



**UNIVERSITY of the
WESTERN CAPE**

**YOUTH AGRICULTURAL ENTREPRENEURSHIP AS A VEHICLE
FOR EMPLOYMENT CREATION IN NIGERIA: A CAPABILITY
APPROACH**

BY

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ABSTRACT

Nigeria is indisputably blessed with both human and material resources. With 74 million hectares of arable land, the country has enormous potential to meet its rising food demand while tackling the challenge of youth unemployment. However, harnessing these opportunities will require the active engagement of the youth in agriculture. Through innovation and entrepreneurship, young people are better positioned to transform the sector for greater productivity and growth. It is therefore not surprising that agriculture is considered one of the most strategic sectors to be exploited in creating employment for young Nigerians. This study is an original research work which explored youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria.

To achieve the aim and objective of the research, Sen's capability approach was engaged as the theoretical framework while adopting a mixed methods research design. For the qualitative data collection, four (4) established agripreneurs, four (4) recent graduates and one (1) entrepreneurship educator/expert were engaged in semi-structured interviews. The quantitative data were collected through the use of a survey questionnaire that was designed and administered to a sample of 1,013 recent graduates drawn from the six geopolitical zones in Nigeria. In modelling the dynamics of youth agripreneurship perception and intention in Nigeria, both Linear Regression Model and Multinomial Response Model were applied alongside descriptive and inferential statistics in analysing the quantitative data. Likewise, qualitative inductive reasoning/analysis was employed in analysing the pool of opinions and beliefs of young people who participated in the research.

The study showed that, indeed, agricultural entrepreneurship could serve as an effective vehicle for tackling Nigeria's worsening case of youth unemployment. It was also proven that the perception of young Nigerians towards agricultural entrepreneurship has improved in recent years, with most of the participants having a positive disposition towards agripreneurship. According to the study, the undergraduate course of study, participation in entrepreneurship training programs, family income status, and availability of markets for agricultural products are significant determinants of youth agripreneurship perception. Similarly, participation in entrepreneurship training programs, availability of market for agriculture products, family income background were found to be significant determinants of youth intention to start an agribusiness.

Exploring agriculture as a valuable functioning, the study found that factors that make people value agribusiness include the need to eradicate poverty/malnutrition, the opportunity to express one's passion/interest, the craving for freedom/being one's own boss, among others. Moreover, the study identified major challenges facing the Agric ecosystem in Nigeria, including security and weak government policies, finance/cost, weak and inadequate infrastructures, lack of human capital, and unstructured market systems. The study also found that through agency, young people are challenging obstacles and turning them into opportunities for social and economic development by engaging in entrepreneurship. Some of the recommendations put forth by the study to boost youth agricultural entrepreneurship in Nigeria include institutionalising apprenticeship, improving the agribusiness environment, infrastructural development and structuring of the markets for efficiency.



DECLARATION

I hereby declare that this PhD thesis entitled *Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria: A Capability Approach* is my own work and that I have not previously submitted it at any university for a degree or examination. All sources that I have quoted have been indicated and duly acknowledged by means as complete references.

Signature:.....

Kenechukwu Maduka Ikebuaku

February, 2022.



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To God Almighty, my Eternal Foundation, my Source and my Strength, thank you for your unwavering love and grace.



DEDICATION

To the millions of young Africans who continue to defy the odds and rise above the constraints imposed on them by leadership failures to pursue their ambitions. You are the hope of Africa.

To my sister, Ogechuwku Menkiti - claimed by cancer during this doctoral journey; may your soul rest in peace.

To my mother, Nchekwube Ikebuaku, and many women out there who sacrifice sweat and blood to raise a future generation; scorched by the sun of discrimination and hardship but never surrendering. You are all truly miraculous.

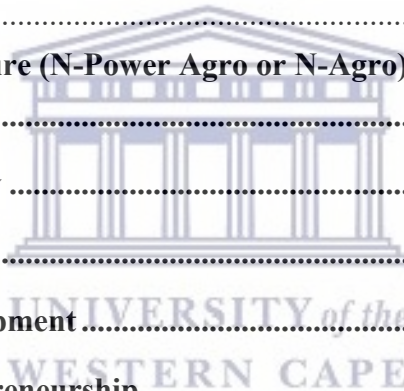
Most importantly, to God Almighty who has never failed despite my unfaithfulness. To Jesus, the One who gave His all for me, I am eternally indebted.



