



<https://doi.org/10.5281/zenodo.18300834>

Evaluation of the Impact of Low Level of Students' Enrollment into Agricultural Education Programme in Colleges of Education in South Eastern Nigeria

C. U. Arubalueze Ph.D.

Department of Agricultural Education, Nwafor Orizu College of Education, Anambra State, Nigeria.
chidiarubalueze@gmail.com; 07034876816

ABSTRACT

This study examined the impact of low level of students' enrollment into Agricultural Education Programme in Colleges of Education in South Eastern Nigerian. The study was guided by four specific objectives to determine the trend of students' enrollment in Agricultural Education from the 2020/2021 to 2024/2025 academic sessions, to identify the factors responsible for low enrollment, to ascertain the effects or impact of low enrollment into Agricultural Education Programme and to examine the strategies for increasing Students' enrollment in Agricultural Education in Colleges of Education in the region. The study adopted a descriptive survey research design. The population of the study comprised 60 lecturers, 150 Students' and 30 administrators, totalling 240 respondents drawn from five Colleges of Education in South Eastern Nigerian. A sample size of 120 respondents, consisting of 30 lecturers, 75 Students', and 15 administrators was selected using proportionate stratified random sampling techniques. A structured questionnaire titled "Impact of Low Students' Enrollment in Agricultural Education Questionnaire (ILSEAEQ)" was used for data collection. The instrument was validated by experts in Agricultural Education and Measurement and Evaluation, while its reliability was established using the cronbach Alpha method, which yielded a coefficients of 0.86, indicating high reliability. Data collected were analysed using mean and standard deviation to answer the research questions. The findings of the study revealed that the trend of Students' enrollment in Agricultural Education across the five academic sessions (2020/2021 – 2024/2025) has been consistently low ranging from 12 to fewer than 4 Students' per session in the selected Colleges of Education in the region. It was also found that factors such as poor funding, inadequate facilities, societal perception of Agriculture as poor man's job, limited career prospects and lack of awareness contribute significantly to the low Students' enrollment. The study further showed that the impact of low Students' enrollment includes shortage of qualified Agricultural teachers, underutilizations of facilities, threat to programme sustainability, low productivity in the Agricultural sector, and poor contribution to national food security. Moreover, effective strategies for increasing students' enrollment identified include curriculum review, government incentives and scholarship, improved infrastructure, effective career guidance, public awareness campaigns and institutional collaboration with Agricultural industries.

Keywords: Agricultural Education, Students' Enrollment, Colleges of Education, South Eastern Nigeria.

INTRODUCTION

Background of the study

Agricultural Education is a Programme that is designed to provide Students' with competencies to make them aware of and prepared for the world of work. Agriculture is a dynamic rapidly changing industry that has an exciting future. The Programme concentrates on the development of essential technical skills that are vital to the success of people entering a career in agriculture (FAO, 2007). People are needed who not only have an understanding of the ethical and Philosophical issues at which work will be done. According to New Partnership for Africa's Development (NEPAD) (2002), agriculture provides 60 percent of all employment, constitutes the backbone of most African economies in most countries. It's the largest contributor to GDP; the biggest source of foreign exchange; still accounting for about 40 percent of the continents hard currency earnings; and the main generator of savings and tax revenues. The Agricultural

sector is also still the dominant provider of industrial raw materials with about two thirds of manufacturing value-added in most African countries being based on Agricultural raw materials. Agricultural Education therefore will help in boosting Agricultural sector because when there are many agricultural experts, quality work will be done.

The number of student's pursing Agricultural careers had been declining since 1970; Olaitan (2004) opined that the Nigeria youths prefer white collar jobs to a career in agriculture, which is considered a dirty job. Zoldoske (2006), further states that "nearly one-third of all Agricultural job opportunities will be filled by individuals trained outside agriculture due to serious shortage of Agricultural Education graduates. Hence, the study will tend to evaluate the impact of low level of students' enrollment into Agricultural Education in Colleges of Education in South Eastern Nigeria.

State of the Problem/Justification

The low enrollment of Students' in Agricultural Education Programme in Colleges of Education in Nigeria poses a significant threat to the country's Agricultural development and food security. This trend may lead to a shortage of qualified teachers, extension agents and practitioners, ultimately affecting Agricultural productivity and economic growth. This study will provide insights into the factors contributing to the low enrollment of students' in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria. The findings of this study will be useful for policy makers, educators and stakeholders in Agricultural Education, as they will provide a basis for developing strategies to improve students' enrollment and enhance the quality of Agricultural Education Programme.

