

**EFFECTS OF AGRIBUSINESS ENTERPRISE PERFORMANCE ON POVERTY ALLEVIATION  
AMONG AGRIBUSINESS ENTREPRENEURS IN IKWUANO LOCAL GOVERNMENT AREA OF  
ABIA STATE, NIGERIA.**

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### ABSTRACT

The study analyzed the performance of agribusiness enterprises on poverty alleviation among agribusiness entrepreneurs in Ikwuano local Government Area in Abia state. A well-structured questionnaire was used to collect data from the respondents. Data analyzed were carried out using descriptive statistics such as mean, frequencies, percentage and inferential statistics like regression analysis. Result showed that The poverty incidence for respondents was 0.32 and the poverty gap was 0.26. Result on the role of agribusiness enterprise in poverty alleviation shows that food security has on the average the highest mean ( $X= 4.22$ ), this was followed by Income Generation which has mean of ( $X= 3.90$ ); while “corporate social responsibility, employment and structural transformation have mean of 3.83, 3.73 and 3.25 respectively. Multiple regression result on factors influencing performance of the agribusiness enterprises in Ikwuano Local Government Area shows that the values of  $R^2$  of 0.822 and the number of staff, experience, education and amount of credit were the significant factor influencing the performance of the enterprises. Result on constraint of agribusiness enterprise shows inadequate capital has on the average the highest mean ( $X= 4.40$ ); this was followed by lack of appropriate technology which has mean of ( $X= 4.33$ ); while “high transportation cost, poor policy articulation, inadequate infrastructure, inadequate market information and no incentives have mean of 3.63, 3.50, 3.83 and 3.2,5 respectively. Institutional reforms, such as credit should be vigorously pursued to avail more individual on the increased participation in the agribusiness venture.

**Keywords: Agribusiness Enterprise, performance, Poverty Alleviation Ikwuano, Abia State.**

### INTRODUCTION

Agriculture is recognized as a fundamental instrument for stemming and reversing the worsening poverty, food insecurity and natural resources degradation trends in sub-Saharan Africa. Despite years of commitments in agricultural research and development with evidences of achievements, hunger and poverty continue to confound the countries in the region (Damisaet *al.*, 2011). Nigeria is one of the most resource-endowed nations in the world. But socio-economically, Nigerians are also among the poorest in the world (Etimet *al.*, 2009). Hence, there is a persisting paradox of a rich country inhabited by poor people, which has been the subject of great

concern for many years, but more especially in the last decade (Etim and Patrick, 2010).

Poverty prevalence is one of the largest challenges of mankind in the 21st century (Abimbolaet *al.*, 2011). However, this problem is hard to define and as such many different meanings and definitions are resorted to in the development field (Klugman, 2002). Poverty as the inability to attain a minimal standard of living, measured in terms of basic consumption needs or the income required to satisfy them. This definition considers poverty in absolute terms. To measure poverty in absolute terms, a poverty line has to be established. Poverty lines are assumed to be a measure of household well-being; it shows the per-capita minimum monetary requirements an individual needs to afford the purchase of basic goods and services (Odeyemi and Olamide, 2013).

Poverty in Nigeria is said to be mainly a rural phenomenon where up to 80% of the population live below the poverty line (National Bureau of Statistic, NBS, 2013; Edoumiekumo, 2014). For many households in Nigeria, especially in the rural areas, agriculture is their primary source of livelihood. Therefore, reducing poverty among the small scale farmers will improve the well-being of a vast majority of the Nigerian poor. The most compelling evidence of successful agriculture-led poverty reduction comes from the Green Revolution in Asia. Under the scheme, poverty in the region declined from 50% in the 1970s to 18% in 2004, while hunger declined from 30% to 16% over the same period (Ideas for Progress, 2009). Growth in agribusiness productivity is considered essential in achieving sustainable economic growth and significant level of food security in an under developed country like Nigeria. Its importance in accelerating the pace of economic growth cannot be over emphasized given the usefulness in determining the efficiency and effective capacity of the nation's production system (Oyeranti, 2008; Nto and Mbanasor, 2008). NIPC (2008) observed that productivity in agribusiness sector is critically important if output is to increase at a sufficient level to meet escalating demand for food. This is true following empirical data which revealed that while food output increased at 2.5%, food demand increased at a rate more than 3.5% due to high rate of population growth of 3.18% (FRN 2009). Efforts by government to ensure that the deficit is augmented will turn to nought if a critical and fundamental review of the determinants of productivity in the subsector is not examined (Ojo, 2003); Improving the production system and

capacity of agribusiness firm in emerging economy like Nigeria through increase productivity is an important policy goal especially now that agribusiness represents an important sector in agricultural commercialization of the economy. Block (1995) asserted that within the context of growth in food and poverty alleviation, emphasis should be placed on productivity increase arising from output maximization at constant or decreasing input. By extension, indices on productivity increase should be predicated upon maximization of output at minimum input (Nto and Mbanasor, 2008). This becomes necessary following the 29% productivity decline in individual agribusiness firms and 2.5% average annual decrease contrary to the targeted average annual productivity increase of 6%. Hence, FARA (2006)

