



Exploring the Dynamics of Agripreneurship Perception and Intention among the Nigerian Youth

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Abstract

With more than half of young Nigerians either unemployed or underemployed, the problem of youth unemployment poses a serious threat to the social, political, and economic development of the country. Thus, there has been a concerted effort by the government and other stakeholders to address this perennial challenge. Owing to its enormous growth opportunities, agriculture is considered a strategic sector for addressing Nigeria's problem of youth unemployment. However, the lack of youth participation has hampered the growth of the sector. This study investigated the dynamics of agripreneurship perception and intention in order to provide insight to policymakers on how best to develop the agricultural sector and tackle youth unemployment through the engagement of young people in the sector. It also explored agricultural entrepreneurship as a valuable function for young people in Nigeria. A sample of 1,013 recent young graduates took part in this study, which engaged both quantitative and qualitative methodologies. The quantitative analysis was conducted using linear regression and multinomial response models. Additionally, Sen's capability approach was used as the work's theoretical framework. The results established that Nigerian youths display a positive perception and intention towards agripreneurship engagement. It also found that participation in entrepreneurship programs, course of study, family income, perceived availability of markets, and infrastructural facilities are determinants of youth's agripreneurship perception and intention. On the other hand, the study found that the freedom to control one's time, the expression of one's passion, and the need to eradicate poverty are reasons young Nigerians value agripreneurship. This study serves as the debut of research endeavours that theoretically evaluate agripreneurship undertakings as valuable functionings using the capability approach. Furthermore, by examining factors that affect agripreneurship perception and intention, the study offers fresh policy insights for youth entrepreneurship and employment creation in the agricultural sector.

Keywords: *Agriculture; Capability Approach; Agripreneurship Perception; Agripreneurship Intention; Youth Entrepreneurship*

INTRODUCTION

Youth unemployment is a major macroeconomic challenge facing Nigeria. According to the National Bureau of Statistics (2020), over 63% of Nigeria's youth are either unemployed or underemployed. Therefore, it is not surprising that the nation has experienced an upsurge in extreme poverty, insecurity, terrorism, and political instability over the past several years (Edomwonyi-Otu & Edomwonyi-Otu, 2020). This is because the high unemployment rate has caused the youth of Nigeria to become increasingly frustrated.

Fortunately, the nation has huge potential to meet its expanding food demand while addressing the issue of youth unemployment thanks to its 74 million hectares of fertile land (Inyeinyang & Ukpogon, 2019). Agriculture can be used to increase job prospects for young people in Nigeria (Lyocks, Lyocks, & Kagbu, 2013; Adesina & Favour, 2016), though the sector's expansion has been hampered by issues with production. For instance, the Food and Agriculture Organisation of the United Nations (2020) stated that Nigeria loses over 10 billion dollars in export potential each year from groundnut, palm oil, cotton, and cocoa alone as a result of the continual decline in their production. Additionally, due to its underdeveloped agro-industrial sector, Nigeria imports completed items and exports raw agricultural commodities (Oxford Business Group, 2019).

On the other hand, the challenges of the agricultural sector indicate massive opportunities for young entrepreneurs to step in, identify market frictions, and convert them into business

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opportunities, thereby enhancing productivity and job creation. They are better positioned to restructure the industry for higher productivity and growth through innovation and entrepreneurship (Omeje, Jidefor, & Ugwu, 2020). Hence, agriculture is one of the most strategically important industries to use in order to drive job creation and youth employment. This means that in order to effectively harness the potential of agriculture, young people must actively participate in the sector. However, it has been noted that agriculture is plagued by persistent youth indifference, which results from Nigerian youth's negative perception and bad judgement of the sector. For example, Adesina and Favour (2016) note that due to the variety of obstacles standing in the way of Nigerian agriculture's development, the industry appears unappealing and unprofitable to many young people, deterring their easy integration into strategic agricultural endeavours in Nigeria.

This study investigated the perception of young Nigerians towards agricultural entrepreneurship (agripreneurship), their intention to venture into agripreneurship and the determinants of such. It further explored agripreneurship as a valuable function among Nigerian youth. Ultimately, this paper offers policymakers and other stakeholders insights on effective strategies for boosting the engagement of young people in agripreneurship and, consequently, tackling the perennial problem of youth unemployment.

LITERATURE REVIEW

The development of entrepreneurship is seen as a powerful force for promoting economic growth and job creation (Polas *et al.*, 2021). In the context of agriculture, entrepreneurship entails seeing possibilities along all value chains and mobilising resources to take advantage of them, generating value and reaping the benefits. The phrase "agripreneurship," a combination of the words; agriculture and entrepreneurship, captures this concept. For Nigeria, the agricultural sector has great prospects for youth participation through entrepreneurship (Adeyanju, Mburu, & Mignouna 2021). The talents and efforts of young people must be utilised in order to effectively maximise Nigeria's agricultural economy (Pelzom and Katel, 2018; Adeyanj *et al.*, 2021).

The poor youth engagement in agriculture stems from numerous obstacles that make agriculture economically unappealing to them. For instance, Umeh *et al.* (2020) found that a household's annual income exhibited a statistically significant influence on the agripreneural decisions among the youth, while Nnadi and Akwivu (2008) observed that educational attainment, parents' work, and parents' farm income affect agricultural participation.

Training in agribusiness has a substantial impact on the performance of young entrepreneurs in agricultural activities, claim Adeyanju *et al.* (2021). Also, the development of entrepreneurial ventures is greatly hindered by a lack of sufficient knowledge and information gained through increasing access to education, technical training and intellectual resources that are encapsulated in agriculture intervention and entrepreneurship programs (Umeh *et al.*, 2020). Moreover, Adesina and Favour (2016) identified inadequate training facilities, low-profit margins, and a lack of agricultural equipment and machinery as constraints to youth Agric participation.

According to researchers like Inegbedion and Islam (2021) and Mkong *et al.* (2021), students' involvement in agripreneurship is influenced by where their family lives, with living in a rural location positively correlated with agripreneurship involvement because it increases the likelihood that they will have access to land for agricultural production. Other studies (Kanan, 2012; Shiwa, 2014; Abera *et al.*, 2020; Jeil *et al.*, 2020; Jha *et al.*, 2020) have discovered that the lack of an agricultural market tends to inhibit agripreneurship perception and intention because both current and potential agricultural investors will be demotivated to produce if there is no assurance that their outputs will not be wasted, and because there will be a decreasing expectation for revenues and profits.

Additionally, Lumen (2020) established that the degree to which institutional financial support is perceived to be a problem (especially for agripreneurs) could significantly affect their intention to venture into agripreneurship. Akpan (2010) also noted that factors affecting rural Nigerian youth involvement in agriculture include inadequate availability of credit facilities, lack of agricultural insurance, initial capital, and production inputs.

Further research by Abdullah and Sulaiman (2013) revealed that government sponsorship and advertising at fairs and festivals also had a statistically significant impact on young people's involvement in agriculture. The assistance can come in a variety of forms, such as the provision of machinery for agricultural mechanisation (Adesina & Favour, 2016), grants and interest-free loans to farmers, extension services, subsidies on farm input, and tax exemptions on product sales (Im & Jeong, 2014).

While Muhammad-Lawal et al. (2009) found that the lack of post-harvest infrastructures (such as storage, processing, and transport facilities) has diminished the appeal and profitability of the Nigerian agricultural sector, Kumar (2019) observed that poor infrastructures are one of the most significant obstacles facing agro-based firms, particularly those that are located far from urban centres where most of these facilities are readily accessible.