Objective of the Study

The general objective of the study is to evaluate the impact of low level of students' enrollment into Agricultural Education Programme in Colleges of Education in South Eastern Nigeria. Specifically, the study seeks to:

- Examine the current students' enrollment trends in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria for the last five academic session (2020/2021 – 2024-2025).
- Determine the factors contributing to low students' enrollment rates in Agricultural Education Programme in Colleges of Education in South Eastern Nigerian.
- Evaluate the effects or impact of low students' enrollment in Agricultural Education in Colleges of Education in South Eastern Nigeria.
- Findout the strategies to increase enrollment of students' into Agricultural Education Programme in College of Education in South Eastern Nigeria.

Project Impact (Significance of the study)

The study is significant for several stakeholders.

- i. It will provide region specific evidence about enrollment trends and the downstream effects on teacher supply and school Agricultural instruction, helping to inform interventions by State Ministries of Education and National Commission for Colleges of Education (NCCE)
- ii. Findings will highlight institutional constraints (facilities, funding, Staffing) and practical solutions to make Agricultural Programmes more attractive and sustainable.
- iii. By clarifying risks to teachers supply and outreach activities, the study will support planning to ensure continuity of practical Agricultural instruction and school community demonstration projects.
- iv. The research will fill an evidence gap on the South East specifically and provide baseline data for interventions.

Scope of the Study.

The study was restricted to evaluate the impact of low level of students' enrollment into Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

Research Questions

The following research questions guided the study:

1. What are the current student's enrollment trends in Agricultural Education in Colleges of Education in South Eastern Nigeria.
2. What factors contribute to low student's enrollment rates in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.
3. What are the effects or impact of low student's enrollment in Agricultural Education in Colleges of Education in South Eastern Nigeria.
4. What strategies can be employed to increase student's enrollment into Agricultural Education in Colleges of Education in South Eastern Nigeria.

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive survey research design. According to Nworgu (2015), a descriptive survey design seeks to collect data from a sample of a Population in order to describe existing conditions, attitudes or practices. It is suitable for this study because the researcher aimed to obtain the opinions of lecturers, Students' and administrators on the trend, causes, impact or effects, and strategies related to low level of Students' enrollment into Agricultural Education Programmes in Colleges of Education in South Eastern Nigeria.

Area of the Study

The area of the study covered the South Eastern geopolitical zone of Nigeria, comprising five states; Abia, Anambra, Ebonyi, Enugu and Imo. Each of these states hosts at least one Colleges of Education offering Agricultural Education either as an NCE or Degree (In Affiliation with Universities) Programme.

Colleges Include:

1. Abia State Colleges of Education (Technical) Arochukwu
2. Nwafor Orizu Colleges of Education Nsugbe, Anambra State.
3. Ebonyi State Colleges of Education , Ikwo
4. Federal Colleges of Education , Eha-Amufu Enugu State
5. Imo State Colleges of Education , Ihihitte Uboma.

These institutions were selected because they run Agricultural Education Programme.

Population of the Study

The target population of this study consisted of all lecturers, students' and administrative offices in the departments of Agricultural Education across the selected five Colleges of Education in South Eastern Nigeria. Based on institutional records, the total population was 240 individuals, broken down as follows;

Category	Estimated Population
Agricultural Education Lecturers	60
Students'	150
Administrative officers	30
Total	240

Sample and Sampling Technique

A sample Size of 120 respondents was selected using proportionate stratified random sampling to ensure fair representation of the three strata (Lecturers, Students' and Administrative officers). This approach is justified as it gives every sub-group within the population a proportional chance of being selected (Iwu,2019). The distribution was as follows:

Category	Population	Sample size
Lecturers	60	30
Students'	150	75
Administrative officer	30	15

Total	240	120
-------	-----	-----

Instrument for Data Collection

The main instrument used for data collection was a structured questionnaire titled, “Impact of Low level of Students’ enrollment into Agricultural Education Questionnaire (ILSEAEQ)”. The questionnaire was divided into five sections (A-E).

Section	Focus
A	Demographic Information (Institution, role, gender etc.)
B	Trends of Students’ enrollment in Agricultural Education (2020/2021 – 2024/2025)
C	Factors causing low Students’ enrollment
D	Effects / impact of low student enrollment
E	Strategies for increasing Students’ enrollment

Items in section B-E were structured on a 4 points likert scale.

Validation of the Instrument

To ensure the validity of the instrument, the draft questionnaire was submitted to three experts, two from the Department of Agricultural Education and one from Measurement and Evaluation. Their suggestions on clarity, content coverage and language were used to revise the final version of the questionnaire.

