

1 **Effect of Microcredit on Poverty Reduction among Rural Farm Households in**
2 **Northeast, Nigeria**

3
4
5 **Abstract**

6 The paucity of empirical evidence to show the correlation between microcredit and poverty
7 reduction in North-East, Nigeria led to the study on the effect of microcredit on poverty
8 reduction among rural farm households. Multi-stage random and purposive sampling
9 techniques were employed to select 200 farm households who constituted the sample size.
10 Data were collected primarily using structured questionnaire and analysed with the aid of
11 descriptive and inferential statistics. The results showed informal microcredit as the major
12 source of credit for farm households. The result further indicated that 46 % of the loan
13 applied for was disbursed, resulting to 47 % rise in farm household’s income. Meanwhile, 62
14 % of farm households surveyed were poor with poverty depth of 0.43 and poverty severity at
15 0.38. The regression analysis on the effect of microcredit on the income of the farm
16 households revealed that the coefficient of income was positive and statistically significant at
17 1% probability. The effect of microcredit on the poverty profile of farm households revealed
18 that microcredit exerts negative influence on poverty profile of farm households in the study
19 area. The study recommends: the establishment of robust rural credit scheme in rural areas;
20 and institution of policy framework that will enable poor rural households without
21 appropriate collateral to access funds for farm and non-farm activities.

22
23 **Keywords:** Microcredit, poverty reduction, rural farm households, Foster, Greer and
24 Thorbecke

26 Introduction

27 Nigeria has over 74 million hectares of arable land and a projected population of over
28 160 million people by 2015 with an active workforce of 56.6% (15 – 64 years of age)
29 (Mimiko, 2011). Moreover, over 70 percent of her citizens are engaged in agricultural
30 activities, nevertheless, the country is among the 25 poorest countries in the world with up to
31 69% of her population being poor (National Bureau of Statistics, 2012). Pinstруп-Anderson,
32 Lorch and Rosegrant (2001) contended that poverty in Nigeria is largely a rural phenomenon.
33 These authors asserted that 75% of the rural population lives on less than a dollar per day. In
34 other words, poverty is skewed negatively towards rural areas. United Nation (2015)
35 established that the number of rural poor is roughly twice that of the urban poor and that the
36 depth of poverty was more than double in rural areas. National Bureau of Statistics (2012)
37 reported that the average per capita expenditure of a poor rural household was one-fifth of the
38 non-poor in 2010. He further maintained that of the extremely poor, 85 percent lived in rural
39 areas and more than two-thirds are engaged in farm ventures at subsistence level.
40 Underemployment is also predominantly a rural phenomenon in Nigeria. NBS (2017)
41 reported that 25.8 percent of rural dwellers were underemployed compared to 10.5 percent of
42 urban dwellers. Income inequality is also worse in rural areas, with a Gini co-efficient of 45.6
43 compared with 39.9 for urban areas in Nigeria (World Bank, 1999). Generally, the inequality
44 in Nigeria using the Gini coefficient worsened from 0.356 in 2004 to 0.41 in 2013 but
45 improved to 0.391 in 2016 (NBS, 2018). This level of poverty in the country is attributed to
46 inadequate economic productivity and growth especially in agricultural sector. In the quest to
47 overcome poverty rural households engage in economic ventures such as farming.

48 The fact remains that about 70 percent of the population of Nigerians especially the
49 Northeast Nigeria live in the rural area and engage primarily in farming activities (NBS,
50 2017). This is an indication that the rural economy is an important component of the

51 economy of Northeast of Nigeria. However, International Fund for Agricultural Development
52 (IFAD) (2011) observed that there are a number of frequent problems hindering farming
53 activities by the rural households. These include low productivity, low income, difficulty in
54 accessing start-up capital and fund for enterprise expansion and growth funds to purchase
55 farm inputs. These problems result to unemployment, rural-urban migration, malnutrition and
56 poverty. The argument is if the rural economic entrepreneurs are empowered financially
57 through loans, the rural economic activities will drive this nation's economy upward, thereby
58 increasing employment, productivity, wealth, and reduce poverty.

