

AGRIPRENEURSHIP EDUCATION: A TOOL FOR SUSTAINABLE FOOD SECURITY AND POVERTY REDUCTION IN EBONYI STATE

Nwambe Roseline Nwoke (Ph.D)
Department of Agricultural Education,
Ebonyi State College Of Education, Ikwo
Ebonyi State, Nigeria.

Abstract

This study was focused on agriprenurship education: a tool for a sustainable food security and poverty reduction on Ebonyi State. Descriptive survey design was used. Simple sampling technique was used to select 180 farmers made up of 90 rural farmers and 90 urban farmers. Three research questions and three null hypothesis guided the study and was tested at 0.5 level of significance. Four points Likert scale questionnaire was used for data collection, and had a reliability index of 0.89. The instrument was validated by experts. Mean and standard deviation were used to answer the research questions while t-test statistics was used to test the null hypothesis. The findings of the study indicated that agriprenurship is a veritable tool in the sustenance of food production and poverty reduction though the sector has many challenges such as: inconsistent and weak implementation of agricultural programmes, corruption, multiple taxation, poor credit facilities, insecurity etc. The result of the null hypothesis shows no significant difference in the mean responses of the rural and urban farmers on the challenges of agriprenurship in addressing food insecurity and poverty reduction. Some of the recommendations include: Government should adequately fund agricultural sector and subsidize agricultural inputs. Agricultural schemes and programs should be sustained irrespective of changes in the administration.

Keywords: Agriprenurship, Food Security, Poverty Reduction, Nigeria.

Introduction

The level of poverty and hunger faced by Nigerians today is scaring and unacceptable. The era of three square meals per day for many families is far gone along with the quality of such meals. Kwashiorkor cases and its attendant problems are back in full swing especially in rural families. Despite the numerous policies that had been and being implemented by various administrations, Nigeria and Africa at large are yet to achieve food and nutrition security (Okonkwo, 2023). According to statistics, Nigeria contributes 58.0 percent of the global hunger problems; at 14 million go hungry daily in the country and about 12:1 million people are hungry or malnourished (Rasaq, 2021). While some people couldn't sleep because of hunger, others, the rich and well fed could not sleep because of fear of the hungry.

There is, the need to tap into agricultural activities and promote agriprenurship so as to control the rate of unemployment, ensure food

security and reduce poverty level in Nigeria. Ito *et al* (2019) defined agriprenurship as all enterprises derived from and around agricultural production (food production, seed supply, agrichemicals, and farm machinery), distribution, processing, marketing and retail sales. Agriprenurship involves innovative ways of cultivation, planting, application of fertilizers, processing of farm produce and converting such into finished products, and conveying them to the point of sales with the use of promotional efforts (Eze, 2016).

Agriprenurship growth does foster economic development by generating employment and creating job through the increase of micro small and medium enterprises (Sancho, 2010). Innocent (2017) noted that the present economic challenges that Nigeria is facing are blamed on over dependence on the oil sector, bad governance corruptions, leadership failure, policy inconsistency, over dependence on imported goods and ostensible neglect of the

agricultural sector. However, agripreneurship, if given the right attention, is capable of taking the country out of the present economic and poverty crisis and also create enough job for its teeming population. More scientific research is necessary in discovering and exposing more reliable and possible ways of meeting the needs of the agricultural sector if food security and poverty level is to be achieved, hence this study.

Statement of the Problem

Food and poverty level has been a challenging factor in Ebonyi State and indeed Nigeria. Many administrations has over the years, introduced different policies and programmes with the intension of improving on food availability without success. The agricultural sector had also, through various enterprises, tried to mitigate the problem but such efforts had failed to achieve the desired result of rooting out food shortages and reducing poverty level in Nigeria.

Some medium and small scale agripreneurs who could not contain some the challenges encountered abandoned the sector for less challenging businesses. The ageing farmers population and the quest for quick wealth without hard labour by some youths had adversely further affected the agricultural sector.