**METHODOLOGY**

The study was carried out in Ikwuano Local Government Area of Abia State, Nigeria. Ikwuano was created on the 27<sup>th</sup> 1991 and the headquarter at Isiala-Oboro which is approximately 14km away from the state capital, Umuahia town. Ikwuano lies between latitudes 5<sup>o</sup>24<sup>1</sup> N and 5<sup>o</sup>30<sup>1</sup> N of the equator and longitudes 7<sup>o</sup> 32<sup>1</sup>E 3<sup>o</sup> 37<sup>1</sup> E of Greenwich Meridian. Ikwuano is made up of four major historic clans vizIbere, Oloko, Ariam and Oboro, has fifty-seven villages and seventeen communities. A stratified multi-stage randomized technique was used in choosing the sample. Ikwuano is made up of four major historic clans vizIbere, Oloko, Ariam and Oboro, from which the existing autonomous communities and villages stemmed from. In the first stage, two of the historic clans namely Ariam and Oboro will be randomly selected from the Local Government Area. In the second stage, three autonomous communities from each clan's communities will be randomly selected. In the third stage, 2 villages were selected from the selected autonomous communities respectively. Finally, from the selected autonomous communities, five agribusiness farmers were randomly selected from each village, given a total of 60 respondents for the study. The primary data were obtained using a well-structured questionnaire.

**Model Specification**

**Poverty status, incidence and gap**

The Foster- Greer- Thorbecke class of poverty measures (FGT) which include the Headcount Index (P0), the Poverty Gap Index (P1), and the severity of Poverty Index (P2). The three indices can be expressed into one general form and distinguish

themselves for the different weights attributed to the distance between expenditure of the poor and the poverty line. P0 attributes equal weight to all expenditure of the poor while P1 and P2 attribute increasingly more weight to distance of expenditure of the poor from the poverty line. They are widely used because they are consistent and additively decomposable (Verme, 2003).

The FGT is presented below:

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left[ \frac{Z - y}{Z} \right]^{\alpha} \tag{3.1}$$

Where,

Z = the poverty line is defined as 2/3 of Mean per capita expenditure

Y = the annual per capita expenditure – poverty indicator/welfare index per capita expenditure

q = the number of poor households in the population of size n,

α = the degree of poverty aversion; α=0; is the Headcount index (P0) measuring the incidence of poverty (proportion of the total population of a given group that is poor, based on poverty line). α =1; is the poverty gap index measuring the depth of poverty that is on average how far the poor is from the poverty line; α=2; is the squared poverty gap measuring the severity of poverty and inequality among the poor.

**Multiple Regression :** Multiple regression result on factors influencing profit was specified as; Y= f (X1, X2, X3, X4, X5, X6, ei), Where:Y= profit of the enterprise,X<sub>1</sub>= Age of the respondents (years),X<sub>2</sub>= number of staff,X<sub>3</sub>= Extension visit (Yes=1, No=0) , X<sub>4</sub>= marketing experience (years),X<sub>5</sub>= Education status (number of years spent in school),X<sub>6</sub>= amount of credit (₦),X<sub>7</sub>=capital input in (₦) (which include depreciation of farm tools and equipment, machinery, etc, interest charges on borrowed capital, repair and maintenance costs etc),ei= error term.; PERF= f (POVe<sub>i</sub>), WherePERF = Performance (net return),POV = Poverty status (defined above )

**Table 1: Poverty indicators.**

Indices like 2/3mean per capita household expenditureon food, health and education were important for the achievement of poverty incidence, poverty gap and poverty severity values as seen in table 1

**Table 1, The result of poverty indicators are presented in table 1.**

Poverty indicators	Values
Poverty incidence	0.32
Poverty gap (Poverty Depth)	0.26
Poverty severity	0.17

**Source: Calculated from Field Survey data, 2018**

The poverty indicators of farmer in Ikwano Local Government Area, Nigeria are shown in Table 2. The incidence of poverty otherwise called the head count ratio (Ayobatele and Amudipe, 1999 and Ezech, 2007) shows that the poverty incidence for farmer was 0.32. This implies that 32.0% of the farmers in the study area were poor because their income fell short of the mean household expenditure used as poverty

line.e poverty gap (poverty depth) also known as the income short fall allows for the assessment of the depth of poverty among the farmers in the study area. From the result of the study, the poverty gap is 0.26. This implies that the poor farmers in the study area require 26% of the poverty line to get out of poverty. Furthermore the poverty severity was 0.17.

