FUNAI JOURNAL OF ACCOUNTING,
BUSINESS AND FINANCE (FUJABF)
Vol. 1. N0. 1. 2017. Pp 119-125. Maiden Edition

Federal University
Ndufu-Alike Ikwo
Ebonyi State Nigeria

Analysis of Effect of Poverty Status on Investment Pattern on Rural Women Farmers in Imo State, Nigeria

Nze, Edith Oziomaand Emmanuel and Mary Nwanneka

Department of Agribusiness and Management,
Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria
Corresponding E-mail: nzeedith3@gmail.com

ABSTRACT

The broad objectiveof this study was toanalysethe effect of poverty status on investment pattern of rural women farmers in Imo State, Nigeria,using Obowo as a reference point. The specific objectives were to identify the socio-economic characteristics of the respondents, identify sources of finance available to them, estimate relationship between the poverty status and investment pattern of the respondents andexamine the pattern of investmentamong the rural women farmers in the study area. Primary source of data, was used.Multi-stage sampling technique involving three stages was used in collecting primary data from sixty rural women farmers randomly selected from six villages from three communities in Obowo Imo State.Various econometric and statistical tools such as descriptive statistical tools, poverty index, correlation analysis and multiple regression analysis were used in analysing data.Results revealed that almost all the sampled rural women, 91.7%, fell within the age range of 21-50 years, greater number of the women (96.0%) had a household size of 3 persons and above, majority (95%) earned an average monthly income of N50,000-N100,000.Various sources of finance were available to the women but the most available source was personal/family savings (98.3%). Their major areas of investment were livestock production (71.7%)and foodstuff trade, 70%. None of the rural women was poor and there was a strong relationship between their poverty status and their investment pattern. Household expenditure (10.0%), savings (10.0%) and income (10.0%) were the statistically significant variables that determined the investment types among the rural women. It was recommended that the rural women farmers should be enlightened on the use of loans, credits and debentures in financing their businesses.

Keywords: Poverty Status, Investment Pattern, Rural Women Farmers

Introduction

Agriculture is relevant to the development of any rural area in Nigeria. It contributes about 45 percent of the Gross Domestic Product, employs about two-third of the labour force in the country, is a good source of livelihood for most people in the rural areas and provides raw materials for manufacturing industries (Nigerian Experience, 2008). Nigerian huge agricultural resource base offers great potential for growth for the entire economy.

Rural farmers, especially women, are one of the most disadvantaged and vulnerable groups in Nigeria. Researches have revealed that most of people living in absolute povertyand are undernourished can be found mostly in the rural areas as farmers(Omonona, 2009).This sterns from households headed by females, and gender disparities(Okunmedewa*et al.,* 2005).

Investment is the current commitment of money or any other resources with the expectation of reaping benefitsin the future (Osuala, 2009). It is either economic activities designed to increase, improve or maintain the productive quality of the existing stock of capital (i.e. economic investment) or an exchange of financial claim (i.e. financial investment) (Osuala 2009).Investment can be public investment, household investment or private investment (Girma*et al.*, 2013). In the rural areas of developing countries, household investment is the most common (Fozzard, 2001). According to

Girma*et al.*, (2013) household investment is purchasing assets for productive purpose by households.

Despite the high number of investment programmes undertaken by national and international agencies within Nigeria, the living condition of the rural areas still remains deplorable as attested by many researchers studying the problems of rural areas. Some researchers have opined that poverty status is a great challenge to the investment pattern of rural women farmers while others think it has nothing to do with it (Okunmadewa*et al.,* 2005).

As level of poverty increases, the rural women tend to make investment as a tool to assist them in the reduction of poverty rate, thereby producing high output in their agricultural work. So evaluating their poverty status can be done through the measurement of the number of investment the rural women make with their income. This study seeks to evaluate poverty as a key barrier to investment pattern of the rural women. More so, this work seeks to determine if the vision of poverty reduction matches reality in the rural part of Imo State like Obowoagainst the opinion of many, who claim their impact is not widely felt and worse still existence is unknown in the vast proportion of the country side (Iro, 2008).

Objectives of the study

The main objective is to analyse the effect of poverty status on investment pattern of rural women farmers in Imo State of Nigeria.The specific objectives were:

i. To identify the socio-economic characteristics of the rural women.
ii. To identify sources of finance available to the rural women.
iii. To examine pattern of investment of the rural women.
iv. To determine poverty status of the respondents.
v. To estimate relationship between poverty status and investment pattern of the respondents
vi. To analyze determinants of investment among rural women farmers in the study area.