All these had worsened the food crisis and increased the level of poverty. On this note, there is an urgent need to carry out more research into the ways of effectively combating food crisis and poverty reduction through agripreneurship, hence this study.

Purpose of the Study

The main purpose of the study is to investigate agripreneurship education as a tool for sustainable food security and poverty reduction in Ebonyi State. Specifically; the study seeks to find out:

1. Ways through which agripreneurship serves as tool in sustaining food security and reduce poverty in Ebonyi State.
2. The influence of government agricultural programmes and policies on agripreneurship towards sustaining food security and reducing poverty in Ebonyi

State.

3. The challenges of agripreneurship in sustaining food production and reducing poverty in Ebonyi State.

Significance of the Study

Significantly, the findings of the study will provide empirical justification for the study by providing verifiable facts and knowledge on the role of agripreneurship in tackling poverty and food insecurity in Ebonyi State. The outcome of the study will provide some practical implications for the government and micro-finance institutions, in designing policies and programmes towards the reduction of poverty. The non-governmental organizations will be motivated into designing, monitoring and evaluation of poverty reduction programmes that will boost the agricultural sector and guaranty food security. The large and small scale farmers will equally benefit from the findings of the study by learning how to tackle some of the challenges inherent in the sector and thereby grow their business. The result of the study will also serve as bases for further study, seminars, works and public orientation programme to enlighten the public on the benefits of engaging in agripreneurship for sustainable development and poverty reduction in Ebonyi State.

Research Questions

1. In what ways can agripreneurship serves as a tool for sustainable food security and reduce poverty in Ebonyi State?
2. What is the influence of government agricultural policies and programmes on agripreneurship towards sustaining food security and reduction of poverty in Ebonyi State?
3. What are the challenges of agripreneurship in sustaining food security and reducing poverty in Ebonyi State

Hypothesis

The hypothesis was tested at 0.05 significant level.

H₀: There is no significant difference in the mean rating of the respondents in the urban and rural areas on the role of

agriprenurship in sustaining food security and poverty reduction in Ebonyi State.

H₀₂: There is significant difference in the mean rating of respondents in urban and rural areas on the influence of government agricultural policies and programmes on agriprenurship in sustaining food security and reducing poverty in Ebonyi State.

H₀₃: There is no significant difference in the mean rating of respondents in the urban and rural areas on the challenges of agriprenurship in sustaining food production and reduction of poverty in Ebonyi State.

Methodology

Design of the Study

Descriptive survey was used for the study.

A descriptive survey design is a study in which information are collected from small sample of a large population to enable the researcher describe in a systemic manner and interpret the characteristics features and facts about the thing that exists (Abonyi, 2006). In survey research design, the purpose is to identify the characteristics of a defined population with respect to specific variable (Eze, 2005). Therefore, this study seeks to find out the role of agriprenurship education as a tool for sustainable food security and poverty reduction in Ebonyi State.

Area of the Study

The study was carried out in Ebonyi State. There are three agricultural zones in the state, namely: Ebonyi North, Ebonyi Central and Ebonyi South zones. The three zones also are made up of urban and rural areas.

Population of the Study

The population of the study is made up of 540 owners of agribusiness enterprises in Ebonyi state.

Sample and Sampling Techniques

From the population of the study, a total of 60

respondents were randomly selected from each of the 3 agricultural zones and that gave rise to 180 entrepreneurs. Further random sampling was used to select 30 respondents from the urban and rural areas of each zone respectively.

Instrument for Data Collection

The researcher's self developed questionnaire titled "Agriprenurship Education: Tool for Food Security and Poverty Reduction Questionnaire (AETFSPRQ)" was used to collect data from the respondents. The questionnaire has two sections. The A section contains the profile of the respondents while the B section is made up of the research questions. The research question was arranged in Likert Scale format of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) and has rating scale of 4,3,2,1 respectively. Items with a score of 2.5 and above means agreed while items with score less than 2.5 means disagree. The 2.5 score was got thus:

$$4+3+2+1=10 \text{ then } 10 \div 4 = 2.5.$$

Validity of the instrument

The instrument was subjected to face and content validation by three experts, one from the Faculty of Education and two others in Measurement and Evaluation from Ebonyi State University, Abakaliki.