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LIST OF ABBREVIATIONS

ADPs: Agricultural Development Programmes

AFD: African Development Bank

ARMTI: Agricultural and Rural Management Training Institute

CSS: Community Services Scheme

CSWYE: Women and Youth Empowerment

ERGP: Economic Recovery and Growth Plan

EYP: Enable Youth Programme

FADAMA-GUYS: Fadama Graduate Unemployed Youth and Women Agro-preneur Support

FAO: Food and Agriculture Organisation of the United Nations

FIRS: Nigeria's Federal Inland Revenue Service

FMARD: Federal Ministry of Agriculture & Rural Development

GDP: Gross Domestic Product

GIS: Graduate Internship Scheme

IFAD: International Fund for Agricultural Development

IFPRI: International Food Policy Research Institute

IITA: International Institute of Tropical Agriculture

ILO: International Labour Organisation

IYA: IITA Youth Agripreneurs

NALDA: National Agricultural Land Development Authority

NAPEP: National Accelerated Poverty Eradication Plan

NBS: National Bureau of Statistics of Nigeria

NBTE: National Board for Technical Education

NCCE: National Commission for Colleges of Education

NDE: National Directorate of Employment of Nigeria

NUC: National Universities Commission

NYP: National Youth Policy



NYSC: National Youth Service Corps
O'YES: the Osun State Youth Employment Scheme
OBG: Oxford Business Group
PwC: PricewaterhouseCoopers
SAED: Skills Acquisition and Entrepreneurship Development
SMEs: Small and Medium-scale Enterprises
STEP: Skills Training and Entrepreneurship Programme
SURE-P: Subsidy Re-Investment and Empowerment Programme
TEA: Total Early-stage Entrepreneurial Activity
UNICEF: United Nations Children's Emergency Fund
VTS: Vocational Training Scheme
YAGEP: Youth Agricultural Entrepreneur Programme
YEAP: Youth Employment in Agriculture Programme
YIAP: Youth in Agriculture Programme
YOU-WIN: Youth Enterprise with Innovation in Nigeria



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Chapter 1: Introduction and Background

1.1 Introduction

Youth unemployment has been described as the greatest challenge facing Nigeria, and indeed most African countries. Some have described it as the mother of other challenges like thuggery, tourism, cultism, poverty, and so on (Chidiebere, Iloanya & Udunze, 2014). Considering the population explosion and demographic transition taking place, creating employment for young people has become a top policy concern in Nigeria. On the other hand, agriculture has been found to be one of the most strategic sectors to be exploited in creating employment for young people. The sector has so much potential that, if well leveraged, it could help Nigeria realise its development objectives.

Similarly, entrepreneurship has emerged as a potent force for socioeconomic development, of which young people are the fulcrum. The aim of the chapter is to introduce an original research work on youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria. The chapter begins by providing a background/contextualisation to the study before delving into the research problem, research questions, as well as aims and objectives. Moreover, the rationale for the study, description of the study area, limitations and general outline of the thesis are also discussed.

1.2 Background to the Study

1.2.1 Africa and Youth Unemployment

Africa is currently at a critical point in history. The continent's population sits at 1.2 billion, and it has the youngest population in the world with 60 to 70% of the population falling below 30 years old (FAO, 2018; SACAU report, 2013; African Economic Outlook, 2017). The number of youths in Africa's labour market is estimated to be 440 million by 2030, presenting an important development challenge for African governments (De Pinto & Ulimwengu, 2017). Moreover, the continent's population is expected to double, with its youth population reaching over 830 million by 2050 (African Development Bank, 2015). Most of the African youth live in rural areas and have limited opportunities for gainful employment (Allen *et al.* 2016). However, they have untapped potential to transform the agricultural sector through innovation and entrepreneurship (Koiri, 2014).

If well leveraged, this demographic dividend has the potential to unleash significant socioeconomic development on the continent. On the other hand, it can also trigger serious crises across the continent and the world at large; if the energies and talents of the youth are not properly channelled through productive engagement. Indeed, Africa is at the crossroad of opportunity and crisis, and some have referred to the situation as a ticking time bomb. The current high rate of youth unemployment across the continent portends a dangerous future, and therefore must be addressed squarely. Most African youth are currently unemployed, yet the need for more jobs increases by the day. Despite the fact that 12 million youth enter the labour market each year, only 3 million formal jobs are created annually (International Monetary Fund, 2013). If youth unemployment rates are not effectively checked across Africa, about 50% of youth (apart from students) will be unemployed, discouraged, or economically inactive by 2025 (African Development Bank, 2015).

The consequences of youth unemployment are enormous. Apart from its grave effect on the poverty rate, lack of economic opportunities for youth serves as fuel for conflict and instability. According to the African Development Bank (2015), absolute poverty, which is partly the result of a lack of economic opportunity, is among the most significant predictors of political violence in Sub-Saharan Africa. About 40% of people who join rebel groups are motivated primarily by lack of economic opportunity (World Bank, 2011).

1.2.2 Nigeria, Development and Youth Unemployment

Nigeria is a West African country covering an area of 932,768 sq km, and bounded by Chad to the northeast, Niger to the north, Benin to the west, the Atlantic Ocean to the south and Cameroon to the east (Roma, 2008). Considered the most populous country in Africa and making up 50% of West Africa, Nigeria's population currently sits at about 202 million, and is in fact, one of the largest countries of the world (World Bank, 2019). The country is endowed with enormous resources including expansive fertile agricultural land, abundant mineral deposits, and high-level manpower (Omotola, 2008). It has the largest natural gas reserves in Africa and is also the biggest oil exporter on the continent (World Bank, 2019). However, the most important asset of the country is its highly energetic youth population. Over 60% of Nigerians are under the age of 25, and the country has a median age of 18.4 years of age (Central Intelligence Agency, 2020). If well leveraged, this demographic dividend can engender significant socioeconomic development in the country.

Nigeria has the largest economy in Africa, with growing manufacturing, service, financial, communications, entertainment, agriculture and technology sectors. However, the emerging economy still relies heavily on crude oil as its main source of government revenues and foreign exchange earnings (Central Intelligence Agency, 2020). Hence, the volatility of the oil price continues to affect the country's growth performance. From 2000 to 2014, Nigeria's gross domestic product (GDP) grew at an average rate of 7% (World Bank, 2019). Nevertheless, following the oil price collapse between 2014 and 2016, coupled with negative production shocks, Nigeria's GDP growth rate dropped to 2.7% in 2015, paving the way for the 2016 recession in which the economy contracted by 1.6% (World Bank, 2019). Since 2015, the economy has been somewhat mute but is slowly picking up having grown 2.27% in 2019, and this represents an increase of 360 basis points over the annual GDP growth rate of 1.91 % recorded in 2018 (National Bureau of Statistics, 2020).