Despite the perception that both men and women are uninterested in agriculture, Ambrose and Zake (2015) found that women are most impacted by cultural and gender norms, while Schneider and Gugerty (2010) found that women have been most excluded from the agricultural industry because of their cultural restrictions on access to and ownership of land. Similarly to this, Coker et al. (2017) discovered that gender inequalities in resource access, use, and competitiveness in the agricultural sector have been significant obstacles that continuously prevent Nigeria and Africa's overall goal of food availability and inclusive growth from being realised.

While Inegbedion and Islam (2021) claimed that the majority of undergraduate youths who are presently enrolled in agricultural courses are driven by their perceived own ability/competence to successfully oversee an agricultural business as well as what they believe is the effect of agriculture on their long-term career progression, Mkong, et al. (2021) further revealed that students' inclination for entrepreneurial endeavours in agriculture is mostly determined by their existing educational advancement (level).

Scholars have also observed that perception has a role in influencing young people's intentions to engage in entrepreneurship in both developed and emerging nations. For instance, Cheteni (2016) observed that poor youth agricultural engagement is caused by young people's unfavourable impressions of agriculture, which they frequently regard as an unattractive industry. According to Ikuemonisan and Akinbola (2021), students' evaluations of their learning significantly influenced how likely they were to participate in agripreneur activities. Generally speaking, people's decisions to enter a profession are greatly influenced by their perceptions of their own capabilities (Priyaraj, 2017; Ng'atigwa *et al.*, 2020).

A number of factors were identified as potential determinants of youth perception and intention towards agripreneurship. These factors, indicated in Table 1 below, are also in tandem with the capability approach, which served as the theoretical framework for this study.

Table 1. Potential Determinants of Youth Perception and Intention Towards Agripreneurship

Government Support		Abdullah & Sulaiman, 2013; Im & Jeong, 2014; Adesina & Favour, 2016.
Institutional Support	Financial	Akpan, 2010; Lumen, 2020
Markets for Agric Products		Kanan, 2012; Shiwa, 2014; Abera et al., 2020; Jeil, et al, 2020; Jha, et al. 2020

Infrastructural Deficiency	Kumar, 2019, Muhammad-Lawal, <i>et al.</i> , 2009.
Agriculture Intervention and Entrepreneurship Programs	Umeh <i>et al.</i> , 2020; Adeyanju <i>et al.</i> , 2021; Adesina & Favour, 2016.
Family Income Background	Umeh <i>et al.</i> , 2020; Nnadi and Akwiwu, 2008.
Undergraduate course of study	(Mkong, <i>et al.</i> , 2021; Inegbedion & Islam, 2021)
Gender inequality	Coker <i>et al.</i> , 2017; Addo, 2018

In light of the above, the following hypotheses are proposed:

The core beliefs, motivations, expertise, skills, inventiveness, and spirit of independence necessary for taking an active role in entrepreneurship will be instilled in students and agripreneurs through participation in Agric intervention programmes like Fadama Graduate Unemployed Youth and Women Agripreneur Support (FADAMA-GUYS), N-Power Agriculture (N-Agro), NYSC Skills Acquisition & Entrepreneurship Development (SAED) in Agriculture, Youth Agricultural Entrepreneur Programme (YAGEP), Youth Employment in Agriculture Program (YEAP) (Umeh *et al.*, 2020; Adeyanju *et al.*, 2021; Adesina & Favour, 2016).

Hypothesis 1: Participation in entrepreneurship and agric intervention programs positively influence youth's perception and intention towards agripreneurship engagement.

This mostly relates to undergraduate courses in agriculture. According to Inegbedion and Islam (2021), the majority of undergraduate students currently enrolled in agricultural courses are motivated by their perceptions of their own abilities for running an agricultural business, and the impact agriculture will have on their long-term career development.

Hypothesis 2: The course of study pursued by young Nigerians affects their perception and intention towards agripreneurship engagement.

The justification for this is that individuals with higher income levels will be in a more advantageous position to generate the capital necessary for agribusiness start-up and subsequent expansion, while those with financially well-off family members or parents are more likely to receive greater financial support to establish an agribusiness or when they're in need of extra capital for expanding their business (Umeh *et al.*, 2020; Nnadi and Akwiwu, 2008).

Hypothesis 3: Higher family income is positively associated with youth's perception and intention towards agripreneurship engagement.

The reasoning for this is that the availability of an agricultural market typically encourages agripreneurship perceptions and willingness as current and potential agricultural investors will be encouraged to produce with confidence that their products are not going to waste, and when a greater number of markets are established for the trading of agricultural produce, there will be a greater expectation for income and profit (Kanan, 2012; Shiwa, 2014; Abera *et al.*, 2020; Jeil *et al.*, 2020; Jha *et al.* 2020).

Hypothesis 4: Perceived availability of markets positively influences youth's perception and intention towards agripreneurship engagement.

The justification for this is that inadequate post-harvest infrastructures, such as processing, distribution, and transportation networks, will erode the allure and economic viability of agricultural businesses, especially for enterprises that are located far from metropolitan areas where the majority of these services can be found (Muhammad-Lawal et al., 2009; Kumar, 2019). Because they will likely have a bad impression of agriculture as a business, young people will probably be less inspired as a result of the country's rapidly deteriorating infrastructure.

Hypothesis 5: Perceived access to infrastructural facilities positively influences youth's perception and intention towards agripreneurship engagement.

Youth agripreneurship participation will be influenced by their perceived government support and promotion through the provision of machines for agricultural mechanisation, grants and interest-free loans to farmers, the availability of extension services, subsidies on farm input, and tax exemption on the sales of Agric products (Im & Jeong, 2014; Abdullah & Sulaiman, 2013; Adesina & Favour, 2016).

Hypothesis 6: Perceived availability of government support significantly influences youth's perception and intention towards agripreneurship engagement.

This is supported by the findings that women have been most deprived of the agricultural business due to disparities in gender norms and cultural restrictions regarding ownership and access to land (Ambrose & Zake, 2015; Coker et al., 2017; Schneider & Gugerty, 2010).

Hypothesis 7: Gender inequality significantly affects one's perception and intention towards agripreneurship engagement.

The underlying premise is that youth's perception of institutional financial support (such as having access to credit facilities, the provision of agricultural insurance, and initial capital support) as a problem, particularly for agripreneurs, can have a significant impact on their decision to engage in agripreneurship (Akpan, 2010; Lumen, 2020).

Hypothesis 8: Perceived institutional financial support significantly affects one's perception and intention towards agripreneurship engagement.

Empirical Gap

While some studies have investigated youth agricultural perception and participation in different parts of Nigeria, there is little or no study providing a nationwide assessment of the disposition of young people towards agripreneurship. Furthermore, none of the available studies engaged the capability approach, which is considered a comprehensive framework for analysing issues. Thus, apart from offering a more recent insight into youth agripreneurship engagement, this study provides a nationwide view of the situation while engaging a comprehensive framework. The study further explores agricultural entrepreneurship as a valuable function among young Nigerians.

Theoretical Background: Sen's Capability Approach

Sen's capability approach served as the theoretical foundation for this investigation. Sen's theory lays more emphasis on the intrinsic value of people, which may be increased by enhancing each person's capabilities throughout the process of national development. Sen contends that the

primary goal of development should be a person's freedom to live the life they have reason to value and that economic measures should be viewed as a means of achieving this. The capacity approach emphasises a person's opportunities or freedoms to accomplish particular beings and doings that they have a reason to value (known as functionings) (Sen, 2011).

A person's "achieved functionings" are those capacities that they have effectively pursued and attained (Alkire, 2008). For instance, it might be claimed that a graduate who is running a profitable agribusiness has achieved the functioning of an agripreneur. As a result, the capabilities approach functions as a theoretical viewpoint that may be applied as a useful tool for assessing institutions, policies, services, and social systems.

Conversion Factors in Agripreneurship Participation

Sen emphasised the crucial part that conversion factors—personal, societal, and environmental—play in a person's attempt to transform a given resource—or resources—into realised functioning. A patriarchal culture, for instance, may limit a girl's feeling of agency or her capacity to engage in agricultural business (Roomi, Rehman, & Henry, 2018).