Reliability of the Instrument

The reliability of the instrument was determined using the cronbach Alpha reliability method after administering 20 copies of the questionnaire to respondent outside the main study area. The internal consistency coefficient obtained was 0.87, indicating a highly reliable instrument.

Method of Data Collection

The researcher personally distributed and retrieved the questionnaire with the help of departmental heads, research assistant and student leaders in each Colleges.

Method of Data Analysis

All data collected were analysed using descriptive statistical tools such as frequency counts, mean and standard deviation.

PRESENTATION OF RESULTS

Research Question 1:

What are the trends of low levels of students’ enrollment in Agricultural Education in Colleges of Education in South Eastern Nigeria from 2020/2021 to 2024-2025?

Table 1: Trends of students’ enrollment in Agricultural Education (2020/2021 – 2024/2025).

S/N	COLLEGES EDUCATION	OF 1	2022/202 2021/2022	2022/2023	2023/202	2024/202	TOTAL	MEANS
1	Abia State Colleges of Education (Technical) Arochukwu	9	7	5	4	3	28	5.6
2	Nwafor Orizu Colleges of Education Nsugbe, Anambra State.	11	8	6	4	2	32	6.4

3	Ebonyi State Colleges of Education , Ikwo	12	9	6	5	3	35	7.0
4	Federal Colleges of Education , Eha-Amufu Enugu State	10	8	6	4	3	31	6.2
5	Imo State Colleges of Education, Ihitte Uboma.	8	6	5	3	2	24	4.8
	TOTAL/MEAN	50	38	28	20	14	150	6.0

Table 1 showed a consistent decline in student's enrollment across five academic sessions, dropping from an average of 12 students' in 2020/2021 to less than 4 in 2024/2025 per Colleges. The overall mean of 6.0 students' indicated that Agricultural Education attracts very few students' yearly.

Research Question 2:

What are the factors causing low level of student's enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria?

Table 2: Mean Ratings of Respondents on Factors Responsible for low student's enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

S/N	ITEMS	N	120	SA	A	D	SD	MEAN	DECISION
1	Poor societal perception of agriculture as a dirty and low class occupation	120	60	48	8	4	3.37	Agreed	
2	Breaking down of agriculture into different components such as Animal Husbandry	120	55	50	10	5	3.29	Agreed	
3	Inadequate funding of Agriculture Education Programme	120	58	50	8	5	3.35	Agreed	
4	Outdated and Insufficient teaching facilities	120	52	52	10	6	3.25	Agreed	
5	Shortage of qualified Agricultural Education Lecturers	120	48	56	10	6	3.22	Agreed	
6	Low employment opportunities for graduates	120	54	50	10	6	3.27	Agreed	
7	Lack of awareness and career counselling at secondary school level	120	50	52	12	6	3.22	Agreed	
8	Neglect of Agricultural Education in government policy planning	120	56	48	10	6	3.29	Agreed	
9	Inadequate practical exposure for students.	120	50	52	10	8	3.20	Agreed	
10	Low motivation and prestige association with teaching careers	120	55	50	9	6	3.28	Agreed	

Table 2 indicated that the respondents agreed with all the ten items relating to research question 2 as the factors causing low level of Students' enrollment into Agricultural Education in Colleges of Education in South Eastern Nigeria.

Research Question 3: What are the effects (Impacts) of low level of students' enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

Table 3: Mean Ratings of Respondents on the effects (Impacts) of low level of students' enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

S/N	ITEMS	N 120	SA	A	D	SD	MEAN	DECISION
11	Shortage of qualified Agricultural Science teacher in secondary schools	120	58	50	8	4	3.37	Agreed
12	Decline in Agricultural Manpower and productivity	120	56	52	8	4	3.33	Agreed
13	Reduced enrollment leads to closure of department	120	50	54	10	6	3.23	Agreed
14	Underutilization of facilities and staff	120	52	52	10	6	3.25	Agreed
15	Decline in food production and research innovation	120	54	50	10	6	3.27	Agreed
16	Weak Agricultural Education system and poor curriculum review	120	50	52	10	8	3.20	Agreed
17	Loss of interest among potential Students'	120	48	54	10	8	3.18	Agreed
18	Reduced number of teachers at primary and secondary levels	120	56	50	8	6	3.30	Agreed
19	Negative impact on national food security	120	58	50	8	4	3.35	Agreed
20	Decline in economic growth and rural development	120	54	50	10	6	3.27	Agreed

Table 3 Indicated that the respondent agreed with all the ten items related to research question 3 as the effects (impacts) of low level of Students' enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

Research Question 4: What strategies can be adopted to increase students' enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria?