59 Economic growth in farm enterprises is driven by ideas, intellectual capacities,
60 entrepreneurship experience and technology. However, the major challenge of the people is
61 capital. Capital resource such as finance is one of the principal factors of production. In
62 support of this, Ezike (1999) contended that finance is the sixth sense that makes other senses
63 to function effectively. Access to finance is a crucial motivation for agricultural and non-
64 agricultural productivity. Farm enterprises in rural areas require unhindered access to credit
65 to boost their economic activities. This is predicated on the fact that credit serves as the
66 engine that drives other factors of production to attain higher level of growth. The pedagogy
67 of microfinance revolves around poverty reduction and its fulcrum is microcredit given to the
68 poor to stimulate economic activities. Microcredit refers to small loans. It is a component of
69 microfinance in that it provides credit to the poor. Chowdhury (2009) noted that the promise
70 of micro credit lies in its ability to empower poor people to work on their own to eradicate
71 poverty while avoiding dependency. The aim of microcredit programmes is to meet the credit
72 need of the rural poor through an effort to help them become self-employed in some form of
73 income generating activities and lift themselves out of poverty. Thus, microcredit is one of
74 the mantras of contemporary development initiatives world over.

75 The introduction of microcredit in Nigeria was based on the failure of the top-bottom
76 formal financial institutions to address the credit needs of the rural poor households, thereby
77 constraining the processes of investing for livelihood enhancement among the rural
78 entrepreneurs. This credit gap created by formal financial institutions to give credit to rural
79 entrepreneurs is filled by the micro-finance institutions. Despite the existence of several
80 microcredit institutions such as microfinance, cooperative societies, Bank of Agriculture,
81 money lenders etc, Northeast, Nigeria is still regarded as the zone with the highest rate of
82 poverty in Nigeria (NBS, 2012). It is against this backdrop that this study assessed the effect
83 of microcredit on poverty reduction among rural farm households in Northeast, Nigeria.
84 Specifically, it analysed the sources and utilization of micro-credit by the rural farm
85 households; determined the effect of micro-credit on the income of farm households in the
86 area; and determined the effect of micro-credit on the poverty profile of rural farm
87 households in the study area.

88

89 **Methodology**

90 This study was carried out in Northeast, Nigeria. Northeast Nigeria is made up of six
91 States, namely: Adamawa, Taraba, Bauchi, Gombe, Borno and Yobe. It has a population of
92 18,984,299 million people and a land mass of 274,548.1 km³ (NPC, 2006). The study adopted
93 multistage random and purposive sampling techniques. In the first stage, four out of the six
94 States were purposively selected. This was informed by the need to select only those States
95 where there is relative peace considering the activities of Boko Haram sect in the zone. These
96 States were Adamawa, Bauchi, Gombe and Taraba (see Table 1). In the second stage, twenty
97 (20) Local Government Areas (LGAs) were randomly selected out of the total number of the
98 LGAs in the selected four States. The selection was done proportionately using the total
99 number of LGAs in each State. Based on this, the following LGAs were selected in each

100 State: 6 LGAs in Adamawa, 6 in Bauchi, 3 in Gombe and 5 in Taraba to give a total of 20
101 LGAs. In the third stage, two electoral wards were randomly selected from the 20 LGAs to a
102 give a total of 40 wards. Finally, 5 farm households who have benefitted from microcredit
103 within the last 3 years were randomly selected from the lists of credit beneficiaries obtained
104 from formal and informal credit institutions located in the forty wards. In selecting the
105 respondents, efforts were made to reach out to Banks of Agriculture, microfinance banks,
106 registered cooperative societies and informal credit organizations operational in the areas.
107 Consequently, a total of two hundred (200) respondents were sampled for the study. Data for
108 the study were collected using interviewers schedule based on structured questionnaire.
109 Descriptive statistics was used to analyze objectives (i) and was further subjected to FGT
110 index analysis, while objective (ii) was achieved using simple regression and objective (iii)
111 was achieved with the aid of logit regression. F-test, Z-test was used to test the hypotheses.