Reliability of the instrument

The reliability of the instrument was obtained through a Pilot test on 50 agriprenurs that were not part of the study at two different intervals. The result obtained was subject to internal consistency using Cronbach Alpha Method and reliable index of 0.89 was gotten indicating high reliability of the instrument.

Method of Data Analysis

The result from the data was analyzed using mean score and standard deviation. Any mean with 2.50 and above indicates agree while means with score below 2.50 indicates disagree. The null hypothesis was tested using Z- test statistics under 0.05 alpha level of significance. Decision on the hypothesis was based on: Reject H₀ if Z-calculated is greater than the Z- critical (1.96) and

accepted if the Z- calculated is less than Z-critical.

Data Analysis

The data and the result analysis are presented in

tables according to the research questions.

Research Question 1:

In what ways can agripreneurship education serve as a tool for sustainable food security and poverty reduction in Ebonyi State:

Table 1: Mean score and standard deviation of respondents in the urban and rural areas on the ways agripreneurship education can serve as a tool for sustainable food security and poverty reduction.

S/N	VARIABLES	URBAN AREA			RURAL AREA			URBAN/RURAL AREAS		
		$\bar{X}$	SD	RK	$\bar{X}$	SD	RK	$\bar{X}$	SD	RK
1.	Provision of adequate food for the growing population	2.51	0.81	A	3.01	0.78	A	2.76	0.80	A
2.	Supply of adequate raw materials to a growing industrial sector	2.95	0.78	A	2.71	0.87	A	2.83	0.83	A
3.	As a major source of employment	3.10	0.75	A	3.21	0.73	A	3.16	0.74	A
4.	Provision of stable income from livestock and crop production and processing	2.96	0.84	A	3.28	0.68	A	3.12	0.76	A
5.	As a major source of foreign exchange earning	2.86	0.82	A	2.81	0.81	A	2.84	0.85	A
6.	Provision of market for the products of the industrial sector.	2.82	0.82	A	2.78	0.80	A	2.80	0.81	A
7.	Making Nigeria Self-sufficient in the production of livestock and crops	3.07	0.70	A	2.57	0.69	A	2.82	0.70	A
8.	Protection of farmers from vagaries of the weather and risks in livestock and crop production.	3.00	0.69	A	2.95	0.78	A	2.98	0.74	A
9.	Through effective use of the ecosystem for expanded animal and crop production	3.02	0.63	A	2.81	0.84	A	2.92	0.74	A
10.	Creation of enabling environment for skill transferring agribusiness	3.08	0.83	A	2.51	0.81	A	2.80	0.82	A
	Grand Mean	2.94	0.77	A	2.86	0.71	A	2.61	0.71	A

Note: $\bar{X}$ = Mean, SD = Standard Deviation A = Accepted, RK= Remarks Decision rule = 2.50

In table 1, the result shows a total agreement that all the variables tested are ways agripreneurship can serve as a tool for sustainable food security and poverty reduction in Ebonyi State.

Research Question 2:

What is the influence of government agricultural policies and programmes on agripreneurship towards sustaining food security and reduction of poverty in Ebonyi State?

Table 2: Mean Score and standard deviation of respondents on the influence of Government agricultural policies and programmes on agripreneurship as a tool for sustaining food production and poverty reduction in Ebonyi State.

