



Impact of Agricultural Skills Acquisition on Entrepreneurial Intentions of Students in Colleges of Education in North east, Nigeria

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ABSTRACT

The study investigates the influence of agricultural skills acquisition on the entrepreneurial intentions of students in Colleges of Education in North-East Nigeria. Descriptive survey research design was adopted for the study. The population of the study comprised of 500 NCE 111 agricultural education student from Colleges of Education that offer NCE agricultural education course in north east Nigeria. A sample size of 350 students were selected using multi-stage sampling technique, appropriate statistical formula was used to determine the sample size. Data collected were analysed using descriptive statistics to answer the research questions, and inferential statistics to test the hypotheses at a 0.05 level of significance. Spearman rank moment correlation was used for the relationship between agricultural skills acquisition and entrepreneurial intentions of agricultural education students in Colleges of Education in North-East Nigeria. The findings revealed that, agricultural education students do not possess adequate skills for entrepreneurship development in agriculture, they had a very low skills in the use of agricultural tools, agro processing, farm management and a moderate skill level on crop production techniques and animal husbandry practices. The findings further indicate a moderate level of entrepreneurial interventions among agricultural education students in federal collages of education in north east Nigeria. The study recommends the integration of entrepreneurship education in to the curricula of agricultural education programs across all colleges and ensuring full implementation of the curriculum will no doubt assist agricultural education students to connect the skills acquired with viable agribusiness opportunities.

ARTICLE INFO

Article History

Received: February, 2026

Received in revised form: March, 2026

Accepted: May, 2026

Published online: June, 2026

KEYWORDS

Agricultural Skills, Entrepreneurial Intentions, Agricultural Education Students, Colleges of Education

INTRODUCTION

In sub-Sahara Africa, Agriculture contributes significantly to poverty reduction, food security and employment generation, it remains the most critical sector of developing economy (Noah, et al, 2025). In Nigeria, agriculture employed a reasonable number of Nigerian population and provide a viable pathway for economic diversification and youth empowerment Food and Agriculture Organization (FAO, 2018). Despite this development unemployment among Nigerian youth remains a serious challenge, especially among graduates of tertiary institutions,

including Colleges of Education National Bureau of Statistics (NBS, 2020).

Colleges of education in Nigeria are post-secondary institutions responsible for producing professional teachers in various subject areas, however, their mandate and curriculum have been revisited to include skill acquisitions and entrepreneurship development, all this is to address the rising unemployment in the country. Globally, entrepreneurship education has been acknowledged as a means of encouraging students to become independent, creative, and self-reliance (United Nations Educational,

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Scientific and Cultural Organization UNESCO, 2016). Suanpong, et al. (2025) asserts that, entrepreneurial intention is a crucial predictor of entrepreneurial behaviour because people are more inclined to start businesses when they have strong ambitions backed by abilities and optimistic attitudes.

Acquiring agricultural skills entails hands-on training focused on competencies in areas like crop cultivation, animal husbandry, agro-processing, and managing agribusiness (Keerthi, et al. 2025). This type of experiential learning boosts students' technical abilities and entrepreneurial skills, potentially impacting their desire to launch agribusiness ventures (Albert Bandura, 1997). Research has indicated that engaging in entrepreneurship education significantly enhances students' intentions to pursue entrepreneurship and their self-efficacy (Norris et al, 2000).

Additionally, it has been highlighted that incorporating agriculture and vocational training in to post-secondary education curricula is a way to empower young people and promote sustainable development (World Bank, 2019). However, the availability and adequacy of suitable facilities, qualified skills instructors, funding and institutional support system determines how successful these programs are. Implementing programs for skill acquisition in Agriculture at colleges of education is very difficult one due to inadequate funding and unavailability of facilities.

Although vocational and agricultural skills acquisition has been widely used as an instrument for stimulating entrepreneurship development among youth in Nigeria, there is also limited empirical studies specifically in examining the impact of agricultural skills on the entrepreneurial intentions of students in Colleges of Education in Nigeria. Therefore, this study seeks to investigate the relationship between agricultural skills acquisition and entrepreneurial intentions among students of colleges of education, with a view to providing evidence-based recommendations for curriculum improvement and policy formulation.

STATEMENT OF THE PROBLEM

Youth unemployment in Nigerian remains the major challenges affecting university and college graduate, especially in North-Eastern part of country where insecurity and economic instability is predominant (Garba, et al. 2022). This challenge resulted in limited industrial and economic development in the region which further reduced employment opportunities for the teeming graduates. Colleges of Education in Nigeria are responsible of producing teachers who can effectively delivered instruction to students at primary and secondary schools in Nigeria; these colleges produce teachers year after year however, the increasing number of NCE graduate couple with the limited government opportunities for employment have left many NCE graduates without sustainable means of livelihood.

Agriculture has been recognised as a vocational course that serve as a viable tool for employment generation in Nigeria. In respect to this, agricultural skills acquisition has been integrated in to the curricula of teacher education, this is to equip students with practical skills and competencies for entrepreneurship and self-reliance. However, it has been observed that many students of agricultural education who graduated from colleges of education still show less entrepreneurial skills and limited intension for agribusiness ventures.

