women's living condition and allowed them to contribute to household income in Northern Cross River State. Hence, there is a need for various enlightenment programmes aimed at educating rural people on the benefit of obtaining microcredit for businesses and economic activities that will help move them out of poverty. Also, there is a need for banks and other institutions offering microcredit to offer rural people microcredit at minimal interest rate and with little or no collateral.

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