Application of the Capability Approach to Agripreneurship

Getting young Nigerians involved in agricultural entrepreneurship has received a lot of attention recently as a way to successfully combat the ongoing issue of youth unemployment. While there is no doubt that this is a positive move, there is little focus on the capabilities (opportunities) that are available for young people to participate in and thrive in agricultural business formation. The capabilities approach may therefore shed light on a variety of elements that are essential to ensuring that young and prospective agripreneurs achieve true success because it is a comprehensive framework.

Agripreneurship as a Valued Functioning:

It is critical to research agripreneurship among young people as a Valued Functioning in light of the influence of motivation on business success (Amit & Muller, 1995). This will, among other things, assist in determining if young Nigerians have good reason to value agricultural entrepreneurship. Additionally, it can shed more light on the reasons why young people do not favour agricultural engagement.

RESEARCH METHOD

This study used a mixed research methodology combining quantitative and qualitative approaches to data collection (Turnbull, Chugh, & Luck, 2021). Essentially, the primary quantitative data were collected using online survey questionnaires, while the primary qualitative data were gathered through an online survey (open-ended questions) and semi-structured interviews. The goal of the qualitative data collection was to give participants the freedom to freely express their opinions, perceptions, and intentions regarding agricultural entrepreneurship in Nigeria (Cresswell & Plano, 2017). In contrast, the quantitative data were extracted with the goal of quantitatively estimating the coefficients of the various determinants of both youth agripreneurship perception and intention with additional evidence from Nigeria.

Using a purposeful sampling technique, eight interviewees were selected for the semi-structured interview. These include four recent graduates (potential agripreneurs), four established agripreneurs (operating in various parts of the Agric value chain), and one entrepreneurship educator/expert with extensive experience in several youth agricultural programs. This particular interviewee played a significant role in presenting a comprehensive viewpoint on the subject.

The most recent graduates were chosen because they had to have completed entrepreneurship education, which is a prerequisite for all Nigerian tertiary institutions, and because they would either look for employment or start a business after completing their one-year National Youth Service. The study utilised stratified and snowball sampling techniques.

A snowball sampling technique was used to contact participants in each geopolitical zone to ensure the sample was evenly distributed across the country. The overall population was divided into six strata, each of which represented a geopolitical zone in Nigeria. A total of 1,000 individuals received the survey questionnaire. The sample size was calculated using the Taro Yamane scientific formula which is given as:

$$n = \frac{N}{1+N(e^2)} \dots\dots\dots(1)$$

$$n = \frac{600,000}{1+600,000(0.05^2)}$$

N=400

Where:

N is the Population (600,000 youths was the Population for the Study)

1 is the constant

e is the degree of error expected (0.05)

n is the sample size?

Table 2. Selection Process of Respondents

Geographical region	No. of Participants	Percentage Distribution of Participants
North-Central	185	18%
North-East	177	17%
North-West	150	15%
South-East	99	10%
South-South	122	12%
South-West	281	28%
Total	1013	100%

The responses were coded from "1" to "5" in a progressive manner as they swung from 'strongly disagree' to 'strongly agree'.

Linear Regression Model

Given a collection of explanatory factors, the linear regression model in equation (2) was chosen to predict young people's perceptions of agricultural entrepreneurship (Montgomery, Peck, and Vining 2013).

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \dots + \beta_kX + \epsilon \dots\dots\dots(2)$$

Where; Y is the dependent variable, $X_1 \dots X_k$ are the independent variables, β = regression coefficients to be estimated ϵ = error term in the model.

Multinomial Response Model

Based on the same variables used in the model above, Manda *et al.* (2021)'s the multinomial response/multinomial logistic regression model was used to assess the intention to engage in agripreneurship.

$$\text{logi}(Y) = \alpha + \beta_1X_1 + \beta_2X_2 + \dots + \beta_kX + \epsilon \dots\dots\dots(3)$$

Dependent variables

As noted in the variables coding section of this chapter, the dependent variables considered in this study are agriculture entrepreneurship perception score as well as the intention to start up an agriculture business.

Independent Variables

Similarly, the independent/explanatory variables (set of predictors) considered in this study are government support, institutional and financial support, markets for agric products, technological infrastructure, course of study, agriculture intervention programmes, agriculture entrepreneurship programmes, gender, family income category, tribe and geopolitical zones.

Ethics Considerations

The Institute for Social Development, the Faculty of Economics and Management Sciences Board, and the Senate of the University of the Western Cape all gave their approval to the study. Before including them in the procedure, the participants were fully informed about the implications of the study and their consent was requested. Additionally, all obtained data was handled with complete confidentiality and anonymity.

FINDINGS AND DISCUSSION

First, the quantitative and qualitative data were analysed using SPSS (V. 24.0) and ATLAS.ti 9, respectively.

Reliability and Validity of Quantitative Data

The Cronbach alpha reliability coefficient in Table 4 was used to evaluate the internal consistency of all categorical variables (such as agriculture business is for the poor, entrepreneurship is for dull students, agriculture business is for the uneducated, entrepreneurship in agriculture is lucrative, Nigeria is not safe for agripreneurs, Agric profession is for old people, entrepreneurship is stressful, Agric business is risky, Agric business is highly capital intensive and the Agric profession in Nigeria is admirable) to ensure the replicability of the results when a similar survey is conducted on the subject matter using the same measurement scale (Rose & Johnson, 2020). In the submission of Ursachi, Horodnic and Zait (2015), "a Cronbach Alpha score between 0.6 and 0.7 indicate an acceptable level" of reliability of the construct. The estimated Cronbach Alpha score for this study was 0.639 and fell within the acceptable level.

Table 3. Testing for Scale Reliability Using the Cronbach's Alpha Approach

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.639	.686	10

Reliability and Validity of Qualitative Data

The validity of qualitative data was ascertained by ensuring that the participants responded to the questions presented before them without having to deviate from the subject matter. In the event that the researcher was not clear about the responses provided by the interviewees, more clarification was sought.

Similarly, to provide accurate answers to the questions posed to the participants, there were several instances where the participants asked the interviewers to repeat some of the questions presented to them in the course of the interview. Thus, the reliability of the data generated through the interview was ascertained by the level of clarity of both the questions and the answers provided during the entire interview process. Another way to ensure the validity and reliability of qualitative data is to maintain a high level of accuracy in the transcription process (Rosenthal, 2016). Some of the semi-interview questions asked include:

1. Tell me about your understanding of agricultural entrepreneurship.
2. Would you consider being an agricultural entrepreneur in the nearest future?
3. Do you consider agricultural entrepreneurship a desirable profession?
4. Why should someone get involved in agricultural entrepreneurship?
5. What are the challenges facing agricultural entrepreneurs in Nigeria?

Demographic Characteristics

Table 4 below highlights the profile of the 1013 participants.

Table 4. Demographic Characteristics

Demographic Characteristics	Frequency	Per cent
<i>Age Category</i>		
Below 20	6	0.6
20-25	341	33.7
26-30	666	65.7
<i>Gender Category</i>		
Female	324	32
Male	665	65.6
Prefer not to say	24	2.4

Youth Agripreneurship Perception

The concept of "agripreneurship perception" refers to how people value, comprehend, or perceive agripreneurship based on their own personal, environmental, and social contexts. The study analysed how young people view agricultural entrepreneurship by asking participants if they consider it a business for the underprivileged and ignorant or as stressful, capital-intensive, dangerous, or lucrative. According to the research, 75.80% of young people reject the idea that agribusiness is only for the underprivileged. Thus, the majority of young people think that people from different socioeconomic backgrounds can engage in agripreneurship.