Literature Review

Conceptual review on poverty and investment

The concept of poverty is naturally contrasted with those of riches and material prosperity. Indeed, poverty is often thought of in terms of a lack of riches, or material prosperity. This conception of poverty has its counterpart in the most common ways of measuring poverty - involving the headcount index and the income gap - which associate poverty with inadequate income. The primary focus in poverty evaluation must rather be on human well-being or the quality of life, thus, overtly can then be thought about in terms of a shortfall in terms of well-being. It is therefore generally agreed that in conceptualizing poverty, low income or low consumption is its symptom. This has been used for the construction of poverty lines.

Investment on the other hand is the current commitment of money or any other resources with the expectation of reaping future benefits. It is either economic activities designed to increase, improve or maintain the productive quality of the existing stock of capital (i.e. economic investment0 or an exchange of financial claim (i.e. financial investment) (Osuala 2009)

Investment can be public investment, household investment and private investment. In the rural areas of developing countries, household investment is the most common. (Girma*et al*., 2013) refers to household investment as purchasing assets for productive purpose by households. Investment is also the process of actual capital formation through increasing the production of inventory of new factories, housing and tools for production.

Theoretical framework

A theory is a set of related statement that are arranged so as to give functional meaning to a set of events. Various theories have been advanced in order to put in proper perspective the mechanics of poverty. The orthodox Western views of poverty, reflected in the “Vicious circle” hypothesis stating that a poor person is poor because he is poor, and may remain poor, unless the person's income level increases significantly enough to pull the person in question out of the poverty trap. To the classical school of thought, such improvement can only be real and sustained, if and only if, the population growth is checked and the “limits of growth” are eliminated (Wilhelm and Fiestas, 2005). Poverty can be structural (chronic) or transient. The former is defined as persistent or permanent socio-economic deprivations and is linked to a host of factors such as limited productive resources, lack of skills for gainful employment, endemic socio-political and cultural factors and gender. The latter, on the other hand, is defined as transitory/temporary and is linked to natural and man-made disasters. Transient poverty is more reversible but can become structural if it persists.

There are several motives for investment, but the basic motive is profit/return. According to Keynes' theory, this motive depends on the expected marginal efficiency of capital (MEC) in relation to the expected rate of interest. The difference between the realized marginal efficiency of capital and the rate of interest is the opportunity cost of investment. The theory assumes that the expected return on investment is intrinsically volatile in view of the uncertainty that accompanies the main determinant of investment returns. But this is especially as far as private investment is concerned. In the context, the accelerator principle suggests that increases in output leads to increases in investment (Osuala, 2009). This principle relates investment to GDP. It follows from the fact that the demand for machineries and factories is a derived one. Thus, if they demand for the goods that capital equipment produces risings, and the existing industry capacity cannot meet this demand, if production were to be increased, then new plant and equipment would be required. While new capital equipment is being built and installed, investment expenditure has taken place. If the desired stock of capital goods increases, there will be an investment pool which will translate to increase GDP in that economy. This makes investment depend on changes in final demand, and hence changes in GDP. In this vein, the accelerator explains why a slowdown in growth of GDP can lead to negative growth in subsequent periods through a fall in investment spending.

Methodology

This study was conducted in Obowo Imo State, Nigeria.Obowo is one of the local government areas in Imo State. It is made up of 16 autonomous communities namely: Umulogbo, Umusochie, Umuokeh, Amuzi, Ehume, Okuohia, Okwowuohia, Umuagu, Amato, Umuifem, Avutu, Okwunaezigwe, Osinta talowu, Achara, Odenkwume and Umunachi. Obowo Imo State lies within the latitude 4 ° 451 and 7 251N and longitude 6 501 and 7 ° 251E. It occupies a total land area of 46,053sq.km, and a population of about 164,728,600persons (NPC, 2011). Two main seasons witnessed in the area are the rainy season (which lasts March and October) and a four months dry season (usually between November and February). Its mean annual rainfall is between (30,000-34,000mm) while the mean temperature is between 25℃, with a humidity of 97% during the rainy season and between 60-80% during the dry season (NBS, 2005). Obowo is known for farming, hunting, trading and education. Majority of people in the area are predominant farmers. They practice shifting cultivation observing an average of two years between shifts. They undertake mixed cropping for their individual household needs as well as for commercial purposes.