112 Table 1: Distribution of the Sampled States, LGAs and Wards in North-East Nigeria

| States | Total No. of LGAs/State | No. of Sampled LGAs/State | No. of Sampled Wards/LGA | No. of Sampled Respondents/Ward | No. Sampled Respondents/State |
|----------|-------------------------|---------------------------|--------------------------|---------------------------------|-------------------------------|
| Adamawa | 21 | Numan | Mgbalan | 5 | 60 |
| | | | Upalo | 5 | |
| | | Lamurde | Rigange | 5 | |
| | | | Giwana | 5 | |
| | | Demsu | Borong | 5 | |
| | | | Bille | 5 | |
| | | Mayo-Belwa | Gorobi | 5 | |
| | | | Wakka | 5 | |
| | | Ganye | Sugu | 5 | |
| | | | Yebbi | 5 | |
| | | Maiye | Konkol | 5 | |
| Manjekin | 5 | | | | |
| Bauchi | 20 | Katagum | Azake | 5 | 60 |
| | | | Chinede | 5 | |
| | | Zaki | Guika | 5 | |
| | | | Tashena | 5 | |
| | | Misau | Zadawa | 5 | |
| | | | Harsawa | 5 | |
| | | Gamawa | Udibo | 5 | |
| | | | Gamawa | 5 | |
| | | Darazau | Kari | 5 | |
| | | | Gabarin | 5 | |
| | | Kirfi | Badara | 5 | |
| Dara | 5 | | | | |
| Gombe | 11 | Akko | Kumu | 5 | 30 |
| | | | Kashere | 5 | |
| | | Balanga | Bam-bam | 5 | |
| | | | Dadiya | 5 | |
| | | Billiri | Bangje | 5 | |
| | Billiri | 5 | | | |
| Taraba | 16 | Zing | Yakoko | 5 | 50 |
| | | | Lama | 5 | |
| | | Yorro | Lankaviri | 5 | |
| | | | Pupule | 5 | |
| | | Takum | Dutse | 5 | |
| | | | Chanchanji | 5 | |
| | | Sardauna | Dorofi | 5 | |
| | | | Gembu | 5 | |
| | | Jalingo | Kona | 5 | |
| | | | Sintali | 5 | |
| Total | 68 | 20 | 40 | 200 | 200 |

113

114

115 **Model Specification**

116 **The Foster, Greer and Thorbecke (FGT) Index**

117 The Foster, Greer and Thorbecke (FGT) index was used to determine the threshold
118 which was used to categorize the level of poverty among non-farm households in the study
119 area. The FGT index was computed with the aid of this formula stated below:

120

121
$$P\alpha = \frac{1}{n} \sum_{i=1}^H \left(\frac{Z-Y}{Z} \right)^\alpha \dots\dots\dots (1)$$

122

123 Where:

124 Z = poverty line

125 N = total Sample

126 H = the number of poor (below poverty line).

127 Y = average household monthly *per capita* expenditure

128 α = poverty index which takes value of 0, 1 and 2

129 (1) When $\alpha = 0$, the poverty index (PID) becomes Head Count Ratio or Poverty Incidence
130 Index (HCR or PII) i.e. the proportion of people below the poverty line. It was used to
131 determine the number of households having *per capita* income below the poverty line.

132 It is stated as: $P_0 = H/n$.

133 Where:

134 H = the head count.

135 The PII (P0) gives the prevalence of poverty at a point in time.

136 (2) When $\alpha = 1$, PID becomes the Poverty Gap Index (PGI) i.e. the aggregate short fall in
137 income of the household from the poverty line. It measures the difference between
138 actual income and minimum non-poverty income. The proportion of the poverty line

139 (value) that the average poor require to meet the poverty line; the lower the value, the
140 lower the poverty gap. The PGI (P1) gives the depth of poverty at a point in time.

141 (3) When $\alpha = 2$, PID becomes poverty severity index (PSI) i.e. PSI gives more weight to
142 the poverty gap of the poorest. The closer the value is to 1 (100%), the harder the
143 poverty condition of the household. The PSI gives the severity of poverty at a point.

144 **Simple Regression Model**

145 The simple regression model used to determine the effect of micro-credit on the
146 income of farm households in the study area is explicitly stated as:

147 i. Model for farm households:

$$148 \quad Y = \alpha + \beta X + et \dots\dots\dots (2)$$

149 Where:

150 Y = Income of farm households (naira)

151 X = Amount of microcredit acquired by the farm households (naira)

152 α = Constant/ intercept

153 β = Coefficient

154 et = Stochastic error term

155

156 **Results and Discussion**

157 **Sources and Utilization of Micro-Credit by Rural Farm Households**

158 The source and utilization of micro-credit by rural farm households has been on the
159 front burners of many financial analysts. Basically, credit can be secured either from formal
160 or informal sources as shown in the analysis (Table 2). However, the bulk of micro-credit
161 obtained by the respondents was from informal/unorganized sector. The inform sources of
162 microcredit accessed by the farm households comprised rotatory club (isusu/adasu), money
163 lenders, and relatives and friends. On the formal credit source, the most available source for