S/N	VARIABLES	URBAN AREA			RURAL AREA			URBAN/RURAL AREAS		
		$\bar{X}$	SD	RK	X	SD	RK	X	SD	RK
1.	Agricultural Development Project (ADP, 1975)	2.64	1.06	A	2.51	1.64	E	2.58	1.65	A
2.	Commodity Boards (1977)	2.37	1.22	D	2.28	1.18	D	2.33	1.20	D
3.	Nigerian Agricultural and Cooperative Bank (NACB, 1973)	2.52	1.68	A	2.50	1.64	A	2.51	1.66	A
4.	National Accelerated Food Production Project (NAFPP,1978).	2.16	1.20	D	2.00	1.01	D	2.08	1.11	D
5.	Commercial Agriculture Credit Scheme (CACS, 2009)	2.16	0.60	D	1.14	0.58	D	1.65	0.59	D
6.	National Schools Agricultural Programme (NSAP 2014)	1.27	0.92	D	1.24	0.86	D	1.26	0.89	D
7.	Nigerian Agricultural Cooperative and rural Development Bank (NACRDB,2000)	2.50	1.64	A	2.51	1.64	A	2.51	1.64	A
8.	River Basin Development authority (RBDA, 1977)	2.11	1.03	D	2.0	1.01	D	2.11	1.02	D
9.	Operation Feed the Nation (OFN, 1976)	2.64	1.66	A	2.67	1.68	A	2.66	1.67	A
10.	National FADAMA I., II, III (1993)	2.60	1.61	A	2.61	1.61	A	2.61	1.61	A
11.	National Agricultural Land (NALDA, 1991)	2.03	1.14	D	2.00	1.10	D	2.02	1.12	D
	Grand Mean	2.27	1.31	D	2.13	1.28	S	1.98	1.29	D

The result in table 2 in urban and rural areas, indicate that ADP (2.64 and 2.51), NACB (2.52 and 2.50), NACRD (2.50 and 2.51), OFN (2.64 and 2.67) and FADAMA I, II, III (2.60 and 2.61) are the agricultural programmes that had minor impact on agripreneurship in sustaining food production and poverty reduction in the study area. However, the grand mean scores both in the

urban (2.27) and rural (2.13) areas show that the programmes failed totally in making any reasonable impact on agripreneurs in Ebonyi State.

Research Question 3: What are the challenges of agripreneurship in sustaining food production and poverty reduction in Ebonyi State.

Table 3: Mean score and standard deviation of respondents in the urban and rural areas on the challenges of agripreneurship in sustaining food production and reduction of poverty in Ebonyi State.

S/N	VARIABLES	URBAN AREA			RURAL AREA			URBAN/RURAL AREAS		
		$\bar{X}$	SD	RK	$\bar{X}$	SD	RK	$\bar{X}$	SD	RK
1.	Inconsistent and weak implementation of agricultural programmes	3.26	0.42	A	3.00	0.98	A	3.13	0.70	A
2.	Lack of skilled work force	3.65	0.41	A	3.54	0.48	A	3.60	0.45	A
3.	Ageing farmers' population	3.64	0.41	A	3.60	0.43	A	3.62	0.42	A
4.	Economic Instability	3.00	0.98	A	2.78	1.09	A	2.89	1.04	A
5.	Multiple Taxation	2.95	0.57	A	3.02	0.97	A	2.99	0.77	A
6.	Corruption	3.00	0.98	A	3.35	0.53	A	3.18	0.76	A
7.	Security challenges	3.61	0.46	A	3.68	0.42	A	3.65	0.44	A
8.	Poor infrastructures	2.78	1.09	A	3.00	0.98	A	2.89	1.04	A
9.	Poor Credit and access management	2.91	0.58	A	2.58	1.12	A	2.75	0.85	A
10.	Poor quality livestock feed	3.02	0.97	A	3.65	0.41	A	3.34	0.69	A
	Grand Mean	3.22	0.69	A	3.20	0.74	A	3.20	0.72	A

Note: X = Mean, SD = Standard Deviation RK= Remarks, A = Agreed, Decision rule = 2.50

The result in table 3 revealed that all the variables tested have a mean score above 2.50 both in the urban and rural areas. This is a clear indication that the variables are challenges facing agripreneurs in Ebony State.