This situation among graduate of agriculture raises serious concern on the effectiveness of skills acquisition particularly in agriculture on entrepreneurial intentions of students in Colleges of Education in North-East Nigeria. It is not clear on whether the knowledge and skills provided by the colleges are sufficiently enough in terms of practical skills, market-oriented, and in line with contemporary agribusiness opportunities. Similarly, there are several factors such as insufficient training facilities and equipment, lack of capital, insecurity, and societal cultural attitudes toward agriculture as a profession may negatively influence students' willingness to invest to pursue entrepreneurship in agriculture.

There is also limited empirical evidence on agricultural skills acquisition and



entrepreneurial intentions among agricultural education students in Colleges of Education in North-East Nigeria. There is also no clear understanding of relationship between those variables. If this situation is allowed to continue and remain unchecked, policymakers and curriculum planners may not be able to effectively design interventions that will enhance entrepreneurial outcomes. Therefore, this study determines whether agricultural skills acquisition significantly influences the entrepreneurial intentions of students in Colleges of Education in North-East Nigeria.

Objectives of the Study

The main objective of this study was to investigate the influence of agricultural skills acquisition on the entrepreneurial intentions of students in Colleges of Education in North-East Nigeria. Specifically, to determine:

1. the level of agricultural skills acquisition among agricultural education students in Colleges of Education in North-East Nigeria.
2. the level of entrepreneurial intentions among agricultural education students in Colleges of Education in North-East Nigeria.
3. the major agricultural skills that significantly influence agricultural education students' entrepreneurial intentions.
4. the relationship between agricultural skills acquisition and entrepreneurial intentions among agricultural education students in Colleges of Education in North-East Nigeria.

Research Questions

1. What is the level of agricultural skills acquisition among agricultural education students in Colleges of Education in North-East Nigeria?
2. What is the level of entrepreneurial intentions among agricultural education students in Colleges of Education in North-East Nigeria?

3. Which specific agricultural skills significantly influence agricultural education students' entrepreneurial intentions?

Research Hypotheses

Ho - There is no significant relationship between agricultural skills acquisition and entrepreneurial intentions of agricultural education students in Colleges of Education in North-East Nigeria.

METHODOLOGY

This study adopts a descriptive survey research design, it was conducted in North-East geopolitical zone of Nigeria. The population of the study consist of 500 NCE 111 agricultural education student from Colleges of Education that offer NCE agricultural education course in north east Nigeria. A sample size of 350 students were selected using multi-stage sampling technique, appropriate statistical formula was used to determine the sample size.

Data was collected using questionnaire, the questionnaire was validated by 3 experts and subjected to reliability test, the reliability coefficient (Alpha value) of 0.70 was realized. Data collected was analysed using descriptive statistics to answer the research questions, and inferential statistics to test the hypotheses at a 0.05 level of significance.

The decision rule on the levels of agricultural skill acquisition and entrepreneurial intentions was determined by three categories of mean scores (Low 1.00-2.33, Moderate 2.34-3.67, and High 3.68-5.00). Spearman rank moment correlation was used for the relationship between agricultural skills acquisition and entrepreneurial intentions of agricultural education students in Colleges of Education in North-East Nigeria.



RESULTS

Table 1; Level of skill Acquisition among Agricultural Education Students

S/N	Items	Mean	Overall Mean	SD	Remark
Crop Production Techniques			3.11	0.38	Moderate
1	Soil preparation	3.61			
2	Sowing	3.48			
3	Fertilizer application	3.10			
4	Irrigation	3.50			
5	Weeding	3.42			
6	Thinning	3.33			
7	Disease control	3.10			
8	Insect Control	3.53			
9	Harvesting	3.63			
10	Storage	3.80			
Animal Husbandry skills			2.77	0.45	Moderate
1	Feeding/ Nutrition management	2.94			
2	Housing Management	2.60			
3	Use of personal protective equipment	1.05			
4	Disease control	3.71			
5	Vaccination	3.54			
6	Watering	3.32			
7	Routing management practices	2.23			
Use of Agricultural Tools			1.98	0.64	Low
1	Handling technique	2.81			
2	Routing maintenance	3.03			
3	Safety appliances	1.32			
4	Proper selection	1.42			
5	Environmental consideration	1.34			
Agro Processing skills			1.43	0.67	Low
1	Cleaning	1.40			
2	Grading	1.20			
3	Drying	1.60			
4	Milling	1.32			
5	Fermentation	1.26			
6	Packaging	1.80			
Farm Management skills			1.01	0.73	Low
1	Interpersonal skill	1.08			
2	Innovation	1.04			
3	Organisation	1.15			
4	Planning	1.03			
5	Problem solving	1.00			
6	Decision making	1.02			
7	Commercialisation/marketing	1.08			
8	Financial Analysis	1.01			
9	Risk bearing	1.10			
Grand Mean			1.98	0.57	Low

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Table 1 reveals that, Agricultural education students had a moderate skill in crop production techniques (mean score of 3.11) and animal husbandry (mean score of 2.77). They also had a lower level of skills in use of agricultural tools (mean score of 1.98), agro processing (mean score of 1.43) and farm management skills (mean score of 1.17). Table 1 also with a grand mean of 1.98 conclude that, agricultural education students

of federal collages of education in the north east Nigeria had a lower level of skills acquisition. This implies that agricultural education students do not possess adequate skills for entrepreneurship development in agriculture, they had a very low skills in the use of agricultural tools, agro processing, farm management and a moderate skill level on crop production techniques and animal husbandry practices.