Multi-stage sampling technique was employed in this study. This involved three stages, in the first stage, a purposive selection of three communities was done, which were Umuariam, Umulogho and Avutu. In the second stage, from each of the communities, two villages were randomly selected to give a total of six villages, and in the third stage, ten rural women farmers were randomly selected from each of the villages to give a total of sixty rural women farmers for the study.

Primary Data were used for the study. The primary source was through the administration of a well structure questionnaire which was given to the sampled women farmers in Obowo, Imo State.

Analytical techniques

In pursuance of the objectives of the study, various econometric and statistical tools were applied as deemed suitable for the study;

Objectives i, ii and iii were analysed using descriptive statistics which basically included frequency tables and percentages. Objective iv was analysed using poverty index, v was analysed using correlation analysis, while objective vi was analysed using multiple regression.

Models Specifications

The model used for achieving the various objective were specified below:

The FGT poverty index for determining poverty status of the respondents is represented as follows:

Per capita household expenditure =

$$\frac{\text{Total household monthly expenditure}}{\text{Household size}}$$

Mean per capita household expenditure=

$$\frac{\text{Total per capita household expenditure}}{\text{Total number of household}}$$

Correlation analysis for relationship between poverty status and investment pattern of the respondents is specified as follows:

$$rxy = \frac{\sum xy}{\sqrt{\sum xi^2 \sum yi^2}}$$

The Multiple regressionused to analyse objective vi is thus:

$Y = f(X_1, X_2, X_3, X_4, X_5, X_6)$

Where Y= Investment of rural women (Amount investment in Naira)

X_1= Age (years)

X_2= Household size (number)

X_3= Marital status (Married=4, Single=2, Widowed=1, Divorced=0)

X_4= Expenditure (Naira)

X_5= Savings (Naira)

X_6= Income level (Naira)

FINDINGS

Socio-economic characteristics of rural women farmers in Obowo, Imo State

From the result in table 1, almost all the sampled rural women, 91.7%, fell within the age range of 21-50 years. This means that the area has a very high workforce of women. The implication could be that the area is favourable for rural women investments. The findings is in consonance with that of Nwauwa and Onyeka (2011) who said that rural women feature prominently in investments especially in rural areas with respect to marketing. Majority (55.0%) of the population were married and 30% of the respondents were single. The divorced and widowed population were 10% and 5% respectively. This means that more married women dominated the respondents. The implication could be that married individuals are expected to have more labour force who can assist in investment. Adeyeye (2000) confirmed that family labour is very important in the maintenance and establishment of investment. The result showed that a greater number of the women have a household size of 3 persons and above in a family (96.0%). This result collaborates with the findings of Awe *et al.*, (2012) who stated that people with large household sizes commit themselves so much to their businesses in order to maximize profit and be able to cater for their families. In terms of Average monthly income, table 1 showed that majority (95%) of the respondents earned an average income of N50,000-N100,000 monthly, while 3.3% and 1.7% of the respondents earned N100,001-N150,000 and N150,000and above respectively. The women were not very high income earners as only but a few of them, 3 persons earned N100,000 and above on monthly bases. None of them earned below N50,000 per month.

The implication is that their investments yield income of not less than N50,000 on monthly bases, and being a rural area, they are likely to have some other minor means of livelihoods such as keeping domestic animals and engaging in farm labour, and they equally feed more on farm produces. Investigation into the monthly expenditure showed that majority (76.7%) of the respondent spent below N50,000 as their monthly expenditure while 20% and 3.3% of the respondent spentN50,000-N100,000 and N100,001-N200,000 respectively. The implication is that they do not spend much on monthly basis, since majority of them, 76.7%, spent below N50,000. There is the tendency that these women might be keeping domestic animals such as sheep and goat; keeping home gardens and engaged in other means of sustenance that resulted in their little spending.

Table 1: Distribution of rural women farmers according to socio-economic characteristics

Items		Frequency	Percentage
Age of respondents:	21-30	21	35.0
	31-40	21	33
	41-50	13	21.7
	50 and above	5	8.3
Marital status:	Divorced	3	5.0
	Widowed	6	10.0
	Single	18	30.0
	Married	33	55.0
Household size:	<3	2	3.3
	3-5	21	35.0
	6-8	15	25.0
	9 and above	22	36.7
Average monthly income:	Below 50,000	NIL	_
	50,000-100,000	57	95.0
	100,001-150,000	2	3.3
	150,001 and above	1	1.7
Average monthly expenditure:	Below 50,000	46	76.7
	50,000-100,000	12	20.0
	100,001-200,000	2	3.3
Total		**60**	**100.00**

Source: Survey data; 2017.