The notion that agripreneurship is exclusively appropriate for students with intellectual deficiencies was also rejected by 77% of the participants. This implies that young people now recognise the sector as offering promising chances. It is not just for people with weak academic standing; intelligent people can also benefit from it. Given their level of mental acuity, youngsters have the potential to spot frictions in agro-value chains and come up with creative solutions, propelling the economy of the country by engaging in agripreneurship.

The study also revealed that approximately 74.90% of respondents disagreed with the idea that agripreneurship is exclusively appropriate for those with no or little formal education. Based

on the results, it appears that the majority of the youth surveyed are likely to view agripreneurship as a realistic career path. Their exposure to entrepreneurial courses and the knowledge they learned throughout their undergraduate years, in addition to other conversion factors, may have influenced this perception.

Additionally, despite the sporadic shocks from unfavourable weather conditions, inadequate infrastructure, poor quality input resources, unstable prices of both input materials and final product, inadequate research and development efforts, and transportation and logistics issues (Olukunle 2013; Adesina & Favour 2016; FAO, 2020), about 75.40% of the participants dispelled the idea that agripreneurship is risky.

Moreover, roughly 78.80% of the respondents did not think that the agro sector required a lot of cash. This shows that they think they can start and run an agricultural venture even with a small amount of start-up money.

In conclusion, it can be determined that, within the constraints of this study, the Nigerian youth have a favourable attitude toward agripreneurship. This finding contradicts Fabiyi *et al.* (2015), who observed a negative perception of agricultural activities among young Nigerians. The change in perception may be attributed to the numerous youth agricultural programs being implemented by state and non-state actors in Nigeria. As noted by one of the interviewees:

The participation, if I were to measure, is increasing based on the various programmes that have been initiated by the government. There is enough incentive for young people to participate in agriculture.

The participants' perception that agriculture is a practical means of creating jobs for young people also motivates them to engage actively in agripreneurship. This might have affected how they perceived agripreneurship as well. For instance, during the interview, one of the participants provided the following:

Based on the fact that there are limited job opportunities, Nigerian youths are being encouraged to be job creators rather than job seekers, and there are several schemes by both the government and non-state actors to support young people in the space".

Another respondent, who is also an existing agripreneur, revealed the following:

If we look at the demographic challenges we are having, especially with young Africans and the amount of investment they are able to receive from their family and the government, agriculture is naturally the right way to start...We need to create opportunities outside megacities, and Agriculture provides a path to do so.

Thus, agricultural entrepreneurship can serve as a cure for rural-urban migration, which has exacerbated unemployment and resource constraints in urban cities (Obayelu *et al.*, 2020)

Generally speaking, the qualitative interview corroborates the findings from the quantitative survey as young people increasingly perceive desirable opportunities in agriculture.

As noted by a recent graduate, "agriculture business is not for the poor people. In fact, it is a lucrative business, and many people tend not to understand what agriculture is all about... I wish the youths can see that it is not just for the poor people or the uneducated ones".

Table 5. Perception of Agricultural Entrepreneurship Among the Youth

Statements	Neutral	Disagree
Agribusiness is for the poor	24.20%	75.80%
Agribusiness is for dull students	23%	77%
Agribusiness is for the uneducated	25.10%	74.90%
Agribusiness is risky	24.60%	75.40%
Agribusiness is highly capital intensive	21.20%	78.80%

Factors Responsible for Youth Agriprenurship Perception

Estimates from the linear regression analysis are presented in Table 6. As indicated, the course of study, family income status, participation in entrepreneurship programmes, perceived market availability, and the availability of adequate infrastructure were the key determinants of young people's perception of agriprenurship.

Entrepreneurship Programs

Hypothesis 1 is rejected since the result revealed that participation in entrepreneurship and agric intervention programs negatively and insignificantly influences youth's perception and intention towards agriprenurship engagement. This result also invalidates the position of existing studies by Umeh et al. 2020; Adeyanju et al., 2021; Adesina & Favour, 2016; that Participation in entrepreneurship and agric intervention programs can boost youth's perception and intention towards agriprenurship engagement.

When compared to youth who have not yet participated in an entrepreneurship program, the perception score of participants will rise by roughly 2.11 units. This shows how participants' perceptions of agriprenurship will be shaped by the knowledge and skills they acquire through the various entrepreneurship and skill-acquisition programs (Adeyanju, Mburu, and Mignouna, 2021). This might also be explained by the fact that the participants might have learned the dynamics of agriprenurship through the Skills Acquisition and Entrepreneurship Development (SAED) programme, which provides serving Corps Members with training during the required post-graduation National Youth Service time.

Course of Study

We fail to reject Hypothesis 2 since the result reveals that the course of study pursued by young Nigerians positively and significantly affects their perception towards agriprenurship engagement. This result supports the findings of Inegbedion and Islam (2021) that the majority of undergraduate students currently enrolled in agricultural courses are motivated by their perceptions of their own abilities for running an agricultural business and the impact agriculture will have on their long-term career development. The findings demonstrated that all other factors being equal, youth who took courses relevant to agriculture scored on average 1.07 points higher than youth who earned degrees in fields unrelated to agriculture. At a 95% confidence level, this is statistically significant. Therefore, it follows that as the proportion of young people who took agriculture-related courses as part of their undergraduate degree rises, so will the proportion of young people who have a favourable opinion of agriprenurship. This is consistent with Mkong et al. (2021), who noted that students' propensity for agricultural entrepreneurship is highly influenced by their academic engagement. Similarly to this, Inegbedion and Islam (2021) stated that the majority of undergraduate students now enrolled in agricultural courses are influenced by their perceptions of their capacity to lead an agribusiness and the influence of agriculture on their career development.

Household Income

This study found that when home income levels rose, youth perceptions of agribusiness decreased. In contrast to people from lower, middle-and higher-income classes, those from relatively impoverished households had greater positive agriprenurship perception scores. We, therefore, fail to reject Hypothesis 3 given the finding that higher family income is positively and significantly associated with youth's perception and intention towards agriprenurship engagement. The result is in line with earlier findings of Umeh et al. (2020) and Nnadi and Akwiwu (2008) that individuals with higher income levels will be in a more advantageous position to generate the capital necessary for agribusiness start-ups and subsequent expansion, while those with financially well-off family members or parents are more likely to receive greater financial support to establish an agribusiness or when they're in need of extra capital for expanding their business.

Availability of Market

Hypothesis 4 is rejected since the result showed that the perceived availability of markets inversely influences youth's perception and intention towards agriprenurship engagement. The result contradicts the earlier positions of various studies (like Kanan, 2012; Shiwa, 2014; Abera et al., 2020; Jeil et al., 2020; Jha et al., 2020) that the availability of an agricultural market typically encourages agriprenurship perceptions and willingness current and potential agricultural investors will be encouraged to produce with confidence that their products are not going to waste. The findings indicate a strong inverse association between young agriprenurship perception and the absence of agriproduct markets. Youth favourable agriprenurship perception decreases by 0.679 units as the perceived scarcity of markets for farm products rises by one unit. Therefore, a major increase in the market for agro-products may result in a more favourable impression of agriprenurship, while a lack of market opportunities may have the opposite impact.

As noted by one of the interviewees:

there is no accessibility to the market... Little things like this tend to bring one's morale down. In developed countries like the United States, for example, even before they plant, they know the amount they will sell their produce. But in Nigeria, you cannot even project. By the time you harvest, you will start looking for buyers...

Availability of Adequate Infrastructure

According to the study, there is a positive correlation between the lack of infrastructure and youth perceptions of agriculture entrepreneurship. This suggests that the more youth believe there is a lack of infrastructure for agriculture businesses, the more positively they perceive agriculture entrepreneurship. Hypothesis 5 is rejected since the result shows that perceived access to infrastructural facilities negatively influences youth's perception and intention towards agriprenurship engagement. Since the whole agricultural value chain needs access to vital infrastructure and specific agro-processing technology to increase system productivity, this finding defies theoretical a priori expectations and previous empirical findings (Muhammad-Lawal et al., 2009; Kumar, 2019; Lyocks, Lyocks, & Kagbu, 2013; Jha et al., 2020).