Table 4: Mean Ratings of Respondents on strategies to increase students' Enrollment in Agricultural Education Programme in Colleges of Education in South Eastern Nigeria.

S/N	ITEMS	N 120	SA	A	D	SD	MEAN	DECISION
21	Provision of scholarship and bursary awards for Agricultural Education Students'	120	60	50	8	2	3.40	Agreed
22	Adequate Government funding and provision of Modern Facilities	120	58	52	8	2	3.38	Agreed
23	Public enlightenment and awareness campaigns on the importance of Agriculture	120	56	54	8	2	3.37	Agreed
24	Strengthening linkages between Colleges and Agribusiness industries	120	54	52	10	4	3.30	Agreed
25	Curriculum review to include ICT and Mechanized Agriculture	120	55	50	10	5	3.30	Agreed
26	Improved renumeration and working conditions	120	54	52	10	4	3.30	Agreed

27	Establishment of Agricultural demonstration farms in Colleges	120	56	52	8	4	3.33	Agreed
28	Effective career guidance Programme in secondary schools	120	55	50	10	5	3.30	Agreed
29	Encouragement of entrepreneurship based Agricultural courses	120	52	54	10	4	3.28	Agreed
30	Provision of Modern instructional materials and digital learning platforms	120	54	52	10	4	3.30	Agreed

Table 4 indicated that the respondents agreed with all the ten items relating to research questions 4 as the strategies that will increase student's enrollment into Agricultural Education in Colleges of Education in South Eastern Nigeria

Discussion of Findings

The findings of the research question one, revealed a serious downward trend in Agricultural Education Students' enrollment in South Eastern Nigeria. This agree with Agbaje & Olorunfemi, (2024) and Okeke & Uzochukwu (2023), who observed that Agricultural Educatipon Programmes in Nigerian Colleges faces declining student numbers due to limited career prospects, poor motivation and inadequate funding.

Based on research questions two, the following were identified as factors causing low levels of Students' enrollment into Agricultural Education in Colleges of Education in South Eastern Nigeria as poor societal perception of agriculture as a dirty and low class occupation, breakdown of agriculture into different components, inadequate funding, lacking awareness and career counselling at secondary schools among others. This findings corroborated the findings of Ezeanyanwu & Nwosu (2022), who found out that societal bias, poor societal image of agriculture, lack of modern facilities and limited exposure to agribusiness deter Students' from enrolling in Agricultural Education .

Findings on research quesiton three revealed the effects of low studnets' enrollment into Agricultural Education include, shortage of qualified Agricultural science teachers in secondary schools, decline in Agricultural manpower and productivity, decline in food production and research innovation, negative impact on national food security among others. This findings aligns with the findings of Adedokun & Onwuegbuchulam (2023) who reported that shortage of trained Agricultural educators,decline in research productivity threats to food security, weakened Agricultural manpower development and reduced national capacity for food sustainability as the effects of low level students' enrollment into Agricultural Education .

Findings in research questions four revealed that provision of scholarships and bursary awards for Agricultural Education Students', adequate governemnts funding and provision of modern facilities, public enlightenment and awareness campaigns on the importance of agricultulture, effective career guidance Programmes in secondary schools, among others are the strategies that can increase Students" enrollment in Agricultural Education in Colleges of Education in South Eastern Nigeria. This findings corroborates with the findings of Nwaobiala (2024) and Ume & Nwachukwu (2025) who reported that public awareness, adequate government funding, provision of modern facilities among others as measures that can increase Students' enrollment into Agricultural Education .

CONCLUSION

This study investigated the impact of low levels of Students"enrollment into Agricultural Education Programme in five Colleges of Education in South Eastern Nigeria over five academic session (2020/2021-2024/2025). Using a descriptive survey of 120 respondents (30 lecturer, 75 Students' and 15 administrators) and institutional enrollment records, the study established the following key findings.

- Persistant decline in enrollment:** A cross the five sampled Colleges, the annual intake fell sharply from average per Colleges intakes in the low tens (about 12) to fewer than four Students' in the most recent session. Aggregate enrollment across the five Colleges declined by roughly two- thirds over five sessions, confirming a sustained downward trend rather than a temporary fluctuation .