Hypothesis 1: There is no significant difference in the mean rating of respondents on the role of agripreneurship as a total for sustainable food production and poverty reduction in Ebonyi State

Table 4: Z-test of independent mean between the opinions of respondents in the urban and rural areas on the role of agripreneurship as a total for food security and poverty reduction.

S/N	LOCATION	N	X	SD	DF	LS	Z-Cal	Z-Crit.	REMARK
1.	Urban Area	90	2.94	0.77	160	0.05	0.78	1.96	Accepted
2.	Rural Area	90	2.86	0.71					

Note: N= Number of respondents, X = Mean, Standard Deviation, DF= Degree of Freedom, Ls – Level of Significance

Table 4 above shows that the Z-calculated (0.78) is less than the Z- critical (1.96). This is an indication that there is no significant difference between the opinion of respondents in the urban and rural areas. Therefore, the null hypothesis is accepted.

Hypothesis 2: There is no significant difference in the mean rating of respondents on the influence of Government agricultural programmes on agripreneurship in sustaining food security and poverty reduction.

Table 5: Z-test of independent mean between the opinions of respondents in urban and rural areas on the influence of government agricultural programmes on agripreneurship is sustaining food security and poverty reduction.

S/N	LOCATION	N	$\bar{X}$	SD	DF	LS	Z-Cal	Z-Crit.	REMARK
1.	Urban Area	90	2.27	1.31	160	0.05	0.19	1.96	Accepted
2.	Rural Area	90	2.13	1.28					

Note: X = Means, SD = Standard Deviation, DF= Degree of Freedom N= Number of respondents and LS = Level of significance.

The result of the H_0 as presented in table 5 indicates that the Z-calculated (0.19) is less than the Z- critical (1.96) and the null hypothesis therefore is accepted. This means that there is no significant difference on the opinion of the respondents in the urban and rural areas regarding the influence of government

agricultural programmes on agripreneurship in sustaining food security and poverty reduction.

Hypothesis 3: There is no significant difference in the mean rating of respondents on the challenges of agripreneurship in sustaining food production and poverty reduction.

Table 6: Z-test of independent mean between the opinions of respondents in urban and rural areas on the challenges of agripreneurship in sustaining food production and poverty reduction.

S/N	LOCATION	N	$\bar{X}$	SD	DF	LS	Z-Cal	Z-Crit.	REMARK
1.	Urban Area	90	3.22	0.69	160	0.05	0.32	1.96	Accepted
2.	Rural Area	90	3.20	0.74					

Note: X = Means, SD = Standard of Deviation, DF= Degree of Freedom N= Number of respondents and Ls = Level of significance.

In table 6 above, the null hypothesis is accepted because the Z-calculated (0.32) is less than the Z-critical (1.96). This supports the no significant difference on all challenges faced by agripreneurship in the urban and rural areas in sustaining food production and poverty reduction.

Discussion

The result of the study has shown that agripreneurship is a veritable tool necessary for combating food insecurity and poverty reduction in the area of study, as indicated by the 10 variables tested both in the urban and the rural areas.

It could therefore be said that there is a direct link between agripreneurship and economic growth and productivity. The finding of this study is supported by Okonkwo *et al* (2023) who opined that in Nigeria, there is a high rate of unemployed

youths who need to be engaged in entrepreneurial activities to ensure a stable and sustainable economy. Opportunities abound in agriculture and agro-allied industries that can help in the improvement of people's income thereby reducing not only poverty but can create employment for the ever increasing jobless youths, the result of this study has also affirmed that agripreneurship is a very strong sector not only in the provision of food and employment, but also indirectly helps to take-away the able bodied and restless youths, out of the streets, thereby reducing the rate of crime and lawlessness in the country. For the entrepreneurs to be effective in creating wealth and employment opportunities, the government needs to create an investor-friendly environment and encompassing stable macro-economic policies (Lawal *et al*, 2023). As exposed in this study, agripreneurship is capable of not only sustaining the economy but can eradicate poverty

and provide a very strong base for the sustenance of food security in Nigeria as a whole and Ebonyi State in particular.