The quantitative finding also contradicts the response of an interviewee who noted that, *Infrastructure remains a major challenge. Sometimes when it rains, roads to the farm are not accessible. Customers would try to avoid coming to the farm, no one would want to come to the*

farm because the roads are bad, and they do not want their trucks and cars to get stuck. Many of the transporters at this point would increase the fee because they already projected damages to their vehicle on the road.

While the quantitative finding on infrastructure seems counterintuitive, one may see the lack of infrastructure deficiency as an incentive to innovate solutions to tackle these issues. Taking this line of thought, it may appear that the Nigerian youth might have found a way to convert constraints (problems) into business opportunities in the entire agricultural value chain. After all, effective entrepreneurs, among other things, are known for their ability to identify opportunities during turbulent situations (Giones *et al.*, 2020).

Findings on that Government Support, Agriculture Intervention Programme, Institutional and Financial Support

The study found that government support, agriculture intervention programme, and institutional and financial support had no significant effect on youth agripreneurship perception. Thus, Hypothesis 5 is rejected, given that perceived access to infrastructural facilities insignificantly influences youth's perception and intention towards agripreneurship engagement. Also, Hypothesis 6 is rejected, given that the Perceived availability of government support insignificantly influences youth's perception and intention towards agripreneurship engagement. Finally, Hypothesis 7 is rejected, given that Gender inequality insignificantly affects one's perception and intention towards agripreneurship engagement. Further details are shown in Table 6 below.

Table 6. Factors Affecting Agripreneurship Perception

Parameter	B	Std. Error	t	Sig.
Intercept	36.120***	0.909	39.738	0.000
Undergraduate Course				
Agric	1.070**	0.420	2.550	0.011
Non-Agric	0 ^a			
Family Income Background				
Poor	4.123***	0.616	6.699	0.000
Low Income	2.953***	0.395	7.473	0.000
Middle Income	2.804***	0.375	7.472	0.000
Upper Income	0 ^a			
Participation in Agric Intervention Program				
Yes	-0.175	0.295	-0.592	0.554
No	0 ^a			
Participation in Agric Entrepreneurship Prog				
Yes	2.109***	0.397	5.311	0.000
No	0 ^a			
Lack of Government Support	-0.225	0.180	-1.249	0.212
Lack of Financial Support	0.218	0.183	1.193	0.233
Lack of Market for Agric Produce	-0.651***	0.142	-4.589	0.000
Lack of Agric Infrastructure	0.489***	0.163	3.005	0.003

Dependent variable: Agriculture Entrepreneurship Participation

Youth Agripreneurship Intention

The perception of young Nigerians toward agribusiness should have an impact on their desire to actively engage in the sector. This is due to the fact that people generally do not desire to get involved with something that is viewed as being negative. A favourable perception will, therefore, probably result in a favourable intention. When asked whether they intended to launch an agribusiness in the near future, the results revealed that 75.1% of participants were in favour of doing so, while 9.3% had no interest in doing so. However, 15.6% of the participants were unsure whether to make such a choice.

Factors responsible for Youth Agripreneurship Intention in Nigeria

It's important to note that the majority of the findings from the logistic regression analysis outputs are consistent with those from the study of the factors that influence young people's perceptions of entrepreneurship. According to the results, for instance, youth intention to establish an agribusiness was significantly influenced by participation in entrepreneurial training, the availability of the market for agro products, and family income.

However, while there is an inverse relationship between family income status and the perception of agripreneurship, the study revealed a direct relationship between family income background and intent to launch a business, meaning that young people from wealthier families are more likely to do so than those from poorer families. Table 8 demonstrates that, when all other factors are equal, the likelihood of a young person starting an agricultural business decline by 0.971 units if they come from a lower-income household as opposed to those from higher-income families. This further suggests that, in terms of family income background, the youth's impression of the agriculture sector does not necessarily convert into an ambition to start an agribusiness. As previously said, a student from a low-income household may have a positive opinion of agricultural entrepreneurship due to his or her family's farming history but may also show a lower intention since they lack the financial resources to launch a business.

Table 8. Factors Affecting Youth Agripreneurship Intention

Variables	B	Std. Error	Wald	Sig.	Exp(B)
Intercept	2.495***	0.838	8.872	0.003	
Lack of Government Support	0.091	0.168	0.293	0.588	1.095
No institutional financial support	0.126	0.172	0.541	0.462	1.135
No market for Agric produce	-0.368***	0.142	6.732	0.009	0.692
lack of Infrastructure	-0.113	0.162	0.484	0.487	0.893
Gender					
Male	0.227	0.253	0.804	0.370	1.254
Female(Ref)	0 ^b				
Course of Study					
Agric-Related	0.237	0.405	0.342	0.559	1.267
Non-Agric(Base)	0 ^b				
Family Income Category					
Poor	-0.971**	0.482	4.059	0.044	0.379
Lower-Income	-0.383	0.364	1.104	0.293	0.682
Middle-Income	-0.308	0.351	0.766	0.381	0.735
Upper Income	0 ^b				
Participation in Agric Intervention Program					
Yes	0.367	0.255	2.074	0.150	1.443
No (Ref)	0 ^b				

Variables	B	Std. Error	Wald	Sig.	Exp(B)
Participation in Entrepreneurship Training Program					
Yes	1.330***	0.273	23.672	0.000	3.781
No (Ref)	0 ^b				

Sen's capability approach highlights the role of personal, social and environmental conversion factors in translating resources to achieved functioning (Sen, 2011). In the situation while a person might have been predisposed (perhaps due to being raised in a rural or poor family) to have a positive perception of agricultural entrepreneurship, his or her decision to actually venture into the business (functioning) may be hampered by lack of the environmental conversion factor of financial constraints. Thus, viewed through the capability lens, for an entrepreneurship programme to be effective, it should go beyond improving perception to actually making sure that financial and other hurdles are removed from the path towards agripreneurship. This is consistent with the findings of Umeh *et al.* (2020), who found that raising a household's annual income has a statistically significant impact on future agricultural decisions. The extended model for entrepreneurship participation (Figure I) clearly illustrates the role that conversion factors play in this process.