However, the said recovery is yet to reflect positively on the livelihood of average Nigerians. A 2018 report by the Brookings Institute indicates that there are currently about 87 million Nigerians living in extreme poverty, and the number of those falling into the category is increasing by six (6) people every minute. Nigeria has overtaken India as the poverty capital of the world (Adebayo, 2018). The weakness of the agriculture sector weakens prospects for the rural poor, while high food inflation adversely affects the livelihoods of the urban poor (World Bank, 2019). And while some sectors have experienced expansion in recent years, employment generation remains weak and insufficient to cater for the fast-growing labour force, leading to high rates of unemployment and underemployment rate of 23% and 20%, respectively (World Bank, 2019). The situation has been exacerbated by the COVID-19 pandemic as the unemployment and underemployment rates has jumped to 33.3% and 22.8%, respectively, by Q4 of 2020 (National Bureau of Statistics, 2020).

Young people are the most adversely affected by the socioeconomic situation of the country. According to Nigeria's National Bureau of Statistics (2020), the unemployment rate among young people (15-34 years) was 42.5% while the underemployment among the same category was 21% by Q4 of 2020. This means that as of the last quarter of 2020, the youth unemployment/underemployment rate was 63.1%. This high rate of youth unemployment has had enormous consequences in the country. As observed by Emeh (2012), youth unemployment has led to numerous social and economic ills such as extreme poverty, armed robbery, prostitution, kidnapping and thuggery in Nigeria. Similarly, the World Bank (2019) notes that the high unemployment rate has resulted in increasing frustration among the Nigerian

youth. These young people, bereft of meaningful opportunities, easily fall prey to politicians and rebel/terrorist groups who engage them in various vices. Little wonder why the Boko Haram menace has only grown worse in recent years. As corroborated by the African Development Bank (2015), absolute poverty, which is partly the result of a lack of economic opportunity, is among the most significant predictors of political violence in Sub-Saharan Africa. Furthermore, about 40% of people who join rebel groups are motivated primarily by lack of economic opportunity (World Bank, 2011).

The root cause of Nigeria's youth unemployment challenge is two dimensional. On the demand side, as noted earlier, employment creation has remained weak and so unable to cater for the teeming young population entering the job market. On the other hand, most Nigerian youth are ill-equipped for the labour market. First, the out-of-school children phenomenon is still pervasive in Nigeria. According to UNICEF (2019), 10.5 million of the Nigerian children aged 5-14 years are not in school, and the country has 20% of the entire world's out-of-school children. The situation is worse in the northern part of the country with a school attendance rate of 53 % (UNICEF, 2019).

However, even for those who have had the privilege of basic and tertiary education, scholars have argued that many of them are ill-equipped for the labour market. Salami (2013) observes that most Nigerian graduates lack the relevant skills for employment in today's job market. According to Agboola (2010), the curricula used by the Nigerian tertiary institutions are obsolete when viewed from the perspective of the modern global labour market. Stuck in their ancient ways, these tertiary institutions continuously churn out graduates educated in general fields of studies bereft of relevant technological, social and economic skills and knowledge needed for thriving in the current dispensation (Agboola, 2010).

In the same vein, Akhuemonkhan, *et al.* (2013) notes that the schooling system which Nigeria inherited from the colonial masters continues to produce graduates lacking self-motivation and the innovation of drive needed by the labour market. This is given credence by the fact that the unemployment rate is higher among people with bachelor (41%), master's (23%) and doctoral degrees (23%) than people with vocational skills (18%) (PwC, 2020).

In order to tame the scourge of youth unemployment in Nigeria, both the supply and demand side of labour must be addressed effectively. While the country needs to facilitate the creation of productive employment through entrepreneurship development, it also needs to foster access

to quality and relevant education (World Bank, 2019). To achieve this, the country needs to further diversify its economy while implementing effective policies to boost entrepreneurship and quality education for all.

Due to the job generation potential, entrepreneurship has been lauded as a potent weapon against the onslaught of youth unemployment (Matlay, 2008). Hence, in recent years, governments and other stakeholders in various countries have been investing in fostering entrepreneurial activities through entrepreneurship education (European Commission, 2002; Harry *et al.*, 2013). The belief is that entrepreneurship education enhances students' career prospects either by enabling them to start and run their own businesses or by making them more employable (Rae and Woodier-Harris, 2013). Nigeria has started taking steps to encourage entrepreneurship among young people.

In 2006, entrepreneurship education was made compulsory for all students of higher of all higher education institutions (HEIs) irrespective of their areas of specialisation (Nwekeaku, 2013). This mandate was perceived as a viable tool for tackling the country's macroeconomic challenge of unemployment with its concomitant social and economic problems. However, the persisting high unemployment rate among young people in the country casts serious doubts on the effectiveness of the programme in engendering the set objectives. As Aja-Okorie and Adali (2013) note, despite the compulsory entrepreneurship education in higher education institutions, many Nigerian graduates still remain unemployed long after their graduation. Hence, it seems that the entrepreneurship education delivered to students is falling short of achieving its aims (Aja-Okorie and Adali, 2013).