Table 2: Level of Entrepreneurial Intentions among Agricultural Education Students

S/N	Items	Mean	SD	Remark
1	Interest in starting an agribusiness	1.30	0.70	Low
2	Willingness to invest personal resources	3.12	0.72	Moderate
3	Desire to create employment for others	3.25	0.65	Moderate
4	Confidence in running an agricultural business	1.10	0.68	Low
5	Intention to apply learned skills in business	1.28	0.67	Low
6	Interest to source money for agribusiness	1.75	0.84	Low
7	Ready to bear agrobusiness risk	3.67	0.86	Moderate
8	Ready to relate with market	3.00	0.69	Moderate
9	Good level of commitments	3.06	0.79	Moderate
10	Developing Innovative	1.98	0.63	Low
	Grand mean	2.35	072	Moderate

Table 2 reveals the level of entrepreneurship intension among agricultural education students, the table indicate a moderate level of entrepreneurship intension in student's desire to create employment for others (means score 3.27), willingness to invest personal resources (mean score 3.12), ready to bear agrobusiness risk (3.67), ready to relate with market (mean score 3.00) and good level of commitments (mean score of 3.06). However, the

table also indicates a low level of student's interest in starting agrobusiness (mean score 1.30), in developing innovation (mean score 1.98), interest to source money for agribusiness (mean score of 1.75), and intention to apply learned skills in business (mean score of 1.28). Table 2 with a grand mean of 2.35 also indicate a moderate level of entrepreneurial intentions among agricultural education students in federal collages of education in north east Nigeria.

Table 3: Specific agricultural skills influence students' entrepreneurial intentions

S/N	Items	Mean	SD	Remark
1	Crop production techniques	1.45	0.62	Not influence
2	Animal husbandry skills	3.12	0.71	Influence
3	Agro-processing skills	1.28	0.68	Not Influence
4	Farm management skills	1.05	0.75	Not Influence
5	Use of modern agricultural tools	2.40	0.66	Not Influence
	Grand mean	1.86	0.68	

Table 3 indicates that, animal husbandry skills is the specific skill that influence agricultural education student's entrepreneurship

intension (mean score of 3.12). Other skills such as crop production techniques (mean score of 1.45), Agro processing (mean score of 1.28), farm

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management skills (mean score of 1.05) and use of modern agricultural tools (mean score 2.40) does not influence agricultural education student's entrepreneurship intention. Table 3 with a grand

mean of 1.86 indicates that agricultural skills acquisition does not influence student's entrepreneurship intention in colleges of education in the north east Nigeria.

Table 4: Relationship between Agricultural Skills Acquisition and Entrepreneurial Intentions

Variables	p-value	r- value
Agricultural Skills Acquisition Entrepreneurial Intentions	0.68**	0.00

Table 4 indicated a strong relationship between agricultural skills acquisition and entrepreneurship intention among agricultural education students of colleges of education in north east Nigeria ($p = 0.68$, $r = 0.00$). The relationship is in positive direction, this means that, as agricultural skills acquisition increases, entrepreneurship intention also increase.

CONCLUSION

The study concluded that, agricultural skills acquisition among students has a significant positive impact on their entrepreneurial intentions in Colleges of Education in North-East Nigeria. Students who acquire practical skills in animal husbandry are more likely to demonstrate a interest to invest in agribusiness ventures, use their skills to create employment for others, and ready to be self-employed after graduation. However, the study also highlighted that, agricultural skills acquisition served as a vital instrument for fostering entrepreneurship and enhancing self-reliance among students, provided that is supported by adequate facilities, training and mentorship

RECOMMENDATIONS

The study recommended that;

1. More emphasis should be given to Agricultural skills acquisition during the student's training. Theories should only serve as a framework and student be subjected to hand on training and real practical on contemporary agribusiness practices.
2. Integration of entrepreneurship education in to the curricula of agricultural education programs across

all colleges and ensuring full implementation of the curriculum will no doubt assist agricultural education students to connect the skills acquired with viable agribusiness opportunities.

3. Agricultural education students that are interested in establishing agribusiness enterprises should be encourage by providing them with credit facilities and financial support open graduation.
4. Colleges of education should establish a mentorship unit that will be responsible for linking students with experienced arbitrageurs to encourage practical learning and foster entrepreneurial mindset.
5. There should be advocacy campaigns to the macro society so as to change the perceptions of the society that agriculture is a low status occupation, highlighting the potentiality of agriculture for wealth creation and sustainable employment.
6. Colleges of education should ensure periodic assessments of students on agricultural skills acquisitions to ensure that the knowledge and skills provided remains relevant and aligned with market opportunities.

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