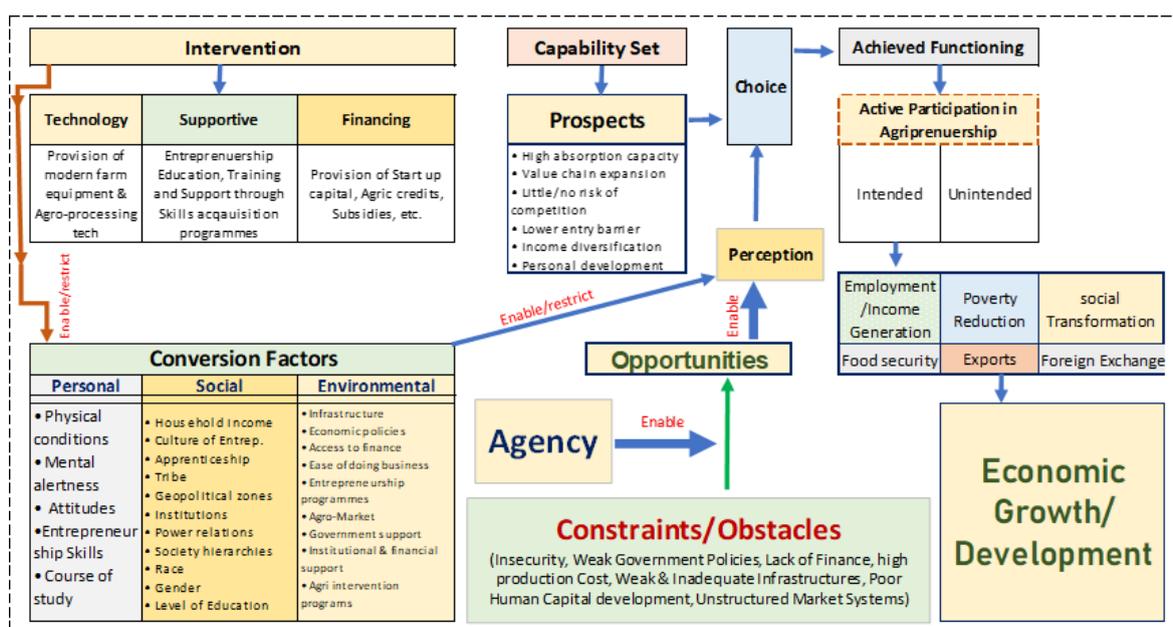


Figure 1. An expanded model for Agripreneurship Participation (Adapted from Robeyns (2005, p.98)

As indicated in the figure, the Nigerian government and other stakeholders need to take a comprehensive approach to improve youth perception and engagement in agripreneurship. While the introduction of entrepreneurship education programmes and agricultural training steps in the right direction (Akhmetshin *et al.*, 2019; Cui, Sun & Bell, 2019; Iwu *et al.*, 2021), they are not sufficient to engender increased youth agripreneurship engagement. Sen's capability approach helps to x-ray several factors required for the effective implementation of development programmes. Considering the multiplicity of threats (like security, lack of finance, and inadequate infrastructure), there is a need to ensure that aspiring agripreneurs have ample support mechanisms (Barki *et al.*, 2020; Sagath, Van Burg, Cornelissen, 2019). Scholars like Elnadi & Gheith, 2021 have

stated the need for the development of an entrepreneurial ecosystem with adequate infrastructure, support structures, and culture that enhances students' self-efficacy and intention to become entrepreneurs.

Qualitative Analysis of Agricultural Entrepreneurship as a Valuable Functioning

The concept of functioning is emphasised in the theoretical framework of this study (Sen's capabilities approach). As noted earlier, they are the many worthwhile doings and beings (Conradie, 2013). The idea encompasses a range of pursuits and situations that are treasured by those who partake in them. The capacity approach's main goal is to increase these opportunities. Being able to start an agribusiness or being an agripreneur are examples of functioning.

The main focus of this study is on the elements that inspire people to engage in agripreneurship. That is, what motivates (Welter & Scrimpshire, 2012) people to undertake agricultural entrepreneurship? In the course of this research, a number of such factors were established as key stimuli for starting an agribusiness.

Eradicating Poverty and Malnutrition Through Agricultural Entrepreneurship

One of the factors that move people to venture into agricultural entrepreneurship is the desire to eradicate poverty and malnutrition. This implies some people derive value from being able to contribute towards ending poverty and malnutrition using agriculture. As noted by the following respondent:

First, I came from a poor background, and growing up, I realised and understood that there is a need to produce food at a cheap level. Secondly, I also observed that there is a low quality of food-producing firms in Nigeria. Why? Because there is no standardisation and regulation for the companies, and people also do not really care about what they eat. One of the motivations is to provide quality and nutritious foods for people in Nigeria. These are the two major factors that motivated me in that field. Another one is the need for food security. No one can stay actually without food.

The above finding is in tandem with the findings of scholars like Bairwa, Lakra, Kushwaha, Meena and Kumar (2014), who argue that people venture into agriculture with the aim of eradicating poverty since they will be able to provide food and generate income to meet their daily necessities.

Agricultural Entrepreneurship as a Vehicle to Express One's Passion

Aside from the need to tackle the menace of poverty and malnutrition, agricultural entrepreneurship also serves as an opportunity to express one's passion/interest. For instance, an individual can develop a significant interest in a specific aspect of agriculture like beekeeping, fish farming, pig farming etc. On the other hand, an individual may have a specific interest in areas of crop production such as cereals and pulses (like garden peas) and perennial crops, and field crops. Thus, agricultural entrepreneurship offers individuals an opportunity to pursue their passion/interest (functioning). As indicated in the following responses:

When I started, I could say I stumbled into my passion a few years ago; I think in 2015 when I came back from the United States. Later on, I saw an advert relating to farming - poultry farming precisely. I believe then that it would be a lot of fun... I am passionate about the Agric business...

Other scholars have emphasised the role of passion in entrepreneurial engagement (Chandra, Tjiptono & Setyawan, 2021). In the face of inevitable challenges along the way, the entrepreneurs' passion motivates them to persevere in their businesses (Kabwe *et al.*, 2018).

Agricultural Entrepreneurship as a Vehicle for Freedom

Another noteworthy aspect of agricultural entrepreneurship as a valuable function is that it provides individuals with a chance to express their Freedom (Fatoki, 2014). People can, for instance, exercise their right to be their own boss or manager by engaging in agripreneurship (López-Meri *et al.*, 2020). Additionally, agriculture entrepreneurship presents an opportunity for people to manage their time and create a customised way of working. Unlike employees in an organisation, they are not influenced by any supervisor. In order to be more independent and apply their own working methods, people engage in agribusiness (Alam, Senik, and Jani, 2012). According to a respondent:

My husband's job was very intense, and I knew I could not do some jobs because I stayed on the mainland, and most of the jobs were on Island. I could not do a job that would take away the time I have for my children since my husband was already busy. So, I started thinking about what I can do. ...I would not have to work for anyone. So, I would design my business. Basically, that is how I started my farming business...I needed a job; I needed something that would give me time, and farming popped up.

Resource control is another aspect of the independence that agripreneurs, the majority of whom are sole entrepreneurs, enjoy. These people make decisions about how the company's resources will be acquired, distributed, and efficiently managed without any type of unjustified interference from a higher authority. They decide how earnings will be made, and utilised, what portion will be invested in the company for growth, and what portion will be set aside for the owner's direct income (Eniola, 2021).

CONCLUSIONS

This empirical study has investigated the perception of young Nigerians towards agricultural entrepreneurship, their intention to venture into agripreneurship and the determinants of such. It further explored agripreneurship as a valuable function among Nigerian youth. The research established that, within the time of this study, Nigerian youths display a positive perception and intention towards agripreneurship engagement. It also found that participation in entrepreneurship programs, course of study, family income, perceived availability of markets, and infrastructural facilities were significant determinants of youth's agripreneurship perception and intention. On the other hand, it was found that government support, infrastructure, agriculture intervention programme, institutional and financial support, gender, tribe and geopolitical zones had no significant effect on youth agripreneurship perception. While qualitatively exploring agripreneurship undertaking as a valuable functioning, the study found that the freedom to control one's time, the expression of one's passion, and the need to eradicate poverty are reasons young Nigerians value agricultural entrepreneurship.

One interesting finding is that although poor family background predicts positive agripreneurship perception, it does not predict an intention to start an agribusiness. This is, perhaps, because financial resources are a critical capability for translating positive perception into action. The result suggests that the government, financial institutions, and other stakeholders should ensure that young Nigerians have access to financial resources and other capabilities needed to engender successful entrepreneurship functioning. Using the Sen capability approach, which

points out a multiplicity of conversion factors, this paper argues for a comprehensive approach towards youth agricultural entrepreneurship development and job creation.

Theoretically, this study broadened Sen's capabilities approach by taking into account significant elements that influence young people's involvement in agricultural entrepreneurship. The expanded model for agripreneurship participation thus serves as an inclusive model worthy of being adopted by subsequent research. Additionally, the empirical findings of this study provide researchers, policymakers, and other stakeholders with insightful inputs on efficient mechanisms for agricultural entrepreneurship development and job creation.