Agriculture has been identified as one of the strategic sectors to be leveraged in creating employment opportunities for the Nigerian youth (Adesina & Favour, 2016; Lyocks, Lyocks & Kagbu, 2013; Mastercard Foundation, 2019). In the country's Economic Recovery and Growth Plan (2017–2020), agriculture is noted as one of the key sectors that would be exploited in the bid to tackle problems of unemployment, food insecurity, faltering foreign exchange earnings and low industrialisation (Inusa *et al.*, 2018). This is not surprising considering the massive untapped potential of the sector. In the first quarter of 2019, the sector contributed 21.91% to the country's real GDP, which was an increase from its 21.66% contribution in the first quarter of 2018 (National Bureau of Statistics, 2019). Yet, the country is only merely scratching the surface of the enormous potential of the sector. According to Otedola and Etumnu (2013), while over 70% of Nigeria's population are employed in agriculture, the sector

is pregnant with immense opportunities considering the country's extensive arable land, water and human resources.

Although agriculture is Nigeria's largest sector, production challenges have hampered the performance of the sector. According to the Food and Agriculture Organisation of the United Nations (2020), Nigeria loses 10 billion dollars in annual export opportunity from palm oil, groundnut, cocoa and cotton alone as a result of continuous decline in the production of these commodities. Moreover, it has been noted that value-added per capita in Nigeria's Agric sector has merely risen by less than 1 % every year (FOA, 2020). The country's Agric value chains remain severely underdeveloped. As noted by Oxford Business Group (2019), Nigeria and other African countries have a greatly underdeveloped agro-industrial sector so they tend to export raw agricultural commodities and import finished goods.

Despite the role of agriculture in bolstering economic development through employment creation, income derivation, food availability and production of exportable commodities, the Agric sector is beleaguered by protracted youth apathy which arises from the adversative perception and poor judgement of Nigerian youth towards the Agric sector in general. For instance, Adesina and Favour (2016) point out that arising from the array of challenges militating against the development of agriculture in Nigeria, the sector appears unattractive and non-lucrative to many youths. This situation thus makes it difficult to absorb the youth into strategic agricultural undertakings, not only in Nigeria, but Africa in general.

In an analogous submission of Chambers (2014), most youth are reluctant to participate in agriculture because they perceive those agricultural activities as exclusively meant for rural dwellers. Thus, agriculture is considered an affair having strong correlation with the poor and uneducated people. This low mentality compels a number of young Nigerian graduates, especially those with a degree in Agriculture, to seek employment even in the banking and insurance sector where such skills are least needed and poorly rewarded. This paleolithic attitude of the youths towards agriculture is well-explicated by over 60% of the population comprising smallholder farmers (Oxford Business Group, 2019).

Following the submission of Oxford Business Group (2019), it is regrettable that Nigeria, the so-called Africa economic giant cannot boast of 100 farmers with an operational capacity of 50 hectares of land in the entire country. From the standpoint of the World Bank (2014), youth apathy in agriculture has a strong link with national policy misalignments. It is clear that the country has not done enough to stimulate youth involvement in agriculture through inclusive

national agricultural policy efforts to make the sector an attractive and sustainable platform capable of driving the occupational momentum of the younger generation.

The thrust of the study is that for Nigeria to fully exploit the potential of agriculture, the energy, talents and innovation of young people must be channelled towards developing the sector. Leveraging the power of entrepreneurship, the youth are better positioned to identify gaps across the sector's value chains, provide solutions (in form of products and services) to those challenges, thereby boosting the sector productivity while at the same time creating economic value for themselves and others. Not only would this engender significant employment opportunities, it would also enhance food security in the country.

Using Sen's capability approach, this research project aims to explore youth participation in Nigeria's Agric space in a bid to develop a model for not only fostering the engagement of young people in the sector but also expanding their capabilities to become successful agripreneurs. Coined from the two words, agriculture and entrepreneur, an agripreneur is an entrepreneur whose primary business is agriculture or agriculture-related (Uplaonkar & Biradar, 2015). The concept of entrepreneurship goes beyond farming and involves tapping into business opportunities across the entire value chains of the agric sector. This study argues that a major key to increasing the participation of young Nigerians in the agric space lies in changing their mindset from farming focused to entrepreneurship focused. By exploiting the excitement and innovation that come with entrepreneurship, young people can push the frontiers of agricultural revolution in the country leading to sustainable economic prosperity and job creation.

1.3. Research Problem

Youth unemployment has become a perennial problem in Nigeria and most African countries. According to the National Bureau of Statistics (2020), youth unemployment/underemployment rate in Nigeria sits at about 63.1%. That is a worrying situation for a country battling with various forms of youth-led vices. As observed by Emeh (2012), youth unemployment has led to numerous social and economic ills such as extreme poverty, armed robbery, prostitution, kidnapping and political thuggery in Nigeria. Similarly, the World Bank (2019) notes that the high unemployment rate has resulted in increasing frustration among Nigerian youth.

Similarly, Ajufo (2013) links the wrong perception of both policymakers and the youth as a key trigger to unemployment in Nigeria. For instance, most tertiary institutions spend years

training students with the aim of preparing them for the world of work with much attention to formal employment with a salary. Undergraduates in the department of agriculture and allied disciplines that are supposed to be well-equipped with the practical knowledge and skills that will enable them drive the sector through entrepreneurial creativity and innovation are fed with theories that have no relevant bearing on current realities. When these students eventually graduate from school, their orientation would be tilted towards getting a job that would, at least, earn them a salary for daily sustenance. The overall impact will manifest in the sharp decline in youth participation in agricultural entrepreneurship, which further translates into an increase in youth unemployment and declining agricultural outputs in the country.