164 farm households include: cooperative society and Bank of Agriculture with very insignificant
165 contribution from the commercial bank. This is an indication that the rural farm households
166 depend more on informal credit source for microcredit procurement and this have serious
167 implication for farm investment as a result of the exorbitant interest rate inherent in the
168 informal credit institution. However, the ease with which clients approach the credit
169 principals may have explained the high dependency of farm households on informal credit.
170 This is in congruous with the finding of Mohieldin and Write (2000) who identified the major
171 sources of informal credit for rural farm and nonfarm households as family, friends, money
172 lenders and savings from and off-farm income. On the contrary, Agbaeze and Onwuka (2014)
173 reported that formal sources of microcredit are gaining prominence in microcredit delivery in
174 the rural areas of Nigeria.

175 Meanwhile, it was observed that most of the farm households applied for an amount
176 of between ₦100,001 – ₦200,000 while more than half (66.0%) of them obtained between
177 ₦50,001 – ₦150,000. The mean amount applied was ₦272,750 whereas a mean of ₦127,225
178 was obtained. The analysis shows that only 46.6% of the total amount applied for by the farm
179 households was released to them, leaving as high as 53.4% undisbursed. This is an indication
180 that farm households received less than half of the total amount of credit applied. This has
181 grave implication for farming activities because it limits the capacity of the farm households
182 to procure technologies for improving productivity. Overall, the level of access to micro-
183 credit in terms of amount disbursed to the rural farm households in the study area is generally
184 low, considering the current economic reality in the country.

185 In support of this assertion, Okonkwo (2010) argued that demand for microcredit by
186 rural households is hardly met. This is mostly due to their poor state and the fear of high loan
187 default. Similarly, Agbaeze and Onwuka (2014) reported that rural households in Enugu State
188 received a mean amount of ₦10,120.55 as against the mean loan request of ₦14,105.72.

189 Aside from having access to credit, the amount of money rural households are able to borrow
 190 are equally of importance. Akinbode, Salami and Ojo (2013) opined that the amount of credit
 191 received by rural households is usually very meagre and not sufficient to make significant
 192 improvement in their investment. In furtherance to this, Adekoya (2014) noted that despite
 193 past and present efforts aimed at providing microcredit through the creation of agricultural
 194 development banks, special lending schemes, and the support of the growth of cooperatives
 195 and other self-help groups (SHGs), the supply of micro-credit in Nigeria is still inadequate in
 196 relation to demand. This suggests that there is some inefficiency in microcredit operations in
 197 Nigeria due to some institutional inadequacies such as undercapitalization, inefficient
 198 management and regulatory and supervisory loopholes. This invariably has inhibited the flow
 199 of micro-credit into agriculture (Adeyemi, 2008).

200 Table 2: Distribution of the Respondents According to Sources of Micro-Credit Accessed

| Sources of micro-credit | Variable description | Freq. (n=200)* | Percentage |
|--------------------------------|-----------------------------|----------------|------------|
| Formal | Commercial bank | 10 | 5.0 |
| | Bank of Agric. | 52 | 26.0 |
| | Cooperative society | 64 | 32.0 |
| Informal | Money lender | 106 | 53.0 |
| | Relatives & friends | 102 | 51.0 |
| | Rotatory club (Isusu/Adasu) | 118 | 59.0 |
| Amount applied | < 30,000 | 22 | 11.0 |
| | 100,001-200,000 | 87 | 43.5 |
| | 200,001-300,000 | 38 | 19.0 |
| | > 300,000 | 53 | 26.5 |
| <i>Mean amount applied (₦)</i> | | 272,750 | |

| | | | |
|--------------------------------|-----------------|----------------|--------------|
| Amount obtained | 5000- 50,000 | 33 | 16.5 |
| | 50,001-150,000 | 132 | 66.0 |
| | 150,001-300,000 | 31 | 15.5 |
| | Above 300,000 | 4 | 2.0 |
| <i>Mean amount obtained(₦)</i> | | <i>127,225</i> | <i>46.6%</i> |