LIMITATION & FURTHER RESEARCH

This study is limited by its focus on only recent graduates. Considering that many Nigerian youth do not have the luxury of tertiary education, there is a need to extend the study to non-college graduates. Future research can reveal the experiences of non-college graduates and the best ways to encourage young agricultural entrepreneurship and job creation among them. There may also be a need to extend the research to other African countries since agricultural entrepreneurship can help to tackle the perennial problem of youth unemployment across the continent.

REFERENCES

- Abdullah, A. A., & Sulaiman, N. N. (2013). Factors that influence the interest of youths in agricultural entrepreneurship. *International Journal of Business and Social Science*, 4(3), 1-15.
- Abera, G., Ibrahim, A. M., Forsido, S. F., & Kuyu, C. G. (2020). Assessment of post-harvest losses of tomato (*Lycopersicon esculentum* Mill.) in selected districts of East Shewa Zone of Ethiopia using a commodity system analysis methodology. *Heliyon*, 6(4), e03749.
- Addo, L. K. (2018). Factors influencing Agripreneurship and their role in Agripreneurship Performance among young Graduate Agripreneurs. *International Journal of Environment, Agriculture and Biotechnology*, 3(6), 2051–2066. <https://doi.org/10.22161/ijeab/3.6.14>
- Adesina, T. K., & Favour, E. (2016). Determinants of Participation in Youth-in-Agriculture Programme in Ondo State, Nigeria. *Journal of Agricultural Extension*, 20(2), 104. <https://doi.org/10.4314/jae.v20i2.8>
- Adeyanju, D., Mburu, J., & Mignouna, D. (2021). Youth Agricultural Entrepreneurship: Assessing the Impact of Agricultural Training Programmes on Performance. *Sustainability*, 13(4), 1697. <https://doi.org/10.3390/su13041697>
- Ahaibwe, G., Swaibu Mbowe, & Musa Mayanja Lwanga. (2013). Youth Engagement in Agriculture in Uganda: Challenges and Prospects. *Africa Portal*, 106. <https://doi.org/10.22004/ag.econ.159673>
- Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozachek, A. V., Prikhodko, A. N., & Safonova, E. E. (2019). Acquisition of entrepreneurial skills and competencies: Curriculum development and evaluation for higher education. *Journal of Entrepreneurship Education*, 22(1), 1-12.
- Akpan, S. B. (2010). Encouraging Youth's Involvement in Agricultural Production and Processing; NIGERIA STRATEGY SUPPORT PROGRAM (Policy Note No. 29). International Food Policy Research Institute. Abuja, Nigeria: CGIAR.
- Alam, S. S., Senik, Z. C., & Jani, F. M. (2012). An Exploratory Study of Women Entrepreneurs in Malaysia: Motivation and Problems. *Journal of Management Research*, 4(4). <https://doi.org/10.5296/jmr.v4i4.2377>
- Alkire, S. (2005). Why the Capability Approach? *Journal of Human Development*, 6(1), 115–135. <https://doi.org/10.1080/146498805200034275>
- Alkire, S. (2008). *Valuing freedoms : Sen's capability approach and poverty reduction*. Oxford Univ. Press.

- Amit, R., & Muller, E. (1995). "PUSH" AND "PULL" ENTREPRENEURSHIP. *Journal of Small Business & Entrepreneurship*, 12(4), 64–80. <https://doi.org/10.1080/08276331.1995.10600505>
- Ayedoju, B. (2022, February 15). *Nigerian graduates' choice of careers*. The Hope Newspaper. <https://www.thehopenewspaper.com/nigerian-graduates-choice-of-careers/>
- Bairwa, S. L., Lakra, K., Kushwaha, S., Meena, L. K., & Kumar, P. (2014). Agripreneurship development as a tool for the upliftment of agriculture. *International Journal of Scientific and Research Publications*, 4(3), 1-4.
- Barki, E., de Campos, J. G. F., Lenz, A.-K., Kimmitt, J., Stephan, U., & Naigeborin, V. (2020). Support for social entrepreneurs from disadvantaged areas navigating crisis: Insights from Brazil. *Journal of Business Venturing Insights*, 14, e00205. <https://doi.org/10.1016/j.jbvi.2020.e00205>
- Chandra, Y., Tjiptono, F., & Setyawan, A. (2021). The promise of entrepreneurial passion to advance social entrepreneurship research. *Journal of Business Venturing Insights*, 16, e00270. <https://doi.org/10.1016/j.jbvi.2021.e00270>
- Cheteni, P. (2016). Youth Participation in Agriculture in the Nkonkobe District Municipality, South Africa. *Journal of Human Ecology*, 55(3), 207–213. <https://doi.org/10.1080/09709274.2016.11907025>
- Coker, A. A. A., Akogun, E. O., Adebayo, C. O., Mohammed, S., Nwojo, M., Sanusi, H., & Jimoh, H. O. (2017). Gender Differentials among Subsistence Rice Farmers and Willingness to undertake Agribusiness in Africa: Evidence and Issues from Nigeria. *African Development Review*, 29(S2), 198–212. <https://doi.org/10.1111/1467-8268.12273>
- Conradie, I. (2013). *Aspirations and capabilities: The design and analysis of an action research project in Khayelitsha* [PhD Dissertation].
- Cresswell, J. W., & Plano, C. V. L. (2011). Designing and conducting mixed-method research. 2nd Sage. *Thousand Oaks, CA, 201*.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. SAGE.
- Cui, J., Sun, J., & Bell, R. (2019). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *The International Journal of Management Education*, 19(1). <https://doi.org/10.1016/j.ijme.2019.04.001>
- Edomwonyi-Otu, O., & Edomwonyi-Otu, L. C. (2020). Is Unemployment the Root Cause of Insecurity in Nigeria? *International Journal of Social Inquiry*. <https://doi.org/10.37093/ijsi.837697>
- Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *The International Journal of Management Education*, 19(1), 100458. <https://doi.org/10.1016/j.ijme.2021.100458>
- Eniola, A. A. (2021). The Entrepreneur Motivation and Financing Sources. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 25. <https://doi.org/10.3390/joitmc7010025>
- Fabiyi, E. F., Obaniyi, K. S., Olukosi, J. O., & Oyawoye, E. O. (2015). Assessment of Secondary School Student's Perception and Attitude to the Study of Agriculture, Omu-Aran, Kwara State, Nigeria. *Case Studies Journal ISSN (2305-509X)–Volume, 4*.
- Fatoki, O. (2014). Factors Motivating Young South African Women to Become Entrepreneurs. *Mediterranean Journal of Social Sciences*, 5(16). <https://doi.org/10.5901/mjss.2014.v5n16p184>
- Food and Agriculture Organization of the United Nations. (2012). *Nigeria at a glance | FAO in Nigeria*. <http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/>