Another factor that further widens the youth agricultural participation gap can be linked to poor exposure. The problem often stems from the fact that when students are excessively fed with theoretical knowledge, certificates are awarded to them on the basis of their classroom and examination performances, without assessing how many of those students can actually manage a mini farm project. Students are supposed to be mandated to go out and set up a farm project with input support from both the government and their institution of learning. At the end of the project, those who are deemed successful will be awarded certificates of agricultural entrepreneurship, while those with poor performances will be allowed to proceed with new projects until they are proven worthy, not only in learning and character, but also in the capacity to manage agricultural undertakings. It is rather unfortunate that a number of higher institutions offering agriculture as a course of study doesn't even have the space where students can undertake such projects.

These institutions also fail to liaise with the government for the provision of such agricultural basic inputs for students to exhibit their entrepreneurial skills in their undergraduate years. Students are rather asked to go and develop undergraduate theses that eventually find their way to the trash bin or at best in the annals of scholarly gymnastics after one or two years of graduation. The whole academic programme therefore becomes a scenario of *just come, pass exams, graduate and go*. This misplaced priority has created a strong psychological force that influences the perception of young graduates towards effective entrepreneurial participation.

In line with the submission of Ajufo (2013), most of the academic curricula and formal training programmes are designed majorly to guide the youths on how to succeed in the formal job market. Since the so-called formal sector cannot cater for the increasing demand in the job market, those who cannot find their dream white-collar job eventually become discouraged

even to consider agripreneurship as a viable alternative. This further adds to the escalating unemployment situation in the country.

On the other hand, agriculture has been identified as one of the strategic sectors to be leveraged in creating employment opportunities for the Nigerian youth (Inusa *et al.*, 2018; Lyocks, Lyocks & Kagbu, 2013; Mastercard Foundation, 2019). However, the immense potential of the sector is far from being maximised owing to various challenges and the underdevelopment of value chains (FOA, 2020; Oxford Business Group, 2019). While young people are indispensable in the quest for employment creation through agricultural entrepreneurship, low involvement of Nigerian youth in the agric space hampers such efforts. (Adesina & Favour, 2016; Chambers, 2014).

A number of scholars have investigated youth participation in agriculture in various cities and States in Nigeria. However, none has undertaken a nation-wide analysis of the phenomenon (Adesina & Favour, 2016; Ogunremi, Ogunremi & Faleyimu, 2012; Nnadi & Akwiwu, 2008). Also, there is a lack of empirical studies on youth agricultural entrepreneurship in the country. Furthermore, there is no extant study on practical ways to boost youth agricultural entrepreneurship in Nigeria leveraging Sen's capability approach. There is therefore a need to comprehensively understudy Nigeria's youth agricultural engagement in a bid to develop a model for expanding the capabilities for successful agripreneurship. This will help to tackle the perennial challenge of youth unemployment and its concomitants of poverty, armed robbery and political thuggery.

1.4 Research Questions

In the context of the research problem identified above, the main aim of the study is to provide an answer to the following general research question:

What are the viable mechanisms for boosting youth agricultural entrepreneurship in Nigeria?

The specific questions of the study are as follows:

- a. What are the perceptions of young Nigerian graduates towards a career in entrepreneurship?
- b. What are the perceptions of young Nigerian graduates towards a career in agriculture?
- c. What are the perceptions of young Nigerian graduates towards a career in agricultural entrepreneurship?

- d. What are the factors responsible for the youth perception towards agriculture?
- e. In what ways can the capabilities of the Nigerian youth be expanded for successful agripreneurship and employment creation?

These preceding questions were critically addressed in the study by engaging a mixed method research design. This means that both quantitative and qualitative research methodologies were employed in answering the research questions, thereby providing a robust analysis.

1.5 Aim of the Research

The aim of the research is to develop a model for expanding opportunities for youth agripreneurship and employment creation in Nigeria.

1.6 Objectives of the Research

The objectives of the study include:

1. To review literature on youth employment, agriculture and entrepreneurship in Nigeria specifically as well as other countries.
2. To investigate entrepreneurship education as a capability.
3. To investigate the perception of young Nigerian graduates towards a career in agriculture and entrepreneurship.
4. To investigate the factors responsible for the perception of young graduates towards agriculture.
5. To critically investigate available capabilities (opportunities) for youth agricultural entrepreneurship in Nigeria.
6. To investigate the effectiveness and challenges of existing youth agricultural intervention programmes.
7. To explore youth employment opportunities within the agricultural ecosystem in Nigeria.
8. To explore the role of agency in agric entrepreneurship and the relationship between agency and the expansion of entrepreneurial capabilities in Nigeria's agricultural ecosystem.
9. To design a model for expanding real opportunities for successful youth agripreneurship in Nigeria
10. To provide recommendation on applying the designed model for tackling the challenge of youth unemployment in Nigeria and other African countries.

1.7 Structure of the Thesis

This thesis is organised into nine chapters as detailed in the table below:

Chapter 1 Introduction and Background

The aim of this chapter is to introduce an original research work on youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria. The chapter begins by providing a background/contextualisation to the study before delving into the research problem, research questions, as well as aims and objectives. Moreover, the rationale for the study, description of the study area, limitations and general outline of the thesis are also discussed.

Chapter 2 Agricultural Entrepreneurship as a Panacea for Youth Unemployment

The aim of this chapter is to explore Agric entrepreneurship as a viable tool for dismantling the manacle of youth unemployment in Nigeria. The chapter begins by elucidating on Nigeria's youth unemployment and programmes to address it before delving into agricultural entrepreneurship.