**Table 2 Distribution of the respondents based on poverty status**

Poverty status	Frequency	Percentage
Poor	37	61.67
Non-Poor	23	38.33
<b>Total</b>	<b>60</b>	<b>100.0</b>

Source: Field Survey, 2018

The result obtained in table 2 shows that Majority (61.67%) of the households were poor while the rest (38.33%) were non poor. This shows that most of the rural household incomes in the study area were

below the poverty line. Furthermore, the result revealed that households whose 2/3 mean per capita total Expenditure falls below the poverty line were poor.

**Table 3 Multiple regression result on factors influencing profit**

Variables	+Linear	Exponential	Double log	Semi log
Intercept	-3805.778 (-0.52)	3.201 (1.13)	2.505 (6.958)***	-13.957 (-0.77)
Age (X <sub>1</sub> )	5.511 (0.26)	0.008 (0.336)	-11.253 (-0.01)	0.146 (0.52)
Extension (X <sub>2</sub> )	85.818 (1.61)	0.017 (0.407)	166.559 (0.52)	0.095 (0.89)
Number of staff (X <sub>3</sub> )	-80.191 (-1.85)*	0.017 (-2.43)**	-512.078 (-1.19)	-0.314 (-2.16)**
Marketing experience(X <sub>4</sub> )	15.129 (2.89)***	0.001 (0.46)	12478.74 (2.42)**	3.55 (0.20)
Education status (X <sub>5</sub> )	1418.072 (13.94)***	0.291 (7.34)	1374.331 (11.67)***	1.654 (7.88)***
Amount of credit (X <sub>6</sub> )	11.140 (3.40)***	0.003 (2.29)**	11441.46 (2.26)**	3.038 (1.77)*
Capital input (X <sub>7</sub> )	-1.494 (-0.92)	0.000 (0.49)	-874.881 (-1.35)	-0.012 (-0.06)
R <sup>2</sup>	0.822	0.569	0.780	0.600
R <sup>-2</sup>	0.798	0.5107	0.750	0.547
F-ratio	34.39***	9.88***	26.39***	11.17***

Source: field survey (2018) + lead equation, \*\*\* Significant at 1%, \*\* Significant 5%, \*significant at 10%

Multiple regression result on factors influencing profitability of the agribusiness enterprises in Ikwano Local Government Area is presented in Table 3. Linear functional was chosen as the lead equation based on the value of R<sup>2</sup> (coefficient of multiple determination), F-ratio, the number of significant variables and the conformity of regression coefficient with a priori expectation. The values of R<sup>2</sup> of 0.822 means that 82.2% of the total variation observed in the independent variable is accounted in the model. The F-ratio of 34.39 signifies that the model is statistically significant at 1% level of significant.

Number of staff, experience, education and amount of credit were the significant factor influencing the profit of the enterprises.

Number of staff was significant at 10% and negatively related to level of profit made by the respondents. This means that as the staff strength increases, level of profit made decreased vice versa. The implication is that agribusiness enterprises will the more cost incurred in payment of staff salaries, the less profit they make from total sale.

Experience of the agribusiness enterprises was statistically significant at 1% respectively and positively related to the profit level. This means that as the experience of the marketers increases, their profit also increases and vice versa. Increase in experience raises human knowledge and skill to adopt to new marketing techniques which increase their efficiency of marketing (Nwaru, 2004).

Education was significant at 1% level and positively related to profit of the agribusiness enterprise. This implies that as the agribusiness enterprises attain higher level of education, their profit increases. Better education has the effect of enabling individuals conceptualized information on improved marketing and production methods and other related issues capable of enhancing their profit (Apataet *al.*, 2010).

The coefficient of credit was significant at 1.0% alpha level of probability and had a positive effect on profit level of the agribusiness enterprises. It implies that the profit level of the agribusiness venture increases with increase loan advance to them. Barretet *al.*, (2001), reported that households with loan facilities would more likely diversify outside agriculture to reduce risk.