Sources of finance available to the rural women farmers in Imo State

Table 2 revealed the various sources of finance available to the rural women as personal/family savings, fixed deposit, trade credit, cost advance, loan, leasing, debentures and preference shares. It showed that the source of finance most available for majority of the population is personal/family savings, 98.3%, followed by fixed deposit, 23.8%, it means that most of them generated their own investment capital, and some others fixed their money in banks to avoid spending. Trade credit ranked the 4th source of finance with 8.5%, while very few of them, 5persons, made purchases and paid on later days. Only one person got her finance through leasing while none of them accessed debenture. It could be that they knew little or nothing about debenture, do not have security or that they do not like it. This connotes with the work of Fletschner (2009) which outlined that it is a serious obstacle for women to have access to finance due to lack of security.

Table 2: Sources of finance to the rural women

Sources	Frequency	Percentage	Rank
Personal / family savings	57	98.3*	1st
Fixed Deposit	14	23.8*	2nd
Loan	8	13.6*	3rd
Trade Credit	5	8.5*	4th
Cost Advance	2	3.4*	5th
Preference shares	2	3.4*	5th
Leasing	1	1.7*	7th
Debenture	NIL	-	8th

Source: Survey data; 2017.

***Multiple responses recorded**

Investment patterns of rural women farmers in the study area

The result on table 3 showed the investment patterns available to the respondent. The table revealed that their major areas of investment were livestock production ranking 1st with 71.7%, followed by foodstuff trade, 70%. The implication is that since they were rural dwellers with large family sizes, the surest means of livelihoods is engaging in livestock production and food stuff trade in order to be able to provide the family basic need which is food. Body and footwear sales ranked the 6th investment. It could be that the people in the areaare not so mindful of what to put on their bodies. Palm oil business and cassava products business ranked 3rd and 4th investments respectively and they also formed part of the family basic need which is food. Food vendor was their least type of investment. This is expected because rural dwellers are not expected to be exposed to eating outside. They prefer preparing their own food and equally carrying some along with them when they go for outside businesses. This goes in line with the work of Fletschner (2009) who opined that the dynamics of allocating income earned to different household needs and savings makes it hard for rural women to invest most of their income.

Table 3: Types of investment engaged by the respondents

Areas of Investment	Frequency	percentage
Livestock production	43	71.7
Foodstuff trading	45	70.0*
Palm oil business	38	63.3*
Cassava products business	36	60.0*
Tailoring	22	36.7*
Body and foot wears sales	11	18.3*
Food vendor	9	15.0*
Bead making	4	6.7*

Source: Survey data; 2017

***=Multiple responses recorded**

Poverty status of the rural women farmers in Obowo

The mean per capita household expenditure (MPCHE) of the respondents ranged from <488.421 for the extremely poor respondent, 488.421≤ 976.842 for the moderately poor respondents and >976.842 for the non-poor. From table 4, none of the rural women spent below ₦976.842, the mean per capita household expenditure, this means that none of the women is poor. The implication is that their types of investment are the ones that do not leave one without a profit, at least N50,000 per month. They also do not spend much as most of them spend below #50,000 on monthly basis, as a result of their involvement in certain means of livelihoods that do not encourage much spending despite their large family sizes. This is in line with the findings of NBS (2005) which shows that there is appreciable decrease in poverty rate between 1996 and 2004.

Table 4: Respondent classification according to poverty status

Poverty Group	MPCHE(N)	Frequency	Percentage
Extremely poor	<488.421	NIL	-
Moderately poor	488.421≤976.842	NIL	-
Non-poor	>976.842	60	100.0

Source: Survey data; 2017

Relationship between poverty status and Investment pattern of the respondents

The relationship between Poverty status and the investment pattern of the respondent is revealed in Table 6. The table revealed that there is a relationship between the respondent's poverty status and their investment pattern. This means that their poverty status equally affected the extent to which they engaged in investments. The implication is that with much investments, there is the tendency of having more income generations which invariably will lower one's poverty level. This collaborates with the findings of Ifenkwe and Kalu (2012) who opined out that poverty status can be transient and that if managed through activities like investments, the status could be changed.