Chapter 3 Literature Review

This chapter aims to place the study in context through a thorough synthesis of extant literature on youth entrepreneurship and agricultural development in Nigeria, Africa and globally. It elucidates on both conceptual, theoretical and empirical understanding of youth agricultural entrepreneurship.

Chapter 4 Theoretical Framework

The aim of this chapter is to provide the necessary grounding for the research through a thorough presentation of the theoretical frameworks used for the study. It also aims to demonstrate the justification for using the capability approach as a holistic approach for exploring entrepreneurship development. The chapter begins with an exposition of the capability approach to development which represents the theoretical framework underpinning the research. Also, the chapter discusses various capability approach concepts like functioning, capability and conversion factors. Moreover, it provides a critique of the capability approach

while attempting to respond to the critiques. It also utilised the capability approach as a lens for understanding agricultural entrepreneurship.

Chapter 5 Philosophy and Methods of Research

This chapter presents the philosophical stance in addition to the methodological procedures utilised in the course of the entire empirical survey process. Essentially, the chapter focuses on critical realism as a philosophical view of this study with a view to linking the discrete quantitative and qualitative research approaches espoused in this study. Other issues captured in the chapter include research design, population and sampling techniques, data gathering as well as the analytical technique and ethical consideration adopted in the study.

Chapter 6 Analysis And Discussion of Youth Perception of Agricultural Entrepreneurship in Nigeria

This chapter thus presents a detailed analysis of youth perception of agricultural entrepreneurship in Nigeria. Specifically, the chapter discusses the dynamics of youth agripreneurship perception and its attendant determinants with significant testament from the empirical survey conducted in the course of this study.

Chapter 7 Nigeria's Agricultural Ecosystem: A complex intersection of constraints, opportunities and agency

The chapter explores the Nigeria's Agricultural Ecosystem as a complex intersection of constraints, opportunities and agency. First, issues relating to agricultural entrepreneurship as a valuable functioning, agricultural entrepreneurship and the need for poverty and malnutrition eradication, agricultural entrepreneurship as an opportunity to express one's passion/interest as well as agricultural entrepreneurship as an opportunity to express one's freedom were discussed. Thereafter, the chapter evaluates various employment prospects for the Nigerian youth, unemployment as a constraint on capability and unemployment as a poverty trigger. Other prominent issues addressed in the chapter include investigation of the various constraints in the Agricultural Ecosystem in Nigeria with specific emphasis on insecurity and weak government policies, increasing finance and production cost, weak and inadequate

infrastructures, poor human capital development and unstructured market systems.

Moreover, the role of agency in turning constraints into opportunities within the Agricultural Ecosystem is further discussed, while making reference to the need to transit from resilience to transilience while presenting constraints as a capability. The concluding section of the chapter offers a discussion of two principal drivers of entrepreneurship intention, namely necessity and opportunity, thus giving birth to necessity entrepreneurship and opportunity entrepreneurship. The distinctions between the duo are also discussed, while drawing a logical conclusion based on current realities in the context of the Agricultural Ecosystem in Nigeria.

Chapter 8 Expanding Opportunities for Successful Youth Agripreneurship in Nigeria

The chapter covers issues relating to the need to expand opportunities for successful youth agripreneurship in Nigeria. First, the chapter discusses the efficacy of the extant entrepreneurship programme in Nigeria's tertiary education as well as that of existing youth intervention and Agric programmes with specific emphasis on Agric programmes in Nigeria. The regrettable rise in the spate of youth unemployment (despite the positive perception of the youth towards agriculture and the various entrepreneurship programmes from which the youth have benefited) triggered the need to look beyond training and perception, by creating a more comprehensive mechanism for boosting youth entrepreneurship engagement in Nigeria. Such opportunities can be created through cultural shifts (by viewing culture as a capability), apprenticeships (a special form of practical education as a capability), as well as government policies and programmes (by viewing the business environment as a capability).

Chapter 9 Research Summary, Conclusion and Recommendation

This chapter provides a comprehensive summary of the entire thesis including the revised conceptual model.

Chapter 2: Youth Agricultural Entrepreneurship as a Panacea for Youth Unemployment

2.1 Chapter Overview

Youth unemployment is one of the major challenges facing Nigeria. However, agriculture is considered a most strategic sector to be exploited in tackling high youth unemployment rate and fostering social economic development in Nigeria. The aim of this chapter is to explore Agric entrepreneurship as a viable tool for dismantling the manacle of youth unemployment in Nigeria. The chapter begins by elucidating on Nigeria's youth unemployment and programmes to address it before delving into agricultural entrepreneurship.

2.2. Youth Unemployment in Nigeria

2.2.1 Definition and State of Youth Unemployment in Nigeria

The African Union (2006) defines youth or young people as every person between the ages of 15 and 35 years. Nigeria, on the other hand, has a narrower definition of youth. In the 2019 edition of National Youth Policy, the age bracket for classification of youth in Nigeria was reviewed downwards from the prior 18 - 35 years to 15 - 29 years. However, apart from the fact that the new classification offers a narrower definition of youth, it has also not been harmonised with the available statistics. Available statistics on youth employment in the country are aligned with the African Union classification. Thus, for the sake of practicality as well as to provide a broader view of young people, this study will engage the African Union's (15 - 35 years) definition.