**Table 5: Effect of agribusiness enterprise performance on poverty**

Variable	Coefficient	Z-value	prob
Constant	0.485	3.87***	0.000
Poverty	-0.265	7.27***	0.054
R <sup>2</sup>	0.654		
R <sup>-2</sup>	0.445		
F-ratio	13.14***		

Source: Field survey (2018) \*\*\* Significant at 1%

Ordinary least square regression model on effect of agribusiness performance on poverty among farmers in the study area is presented in table 5. The R<sup>2</sup> value was 0.654 which indicates that 65.4% of the total observed variation in net return was explained by the poverty included in the model. The F-ratio was 13.14

which is statistically significant at 1% indicating a high goodness of fit of the model. On the specific, the result indicates that there is a negative relationship and significant relationship between performance and poverty status. This indicates that an increase in the performance will lead to about 0.654 decrease in poverty status in the area.

**Table 6: Role of agribusiness enterprise in poverty alleviation**

ROLE	SA	A	D	SD	UD	N	MEAN	REMARK
Employment:	22	18	7	8	5	60	3.73	Accepted
Income Generation	25	19	5	7	4	60	3.90	Accepted
Corporate Social Responsibility:	22	22	3	10	3	60	3.83	Accepted
Structural Transformation	10	15	21	10	4	60	3.25	Accepted
Food Security	33	14	8	3	2	60	4.22	Accepted

Source: Computations from reserves survey data 2018

A 5 point likert scale was used to solicit for the respondents' opinion on these selected role of agribusiness enterprise in poverty alleviation. After which a base mark of 3.00 was used to ascertain the role of each factor in poverty alleviation.

From the table above, food security has on the average the highest mean (X= 4.22) i.e. the respondents indicated strong agreement to the question statement; this was followed by Income Generation which has mean of (X= 3.90); while "Corporate Social Responsibility, Employment and Structural Transformation have mean of 3.83, 3.73 and 3.25 respectively.

The result shows that food security was the highest role of agribusiness enterprises in the area. This shows that a successful agribusiness is capable of ensuring availability and entitlement of the people to sufficient food at all times to guarantee healthy life. Agribusiness must ensure food availability (via supply) and encourage entitlement of the people with plenty alternative commodity bundles for the people. (Haruna and Umar 2011).

Income Generation was the rank second as shown in the chart. The commercial value of agriculture is capable of generating higher incomes. These new income levels are capable of empowering small holder farmers into large holders. The expanded market increases the financial prowess of the inputs suppliers and the market for the processing firms. However sustainability of incomes accruing from agribusiness depends largely on the dynamic link between the farm and the non-farm sectors. When such incomes increase into investible surplus it stimulates growth of the rural non-farm economies and this becomes an important factor in rural poverty alleviation.

Corporate Social Responsibility was ranked third from the chart, this shows that large processing firms are expected to discharge corporate social responsibility to host communities in addition to providing nutritional needs with quality products. This study is inline the work carried out by Taraku, 2004 who argues that as a bulwark of agriculture and industry the company meets the farmer at the rural setting, coordinates his agricultural cooperative

activities with the provision of some inputs and goes back at harvest time to purchase the proceeds and add value to the farmer's family." The best scenario for rural development would be when the majority poor have achieved a shift from those conditions considered unsatisfactory to better standards of worth and sustenance. At this time agribusiness could have engendered wider availability of life fundamentals and given the opportunities generated by agribusiness (jobs, etc) the people would have had the impact of cumulative spirals (economically improved) for freedom from servitude capable of fending for themselves without necessarily depending on government.

Complementarity/Structural Transformation was ranked the fifth, this shows that a strategic link between the farm and nonfarm sectors creates an integrated production structure and a balance between large and small production units. A dynamic agribusiness fuels the growth of the rural nonfarm sector through a number of linkages: while agriculture requires inputs provided by the non-farm enterprises. The rural non-farm sector creates backward integration and forward linkages leading a fast process of structural transformation.

## CONCLUSION

This study investigated the effect of agribusiness enterprise performance on poverty alleviation among Agribusiness entrepreneurs in the study area, the study was conducted in Ikwuamo Local Government Area of Abia State, the result shows that number of staff, agribusiness experience, education and amount of credit were the significant factor influencing the profit of the enterprises, also, the study showed that there was a negative but significant relationship between performance and poverty status. Institutional reforms, such as credit should be vigorously pursued to avail more individual on the increased participation in the agribusiness venture. Also the Government should give to the agribusiness operator loan at minimum interest rate.

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