201 *Multiple responses recorded

202

203 **Poverty Level of the Farm Households**

204 The relative poverty index (RPI) approach was used to determine the poverty status of
 205 farm households in the study area. The RPI was computed as 2/3 of the monthly mean *per*
 206 *capita* expenditure. Based on the mean *per capita* expenditures of ₦13,670.2 for farm
 207 households, the RPI was determined to be ₦9,113.5. Consequently, any household with
 208 monthly expenditure below the poverty line (i.e. ₦9,113.5) were classified as poor while
 209 those with expenditures of ₦9,113.5 and above were classified as non-poor. Expenditure is
 210 known to play a very important role in the poverty level of household because it reflects the
 211 true level of actual income. Hence, expenditure is more preferable to income since incidental
 212 inflows like remittances and gifts, which do not occur regularly, are part of household
 213 income. Consequent upon these, the result shows the FGT poverty indices among the
 214 surveyed farm households. The poverty indicators were consistently high among households.
 215 For example, the head count ratio value of 0.62 was recorded among the farm households.
 216 This is an indication that about 62 % of farm households were poor (i.e. living below the
 217 World Bank minimum per capita daily expenditure of \$1.25 (₦350.00)).

218 The poverty depth indicated a value of 0.43 was recorded for farm, suggesting that a
 219 mean farm household requires to up to 43% of \$1.25 (₦350.00) per day for each household

220 member to be able to escape poverty. The poverty severity shows 0.38, indicating the
 221 seriousness of poverty in the study area; because the closer this value is to one, the more
 222 serious the poverty in the area. The high proportion of poor households in the study area calls
 223 for urgent poverty policy intervention programmes for poverty alleviation in the area. This
 224 may not be unconnected with fact that poverty is largely a rural phenomenon (Pinstrup-
 225 Anderson, Lorch, and Rose, 2001). This justifies the finding of Umeh, Ogah and Ogbanje
 226 (2013), who reported that over 60.0% of small-scale farmers in Apa LGA of Benue State
 227 were below poverty line (poor). However, this finding contradicts that of Adepoju and
 228 Obayelu (2013), who reported that more than 50% of rural households in Ondo State were
 229 above poverty line (non-poor).

230

231 Table 3: Incidence, Depth and Severity of Poverty

| FGT index | Farm households (n=200) |
|--------------------------------|-------------------------|
| Incidence of poverty (P_0) | 0.62 |
| Depth of poverty (P_1) | 0.43 |
| Severity of poverty (P_2) | 0.38 |

232

233 **Effect of Microcredit on the Income of Rural Farm Households**

234 Microcredit was expected to have significant effect on the income of the rural farm
 235 households. Result of the analysis shows that the coefficient of determination (R^2) was 0.765
 236 which implied that about 76.5% of observed total variation in the income of farm households
 237 was attributable to changes in amount of microcredit available to the respondents. The high
 238 value of F-ratio (81.618) and the low value of standard error of the estimate (3.95315) signify
 239 the good fit of the model. The overall model was statistically significant ($P < 0.05$), implying

240 that access to microcredit exerts significant influence on the income of the farm households
 241 in the study area.

242 The coefficient of micro-credit obtained by the farm households was positively signed
 243 and statistically significant at 1%. This means that enhancing microcredit acquisition will
 244 improve income generation of the farm households. Consequently, acquisition of micro-credit
 245 has brought about 37.9% marginal effects on income of the farm households in the study
 246 area. Again, the very high level of significance is an indication that access to microcredit is
 247 an important determinant of income generation among farm households. This finding agrees
 248 with that of Akwaa-Sekyi (2013) who observed that the mean income of farm households in
 249 Sunyani area of Ghana rose after the introduction of the credit from Gh¢257.73 Gh¢875.16.
 250 Similarly, studies by Hulme and Mosley (1996); and Copestake (2007) in Zambia found
 251 positive relationship between access to credit and income growth of the beneficiaries.