The International Labour Organisation defines unemployment (1982) as the share of the labour force (economically active population) that is without work but willing and able to work. Unemployment comprises of:

...all persons of working age who were: a) without work during the reference period, i.e. were not in paid employment or self-employment; b) currently available for work, i.e. were available for paid employment or self-employment during the reference period; and c) seeking work, i.e. had taken specific steps in a specified recent period to seek paid employment or self employment.

The unemployed are simply those people who have not worked for more than one hour during the reference period but who are available for and actively looking for work (O'Higgins, 2001).

In Nigeria, the labour force covers all persons aged 15 to 64 years who are willing and able to work irrespective of whether they are employed or not. According to Nigeria's National Bureau of Statistics (NBS), unemployed persons are those of working age, who are not in employment, but are seeking work, and currently available to start working (Babalobi, 2019). It also reflects those who are currently working less than 20 hours per week. The rate of unemployment of any country can be calculated by expressing the number of unemployed persons as a percentage of its total labour force. Unemployment rate is the most commonly used indicator for gaining understanding of the health of the labour market and the economy of a country. (Hussmanns, 2007). It also helps policymakers to measure the impact of employment generation programmes.

Youth unemployment refers to individuals between the ages of 15 and 35 who are willing and able to work, but unable to find work. The National Bureau of Statistics (NBS) defines underemployment as a situation in which one is engaged in some part-time work. Such persons either work between 20 and 40 hours per week or are employed in a job which underutilised their skills. This occurs when employable young people could only be engaged in short-term, temporary and informal employment arrangements (Durotoye, 2014). Young Nigerians are worse hit by the scourge of unemployment when compared to other age brackets (NBS, 2020).

In the 3rd quarter of 2018, the unemployment rate for young Nigerians (15-35 years) was 29.7%, while the underemployment rate within the same period was 25.7% (NBS, 2018). However, by the fourth quarter of 2020, youth (15-34 years) unemployment and underemployment rates have increased to 42.5% and 21%, respectively (NBS, 2020). Thus, as of the fourth quarter of 2020, 63.5% of Nigeria's youth were either unemployed or underemployed. Even with a narrower age bracket in the most recent NBS reports, unemployment among young people continues to rise significantly and is expected to get worse in lieu of the economic impact of the COVID-19 pandemic.

The enormity of the situation of youth unemployment in Nigeria can be illustrated by the number of graduates that apply for the few available positions. In 2014, about 500,000 applicants were invited to apply for 4,556 job openings with the Nigeria Immigration Service (Adigun, 2014). During the application process, at least 16 applicants lost their lives while several others were seriously injured in desperate stampedes. Similarly in 2018, Nigeria's Federal Inland Review Service (FIRS), received over 700,000 applications in response to 5,000 positions which it advertised. These are just two out of the many terrible experiences Nigerian

graduates are subjected to due to lack of employment opportunities. Every year, millions of Nigerian graduates are churned out by universities with most of them having no hope of getting employment (Ukpong, 2013).

This high rate of youth unemployment has had enormous consequences in the country. According to Durotoye (2014), Boko Haram insurgency, Niger Delta militants, and rampant kidnappings in Nigeria are all products of youth unemployment. The World Bank (2019) notes that the high unemployment rate has resulted in increasing frustration among the Nigerian youth. This position is corroborated by O'Higgins (2001) who notes that youth unemployment leads to alienation and social unrest. In the same vein, the World Bank (2019) asserts that about 40% of people who join rebel groups are motivated primarily by lack of economic opportunity. Thus, high youth unemployment is antithetical to peace and stability (Philip, Samson & Ogwu, 2013).

Moreover, the high rate of youth unemployment poses a significant threat to Nigeria's democracy. These young people, bereft of meaningful opportunities, easily fall prey to politicians who engage them in various vices. As corroborated by the African Development Bank (2015), absolute poverty, which is partly the result of a lack of economic opportunity, is among the most significant predictors of political violence in Sub-Saharan Africa. As noted by Durotoye (2014), Nigeria's high rate of youth unemployment is capable of undermining its democratic practice as these young people constitute serious threats when engaged by the political elites for clandestine activities like political assassination.

Another major effect of youth unemployment is emigration of skilled and talented young Nigerians. According to Durotoye (2014), facing bleak prospects in Nigeria, many ambitious youths often seek opportunities abroad and sometimes risk their lives in the process of escaping to developed countries. In the same vein, youth unemployment has a negative impact on economic growth due to the underutilisation of the country's human resources (Durotoye, 2014; Serifat, 2020). Other consequences of youth unemployment include mental illness due to frustration, extreme poverty, food insecurity and pervasive inequality (Ayinde, *et al.*, 2008; Emeh, 2012; Durotoye, 2014; Onwuka, Ugwu, & Chukwuma, 2020; Serifat, 2020).

2.2.2 Causes of Youth unemployment

Youth unemployment generally stems from poor macroeconomic conditions (O'Higgins, 2001). According to Touré and Fadayomi (1992), unemployment is a function of a country's

inability to develop and utilise its human capital resources effectively. From this statement, we can see that the root cause of unemployment is double edged: the development of human capital and the provision of opportunities to absorb them. In other words, causes of unemployment are two dimensional: labour supply and labour demand.

While the demand aspect deals with factors responsible for employment generation, the supply side deals with the development of human capital with the requisite skills and knowledge to take up available jobs. From the supply side, the causes include rural-urban migration, inadequate educational curricula, rapid population growth, lack of employability skills (Agboola, 2010; Agnes & Venatus, 2010; Durotoye, 2014; Longe, 2017; Salami, 2013; Serifat, 2020). On the demand side, we have factors like poor infrastructure, unfavourable business environment and other government policies that affect enterprise growth and job creation. Other factors include neglect of the agricultural sector and institutional failures (Durotoye, 2014).