- Giones, F., Brem, A., Pollack, J. M., Michaelis, T. L., Klyver, K., & Brinckmann, J. (2020). Revising entrepreneurial action in response to exogenous shocks: Considering the COVID-19 pandemic. *Journal of Business Venturing Insights*, 14, e00186. <https://doi.org/10.1016/j.jbvi.2020.e00186>
- Im, J. B., & Jeong, I. J. (2014). The frame of agricultural policy and recent major agricultural policy in Korea. FFTC-COA international workshop on collection of relevant agricultural policy information and its practical Use, June 23-27, 2014, Taipei, Taiwan R.O.C. view at Google scholar
- Inegbedion, G., & Islam, M. M. (2021). Willingness and motivation of Nigerian youth to pursue agricultural careers after graduation. *International Journal of Agricultural Science, Research and Technology (IJASRT) in Extension and Education Systems*, 11(1), 55-69.
- Inyeinyang, M. M., & Ukpong, I. G. (2019). The Livestock Sector and its Contributions to the Protein and Energy Needs of the Nigerian Population. *Ghana Journal of Agricultural Science*, 54(2), 86-97. <https://doi.org/10.4314/gjas.v54i2.9>
- Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., & Aliyu, O. A. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(1), 100295.
- Jeil, E. B., Abass, K., & Segbefia, A. Y. (2020). Challenges to sustaining beekeeping livelihoods in Ghana. *GeoJournal*, 1-18.
- Jha, S., Kaechele, H., Lana, M., Amjath-Babu, T. S., & Sieber, S. (2020). Exploring Farmers' Perceptions of Agricultural Technologies: A Case Study from Tanzania. *Sustainability*, 12(3), 998. <https://doi.org/10.3390/su12030998>
- Kabwe, S., Machina, H., & Kinkese, T. (2018). Successful Emerging Agri-business Youth Entrepreneurs in Zambia. Indaba Agricultural Policy Research Institute (IAPRI) Working Paper 137, June 2018
- Kumar, D. (2019). Prospects and challenges of agro-industry in Bangladesh: An agripreneur view. *African Journal of Agricultural Research*, 14(31), 1379-1389.
- López-Meri, A., Alonso-Muñoz, L., & Casero-Ripollés, A. (2020). What is Behind the Entrepreneurship Intention in Journalism? Entrepreneur Typologies Based on Student Perceptions. *Journalism Practice*, 1-18. <https://doi.org/10.1080/17512786.2020.1715821>
- Lumen, L. (2020). *Factors Affecting Youth Involvement in Agriculture In Selected Areas Of The Davao Region* [Doctoral Dissertation].
- Lyocks, J., Lyocks, S., & Kagbu, J. (2014). Mobilising Youth for Participation in Nigerian Agricultural Transformation Agenda: A Grassroots Approach. *Journal of Agricultural Extension*, 17(2), 78. <https://doi.org/10.4314/jae.v17i2.11>
- Manda, J., Azzarri, C., Feleke, S., Kotu, B., Claessens, L., & Bekunda, M. (2021). Welfare impacts of smallholder farmers' participation in multiple output markets: Empirical evidence from Tanzania. *Plos one*, 16(5), e0250848.
- Mkong, C. J., Abdoulaye, T., Dontsop-Nguezet, P. M., Bamba, Z., Manyong, V., & Shu, G. (2021). Determinant of University Students' Choices and Preferences of Agricultural Sub-Sector Engagement in Cameroon. *Sustainability*, 13(12), 6564. <https://doi.org/10.3390/su13126564>
- Montgomery, D. C., Peck, E. A., & G Geoffrey Vining. (2013). *Introduction to Linear Regression Analysis*. Chichester Wiley Ann Arbor, Michigan Proquest. <https://www.wiley.com/en-us/Introduction+to+Linear+Regression+Analysis%2C+5th+Edition-p-9780470542811>
- Ng'atigwa, A. A., Hepelwa, A., Yami, M., & Manyong, V. (2020). Assessment of factors influencing

- youth involvement in horticulture agribusiness in Tanzania: A case study of Njombe Region. *Agriculture*, 10(7), 287.
- Ngele, A. N., & Muhammad, M. Y. (2023). Entrepreneurial mindset and growth of Micro Small and Medium Enterprises (MSMEs) in Nigeria: a case study of Abuja Municipal Area Council (AMAC) Federal Capital Territory (FCT) Abuja. *Journal of Global Social Sciences*, 4(14), 1–20. <https://doi.org/10.58934/jgss.v4i14.150>
- Nnadi, F. N., & Akwiwu, C. D. (2008). Determinants of Youths' Participation in Rural Agriculture in Imo State, Nigeria. *Journal of Applied Sciences*, 8(2), 328–333. <https://doi.org/10.3923/jas.2008.328.333>
- Ogwo, C. (2021, August 25). *Nigerian fresh graduates and labour market challenges*. Businessday NG. <https://businessday.ng/education/article/nigerian-fresh-graduates-and-labour-market-challenges/>
- Olukunle, O. T. (2013). Challenges and prospects of agriculture in Nigeria: the way forward. *Journal of Economics and Sustainable Development*, 4(16), 37–45.
- Omeje, A. N., Jideofor, A., & Ugwu, M. O. (2020). Youth Empowerment and Entrepreneurship in Nigeria: Implication for Economic Diversification. *SAGE Open*, 10(4), 215824402098299. <https://doi.org/10.1177/2158244020982996>
- Oni, O. (2013). Challenges and Prospects of Agriculture in Nigeria: The Way Forward. *Journal of Economics and Sustainable Development*, 4(16), 37–45.
- Oxford Business Group. (2018, December 5). *Agriculture exports in Nigeria increase*. <https://oxfordbusinessgroup.com/analysis/leveraging-growth-agricultural-exports-are-although-various-hurdles-still-need-be-overcome>
- Polas, M. R. H., Raju, V., Muhibbullah, M., & Tabash, M. I. (2021). Rural women characteristics and sustainable entrepreneurial intention: a road to economic growth in Bangladesh. *Journal of Enterprising Communities: People and Places in the Global Economy*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/jec-10-2020-0183>
- Priyaraj, P. M. (2017). Career choices and agropreneurship. *ZENITH International Journal of Business Economics & Management Research*, 7(6), 17–23.
- Robeyns, I. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development*, 6(1), 93–117. <https://doi.org/10.1080/146498805200034266>
- Roomi, M. A., Rehman, S., & Henry, C. (2018). Exploring the normative context for women's entrepreneurship in Pakistan: a critical analysis. *International Journal of Gender and Entrepreneurship*, 10(2), 158–180. <https://doi.org/10.1108/ijge-03-2018-0019>
- Rose, J., & Johnson, C. W. (2020). Contextualising reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, 51(4), 1–20.
- Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research. *Currents in Pharmacy Teaching and Learning*, 8(4), 509–516. <https://www.sciencedirect.com/science/article/pii/S1877129715301970>
- Sagath, D., van Burg, E., Cornelissen, J. P., & Giannopapa, C. (2019). Identifying design principles for business incubation in the European space sector. *Journal of Business Venturing Insights*, 11, e00115. <https://doi.org/10.1016/j.jbvi.2019.e00115>
- Sen, A. (2011a). *Development as freedom*. New York, N.Y. Anchor.
- Sen, A. (2011b). *The idea of justice*. Cambridge, Mass. Belknap Press Of Harvard Univ. Press.
- Shiwa, F. A. (2014). *Factors affecting youth's participation in agricultural activities as gainful employment in rural areas: a case study of Kilombero district* (Doctoral dissertation, University of Dar es Salaam).

- Turnbull, D., Chugh, R., & Luck, J. (2020). Learning management systems: a review of the research methodology literature in Australia and China. *International Journal of Research & Method in Education*, 1-15. <https://doi.org/10.1080/1743727x.2020.1737002>
- Umeh, N. G., Nwibo, S. U., Nwofoke, C., Igboji, C., Ezeh, A. N., & Mbam, N. B. (2020). Socio-economic determinants of agripreneurship choice among youths in Ebonyi State, Nigeria. *Journal of Agricultural Extension*, 24(1), 24-33.
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How Reliable are Measurement Scales? External Factors with Indirect Influence on Reliability Estimators. *Procedia Economics and Finance*, 20(1), 679-686. [https://doi.org/10.1016/s2212-5671\(15\)00123-9](https://doi.org/10.1016/s2212-5671(15)00123-9)
- Welter, C., & Scrimshire, A. (2021). The missing capital: The case for psychological capital in entrepreneurship research. *Journal of Business Venturing Insights*, 16, e00267. <https://doi.org/10.1016/j.jbvi.2021.e00267>