252 Table 4: Effect of Microcredit on the Income of Farm Households

| Variables | Linear | Double-log | Semi-log | Exponential |
|-------------------------|----------------------------|--------------------------|--------------------------|------------------------|
| Constant | 192746.794 (11333.734)* | 1925.514 (2272.879)NS | 1850.393 (1732.314)NS | 5915.706 (331.135)* |
| Microcredit obtained | 0.379 (0.042)* | 0.595 (0.034) | 0.601 (0.108)* | 3.456E-005 (0.000)* |
| R | 0.806 | 0.780 | 0.780 | 0.735 |
| R ² | 0.765 | 0.608 | 0.608 | 0.697 |
| Adj. R ² | 0.663 | 0.606 | 0.604 | 0.695 |
| Std. error est. | 3.95315 | 7058.349 | 7076.178 | 0.337 |
| F-ratio | 81.618* | 307.412* | 152.934* | 454.972* |

253 * indicates significance at 1%.

254 NS indicates non significant

255 **Effect of Microcredit on Poverty Profile of Farm Households**

256 The result of logit regression analysis as presented in Table 5 indicates that the
257 coefficient of microcredit obtained was negatively signed but statistically significant at 1%
258 level of significance. This implies that a unit increase in microcredit supply will decrease
259 poverty profile of the farm households by 0.002 and vice versa. However, the significance of
260 this variable is an indication that microcredit is a good determinant of poverty profile of farm
261 households in the study area.

262 The overall logit model was moderately adequate as indicated by the values of
263 Pearson Goodness-of-Fit (26.701) and the 2 Log likelihood (251.813). However, the overall
264 model was statistically insignificant ($P > 0.01$); implying that microcredit does not exerts
265 positive influence on poverty profile of the farm households in the study area. This may be
266 explained by the small size of credit extended to the farm households in the area. The
267 negative impact of lack/ inadequate access to credit facilities cannot be over-emphasized.
268 Obadan (1997) and Adepaju (2005) have identified minimal access to credit and employment
269 opportunities as major source of poverty in sub-Saharan Africa. Lack of access to credit has
270 resulted in low acreages under cultivation, poor farm maintenance practices, inadequate or no
271 fertilizer application which eventually led to poor yields and low income for the rural farmer
272 (Akwaa-Sekyi, 2013). This lack of credit is also attributed to the uncertainty in farm input
273 and output and the time lag between input and output. Thus until harvest time, farmers have
274 difficulty meeting basic household demands (Rahji and Adeoti, 2010). This situation is
275 further worsened by the near absence and under-representation of financial intermediation in
276 the rural areas when compared to urban centres in Nigeria.

277 To further validate the result, the null hypothesis was tested and it showed Cox &
278 Snell R^2 value of 0.009 and Nagelkerke R^2 value of 0.013 which were below 0.05 level of

279 significance. Hence, Microcredit has no significant effect on poverty profile of the farm
280 households in Northeast, Nigeria.

281

282 Table 5: Effect of Microcredit on Poverty Profile of Farm Households

| Variable | Coefficient (β) | Std Error | Z | Sig. |
|----------------------------|-------------------------|-----------|---------|------|
| Constant | -4.774 | 0.105 | -45.263 | * |
| Microcredit obtained (₦) | -0.002 | 0.000 | -0.031 | * |
| Pearson Chi-square | 26.701 | | | NS |
| 2 Log likelihood | 251.813 | | | |
| Cox & Snell R ² | 0.009 | | | |
| Nagelkerke R ² | 0.13 | | | |

283

284 **Conclusion**

285 The study concludes that microcredit acquisition significantly contributed to the
286 income generation and assets acquisition of rural farm households but has no effect on
287 poverty reduction of farm households in Northeast, Nigeria. Based on this the study
288 recommends the establishment of robust rural credit scheme in rural areas; and institution of
289 policy framework that will enable poor rural households without appropriate collateral to
290 access funds for farming activities.

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292 **References**

293 Adekoya OA. Analysis of Farm Households Poverty Status in Ogun States, Nigeria. Asian
294 Economic and Financial Review, 2014; 4(3):325-340

295 Adepoju AO, Obayelu OA. Livelihood diversification and welfare of rural households in
296 Ondo State, Nigeria. *Journal of Development and Agricultural Economics*, 2013;
297 5(12): 482-489.

298 Adepoju BA. An appraisal of the effect of microcredit schemes on poverty reduction among
299 women in rural communities of Kano State, Nigeria. *International Academy of*
300 *African Business and Development*, 2005; 6: 354-362.