The result of research question 2 hypothesis 2, indicated that many of the government agricultural programmes failed in meeting up with the objectives of helping the agricultural sectors to grow and maintain self-sufficiency in basic food supply and attain food security. Out of the 11 variables tested, only ADP, NACB, NCARDB, OFN and FADAMA I, II, III had a little positive impact on agripreneurship towards the sustenance of food security and poverty alleviation in the study areas as attested to by the respondents both in the urban and rural areas. This result is supported by Rasqa (2021) who noted that Nigeria failed to achieve self-sufficiency and food security through government programmes due to weak implementation and lack of follow-up mechanisms.

Furthermore, the results of the study presented in table 3 hypothesis 2 indicated that the 10 variables tested are challenge as of agripreneurship in meeting up with food security and poverty reduction in Ebonyi State. Due to the unsolved challenges, “about 14 million Nigerians go hungry daily (Rasqa 2023) Fasua (2006) grows or develops without efficient agripreneurial practice. One of the challenges arising from the study is aging population of the farmers. This challenge is further compounded by lack of able bodied youths with the needed skills necessary to support business growth and innovation. The country's poor state of infrastructures and insecurity are some of the problem that has equally impacted negatively on

the growth and impact agripreneurship in the study area.

Conclusion and Recommendations

The following conclusions are drawn from the study:

Agripreneurship is a veritable tool in the sustenance of food production and poverty control. However, the full impact and potential of the sector is yet to be achieved due to many challenges such as: Weak and inconsistent agricultural programmes, corruption, insecurity, multiple, taxation, poor credit facilities, ageing farmer's population, among others.

1. Government must create an investor-friendly environment and stable macro-economic policies For the agricultural sector to be effective in wealth, food and employment creation.
2. There is need to revamp the sector especially in the area of science and technology.
3. Agricultural programs and policies must be backed by effective and sustained implementation irrespective of the changing administrations.
4. Government should fund the agricultural sector and also provide subsidize the cost of farm imputes.
5. The findings of research work by scientist should be implemented by the government, entrepreneurs and indeed the general public especially those in agri-business.
6. More research work still needs to be done in all the areas of challenges as it will help to create enough road-map and information necessary to achieve full success in the agricultural sector.

References.

- Asiabak C.C. (2002). Agricultural extension: A handbook for development practitioners. Omoky, River State. Molystem United Services.
- Cerin P. (2016). Bringing economic opportunity into line with environmental influence. *Ecological econo*: 209-225.
- Eze O.N (2005). What to write and how to write a step-by step guide to educational research proposal and report. A publication of the institute of Education, University of Nigeria, Nsukka.
- Fasua K.O (2006). Entrepreneurship theory, strategy and practice, Abuja Bee printing Press: In Lawal, S.C Rufus E, I., Bassey G.E., Eno O.O and Cecilia J. (2023). Entrepreneurship development poverty reduction in Nigeria. Paradigm Academic Press, Law and Economy: 2 (9) 10-14
- Ifeanyi W.O., Benjamin A., Ijeoma E.O., Nzemeka C. and Beatrice O.E. (2023). The role of agriprenurship in enhancing climate resilience for sustainable economic growth in Nigeria. *Journal of Environmental Science and agricultural research*: 1 (1) 1-6. D01: doc: org/10.61440/JESAR 2023 VL 10.
- Innocent Otache (2017). Agriprenurship development: A strategy revamping the Nigeria's Economy from recession. *African Journal of Economic and Management Studies*: 8 (3) pp. 102-109
- Rasaq O. (2021). An overview of Federal Government Policies and Programmes for food security in Nigeria. *Central Bank of Nigeria Economic and financial Review* 59 (4). 53-53