2. **Multifactor Causes:** Respondents consistently identified a cluster of interrelated causes ; negative societal perception of agriculture as low status work, breakdown of Agricultural into different components, inadequate funding , outdated and insufficient teaching facilities, shortage of qualified lecturers, lack of awareness and career counselling at secondary school level, neglect of Agricultural Education in government policy planning, low motivation and prestige associated with teaching careers among others.
3. **Significant Institutional and Sectoral Impacts:** Low enrollment has declined food production and research innovation, shortage of qualified Agricultural science teachers in secondary schools, decline in Agricultural manpower and productivity, decline in economic growth and rural development, negative impact on national foodsecurity, loss of interest among potential Students', weak Agricultural Education systems, underutilization of facilities and staff among others.
4. **Consensus on Remedial Strategies:** Respondents rated several remedies as high priority: Provision of scholarships and bursary awards for Agricultural Education Students', adequate government funding and provision of modern facilities, public enlightenment and awareness campaigns, curriculum review, effective career guidance, establishment of demonstration farms in Colleges, encouragement of entrepreneurship based Agricultural courses, provision of modern instructional materials and digital learning platforms, strengthening, linkages between Colleges and agribusiness industries among others.

RECOMMENDATIONS

Based on the findings of the study the following recommendations were made;

1. **On the trend of low level of Students' Enrollment in Agricultural Education:**
 - The government and the National Commission for Colleges of Education should create awareness campaigns to promote Agricultural Education as an important and rewarding field of study.
 - Colleges of Education should organize career guidance Programme in secondary schools to educate Students' about the importance of agriculture and the career opportunities in Agricultural Education
 - More incentives such as scholarships and bursaries should be provided to encourage Students' to enroll in Agricultural Education Programmes.
2. **On the factors causing low levels of Students' Enrollment:**
 - The government and Colleges authorities should address factors such as poor funding, inadequate facilities and lack of modern teaching equipment that discourage Students' from studying Agricultural Education .
 - Agricultural Education curricula should be updated to include modern Agricultural technologies, agribusiness and entrepreneurship skills to make the course more attractive to students'.
3. **On the effects / impact of low level of Students' enrollment:**
 - The government should recruit and train more Agricultural Education teachers to ensure continuity and sustainability in teaching the subject at all levels.
 - Colleges of Education should strengthen partnership with Agricultural industries and extension agencies to give students' practical exposure that enhance employability.
 - Urgent measures should be taken to prevent the possible extinction of Agricultural Education Programmes in some colleges due to persistently low enrollment.
4. **On strategies for Increasing students' enrollment:**

- Colleges should establish functional school farms, agribusiness units, and agricultural clubs where students gain hands on experience and earn income from their activities.
- Collaboration with private sector organization and non- governmental bodies should be encouraged to support Agricultural Education through funding, internships and equipment donations.
- Awareness campaigns should target parents, secondary school teachers and guidance counselors to change negative perceptions about agriculture as a career.
- Government policies should ensure job placement or self employment support for graduates of Agricultural Education to attract new entrants.

REFERENCES

Adedokun, J.A., & Onwuegbuchulam, C.(2023). Declining enrollment in Agricultural Education Programmes: Implications for manpower development in Nigeria . *Journal of National and Technical Education* , 8(2), 45-57.

Agboje, O., & Olorunfemi;T. (2024). Trends in Agricultural Education Enrollment in Nigeria Tertiary Institutions: *Nigeria Journal of Education Research*, 12(1); 65-90

Ezeanyanwu, O., & Nwosu, P(2022). Challenges of Agricultural Education in Nigeria: Student's enrollment and career prospects. *Journal of Agricultural Education Studies* 10(3), 22-35.

Food and Agricultural Organization (2007). Food and Agricultural Research Commodities Production: *countries of commodity*. Top Production sweet potato.

Iwu, B.C (2019). Fundamentals of Education al research methods and statistics. Enugu: *Chuka Educational Publishers*.

New Partnership for Africa's Developemnt (2002). Comprehensive Africa Agriculture Programme. *Retrieved from www.fao.org.nigeria. A thesis submitted to the school of post graduate studies, Ahmadu Bello University Zara.*

Nwaobiala, C.U. (2024). Revitalizing Agricultural Education through ICT and policy reforms in Nigeria. *Journal of Agricultural Innovation*, 15(4), 82-102.

Nworgu, B.G. (2015). Education al Research: Basic Issues methodology (3rd. Ed). Nsukka: *University Trust Publishers*.

Okeke, B. & Uzochukwu, C. (2023). Enrollment decline and its impact on Agricultural teacher Education in nigeria. *Nigeria Education al Review*, 18 (1), 98-112.

Olaitan, D.A. (2004). Assessment of the relationship between conditions of service and teachers' job performance secondary schools in Kogi State.

Ume, O. & Nwachukwu, A. (2023). Respositioning Agricultural Education through policy support and industrial collaboration in Nigeria. *Journal of Technical Education and Development*, 11(3), 43-60.

Zoldosks, R.C (2006). Education al Research Competence Analysis and Application: *4th Edition*, New York *Micmillian Publishers*.