301 Adeyemi KS. Institutional reforms for efficient microfinance operations in Nigeria. *Central*
302 *Bank of Nigeria Bullion*, 2008; 32(1): 26-34.

303 Agbaeze EK, Onwuka IO. Impact of Micro-Credit on Poverty Alleviation in Nigeria – The
304 Case of Enugu East Local Council. *International Journal of Business and*
305 *Management Review*, 2014; 2(1): 27-51.

306 Akinbode SO, Salami AO, Ojo OT. Impact of Micro Finance on Poverty Status of Small
307 Scale Crop Farming Households in Southwest Nigeria. *American Journal of*
308 *Economics*, 2013; 3(6): 322-329

309 Akwaa-Sekyi EK. Impact of micro credit on rural farming activities: the case of farming
310 communities within Sunyani Area. *Management Science and Engineering*, 2013; 7(4):
311 23-29.

312 Chowdhury A. Microfinance as a Poverty Reduction Tool - A Critical Assessment. *Desa*
313 *Working Paper No. 89*. 2009; Pp. 1-12.

314 Copestake J. Mainstreaming Microfinance: Social Performance Management or Mission
315 Drift? *World Development*, 2007; 35(10): 1721-1738.

316 Ezike KNN. Determinants of Borrowing and Saving Capacity of Smallholder Farmers in
317 South Eastern Nigeria. Ph.D Thesis submitted to the Department of Agricultural
318 Economics and Extension, Enugu State University of Science and Technology
319 (ESUT) Enugu. 1999; Pp 102-107

320 Hulme DA, Mosley P. Finance Against poverty. London: Routledge, 1996.

321 International Fund for Agricultural Development (IFAD). Rural poverty report 2011. New
322 realities, new challenges: new opportunities for tomorrow's generation. Rome, Italy:
323 Quintily, 2011; pp. 1-16.

324 Mimiko O. *Nigeria Spends N24.5 Trillion on food importation annually*. 28 September, 2011.
325 <http://www.misdalive.com/articles> I Nigeria Retrieval 10th Feb. 2012.

326 Mohieldin S, Write W. Formal and informal credit markets in Egypt. Center for Economic
327 Policy Research, 2000; 48(3): 657-670.

328 National Bureau of Statistics (NBS). Unemployment and under-employment report, Q4
329 2016. Abuja: NBS, 2017.

330 National Bureau of Statistics (NBS). Snapshot of inequality in Nigeria (2004, 2013 and
331 2016). January 2018 Report.

332 National Bureau of Statistics (NBS). The Nigeria poverty profile 2010 report. Central
333 Business District, Abuja, NBS Publication, 2012.

334 National Population Commission (NPC). Official Gazette of 2006 Census of North-East
335 Nigeria. Abuja: NPC, 2006.

336 Obadan M. Analytical Framework for Poverty Reduction: Issues of Economic Guide Versus
337 other Strategies. Annual Conference of Nigerian Economic Society, Obaseki ed.
338 Nigeria Economic Society, Ibadan, 1997; pp. 367-382.

339 Okonkwo N. Rural Poverty: a cog in the development Wheel? 2010; Retrieved June 16, 2009
340 from <http://media21.geneva.org/index.php>.

341 Pinstrup-Anderson P, Lorch P, Rose GM. *Global Security: A Review of the Challenges: 2020*
342 *vision*. Washington D.C: IFPRI, 2001.

343 Rahji MAY, Adeoti AI. Determinants of agricultural credit rationing by commercial banks in
344 southwestern, Nigeria. *International Research Journal of Finance and Economics*,
345 2010; 5: 152-160.

346 Umeh JC, Ogah JC, Ogbanje C. Socio-economic characteristics and poverty among small-
347 scale farmers in Apa Local Government Area of Benue State, Nigeria. *International*
348 *Conference on Food and Agricultural Sciences*, IPCBEE, IACSIT Press, Singapore,
349 2013; 55: 106-111.

350 United Nations Development Programme (UNDP). *Human Development Indices*. New York:
351 Oxford University Press, 2000.

352 United Nations. *The Global Multidimensional Poverty Index by the United Nations*. 2015.
353 Available online @ <http://www.dataforall.org/dashboard/ophi/index.php/>, Accessed
354 on 2nd March, 2015.

355 **World Bank. *Poverty and Welfare in Nigeria*. Lagos: Federal Office of Statistics, 1999.**
356