Table 6: Correlation result of poverty status and Investment

	Poverty Status	Investment
Poverty Status	1.00	0.59
Investment	0.59	1.00

Source: Survey data; 2017

Determinants of Investment among the respondent

The result of the regression tables showed that household expenditure, savings and income were the statistically significant variables that determined the investment types among the rural women in the study area. Household expenditure gave a positive coefficient of 1.088 and was statistically significant at 10% level of risk indicating that increase in the household expenditure of the rural women lead to an increase in the investment of the women in order to generate more revenue and in return, be able to carter for their large families. It is in line with findings of Quartey (2005) which showed that household size positively affects the welfare due to synergies and multiple sources of income from large household size. Savings and income had positive coefficients of 0.501and 0.527 respectively and were both significant at 90% levels confidence. This means that the more their income, the more they save, and the more they engage in investments. The implication is that they were likely invest almost all their income and savings in order to generate more revenue so as to meet up with their increasing expenditures. It is in line with the work of Hassett*et al.* (2002) which reveals that investment can only come from the forgone consumption which is savings.

Table 5: Semi - log regression on the determinants of Investment

Parameter	Coefficient	Std. error	T-values
Constant	9.293	1.215	7.648***
Age	-6.27	11.319	-0.055
Household size	0.064	0.085	0.757
Marital status	0.026	0.259	0.100
Household expenditure	1.088	0.734	1.682*
Savings	0.501	0.262	1.914*
Income	0.527	0.745	1.870*
R-squared	5.333		
R^2 adjusted	5.108		
F-ratio	6.080		

Source: Survey data; 2017

Key: *=significant at 1%, *=significant at 10%.**

Conclusion And Recommendations

From the research, it could be seen that none of the rural women farmers in Obowo Imo state lived below the poverty line. This means that none of them could be regarded as being poor. Again, they mostly invested in food production and its sales as sources of livelihoods. The recommendations are rural women farmers should be enlightened on the use of loans, credits and debentures in financing their businesses; there should be established Micro-Finance banks which will enable the smooth transactions of the rural women.

References

Adeyeye, V.A. (2000) "Evolving sustainable strategies for integrated poverty alleviation programmes in Nigeria". Paper presented at Poverty Amelioration programme, Ibadan Sept., 2008.

Awe, F. Imoagene, E.,Osadebe, C.O.,Azeez, F. A and Eniola T. S. (2012). “Evaluation of lwingia kernels Marketing in selected markets in Akure, Ondo State, Nigeria” *International Journal of*

Fletschner, D. (2009). Rural Women's access to credit. Market imperfections and Intra-house hold dynamic. World Development. 46(6) 618-631.

Fozzard, A. (2001) *The Basis Budgeting Problem: Approaches to Resources Allocation in the Public sector and their Implication for Pro-poor Budgeting*. Working Paper 147. London: ODI.

Ifenkwe, G. E. and E. S. Kalu (2012)- "Poverty management among rural women in Bende Local Government of Abia state, Nigeria, 2(8): 323-330.

Iro, S.I (2008). Empowering the rural poor: an appraisal of microfinance and other development intervention in Nigeria. Paper presented at the 2008 rural development seminar in Imo state University Owerri. March, 19-21 2008.

Girma, T., Kassa, B, Emana, B and Haji, J (2013) Patterns and determinates of farm households' investment in rural Ethiopia: The case of East Aarughezone,

National Bureau Of Statistic (2005) The findings of NBS (2005) using Nigeria Living Standard Survey 2004

National Population Commission (NPC) (2011). National Census Figure. NPC, Abuja, Nigeria.

Nigerian Experience (2008). Paper present at the 2008 Rural Development Seminar in Imo state University

Nwauwa, Linus andOnyeka,Ezealaji (2011) "Economics of Palm Oil Storage and Marketing in Imo State, Nigeria".*African Journal of Marketing Management. 3(10):253-260*

Okunmadewa, F.Y. Yusuf, S.A. andOmonona B.T, (2005).Social capital and poverty reduction in Nigeria. Revised report submitted to African economic Research consortium (AERC) Nairaobi, Kenya.

Omonona, B.T. (2009). Knowledge review on poverty and rural development in Nigeria. Strategy Support Programme (NSSP) background paper. Washington.

Osuala, A.E. (2009*). Investment Analysis: A Modern approach to Evaluation of Projects and Securities.* Toni Print Services; Nigeria

Quartey, P. (2005). The Impact of migrant remittances on household welfare in Ghana" a final research presented in AERC biannual research workshop16-24.

Wilhelm, V. and Fiestas, I. (2005) 'Exploring the Link between Public Spending and Poverty Reduction: Lessons from the 90s' mimeo. Washington, DC: World Bank Institution.