In search of greener pastures in the cities, young Nigerians tend to migrate from rural to urban areas. This migration leads to a surplus in the supply side of labour in the urban areas while the rural areas where most agricultural activities take place are bereft of the requisite human capital. As noted by Agnes & Venatus (2010), the high degree of geographical mobility of the African youth from rural to urban migration has contributed to the continent's high rate of youth unemployment, especially in the urban centres. Similar to the rural-urban migration is population explosion. Nigeria has been experiencing a rapid population growth rate leading to an increase in the labour force without commensurate increase in its demand (Durotoye, 2014). While the youthful population offers a demographic advantage to be leveraged for economic growth, such dividends can only be harnessed if enough economic opportunities are available to absorb the teeming labour force.

Another critical factor on the supply side of the labour equation deals with the quality of available human capital. On one hand, low level of education is still an issue in Nigeria as a significant percentage of the Nigerian youth do not have access to secondary and/or tertiary education. This is not surprising considering that Nigeria houses about 20% of the entire world's out-of-school children (UNICEF, 2019). Moreover, 10.5 million of the country's children aged 5-14 years are not in school, only 61% of those aged 6-11 years regularly attend primary school, and just about 40% of children aged 36-59 months receive early childhood education. The situation is even far worse in the northern part of the country with a school

attendance rate of 53 % (UNICEF, 2019). With such low capital development through education, access to decent job opportunities becomes very difficult.

However, the problem of adequate human capital development goes beyond access to schools and institutions of higher learning. As important as access is, quality and relevance of the education provided are also very critical. Salami (2013) observes that most Nigerian graduates lack the relevant skills for employment in today's job market. Similarly, both Durotoye (2014) and Agnes and Venatus (2010) note that the skills possessed by many graduates do not match the needs of the labour market. Little wonder why the number of tertiary institutions in Nigeria has been on the rise, while employment opportunities have been decreasing (Babalobi, 2019).

This situation is consequent upon inappropriate school curricula. According to Agnes and Venatus (2010), the education system in Nigeria, with its bias towards liberal disciplines, over-supplies the job market with graduates lacking skills that are in demand in today's world. They also note that many graduates in Nigeria lack entrepreneurial skills to facilitate self-employment. In the same vein, Agboola (2010) observes that the curricula used by the Nigerian tertiary institutions are obsolete when viewed from the perspective of the modern global labour market. Stuck in their ancient ways, these tertiary institutions continuously churn out graduates educated in general fields of studies bereft of relevant technological, social and economic skills and knowledge needed for thriving in the current dispensation (Agboola, 2010).

This challenge is also noted by Dabalén, Oni and Adekola (2001), who assert that, over the past decades, Nigeria's academic standards have fallen significantly to the point that universities no longer equip students with technical and soft skills required by the modern labour market. Interestingly, the unemployment rate is higher among people with bachelor (41%), master's (23%) and doctoral degrees (23%) than people with vocational skills (18%) (PwC, 2020). Evidently, the educational system has failed and it appears that the longer you study the higher are your chances of being unemployed. Thus, the schooling system, inherited from the colonial masters, needs to be changed in order to be able to produce graduates endowed with skills, innovation and drive for the modern labour market (Akhuemonkhan *et al.*, 2013).

On the demand side of the equation, we have various factors that affect the development and growth of businesses, especially the Small and Medium-scale Enterprises (SMEs) which provide over 90% of employment opportunities in the manufacturing sector, and about 70% of

aggregate employment generated every year in Nigeria (Eniola, 2014). According to Mousley (2007), some of the factors affecting the growth of SMEs include inadequate infrastructure, access to finance, regulatory burden, and training/education. Others are corruption, political instability, lack of access to capital, and unfair competition consequent upon globalisation (Aceleanu *et al.*, 2014; Fjose, 2010; Okpara & Kabongo, 2009; Krasniqi, 2007).

Beyond expansion of SMEs, technological unemployment can result from disruption due to automation which leads to the displacement of human labour with machines. According to Liang, Ramanauskas and Kurenkov (2019), 47% of current existing jobs contain tasks that may be automatable. This means that with full automation of all those tasks machines would replace human labour thereby leading to job losses. Another factor that has contributed to Nigeria's high youth unemployment rate is the neglect of the agricultural sector which before the discovery of oil was the chief source of government's revenue (Ayinde, *et al.*, 2008).

2.3 Various Interventions to Address Youth unemployment

2.3.1 National Youth Policy (NYP)

According to the National Population Commission (2013), about half of the total population of Nigeria comprises of youths between the ages of 18 and 35 years. Considering the large proportion of youth in Nigeria, the government developed the National Youth Policy (NYP) with the overall goal of providing an appropriate framework that will promote social, health, economic and political well-being of all youths, protect their fundamental human right and improve their quality of life (Oduwole, 2015).

The first National Youth Policy was developed in 1981 but was later reviewed in 1989 in order to integrate a social development dimension. The policy was again reviewed in 2001 given the weak and ineffective implementation mechanism of the previous versions. With the creation of the Ministry of Youth Development in 2007, the 2001 NYP was further reviewed in 2009. In 2016, the 2009 NYP was reviewed so as to incorporate the Sustainable Development Goals and new issues confronting youth development (National Youth Policy, 2019).

One of the principles underlying the National Youth Policy is the promotion of equity in opportunities and in distribution of resources, services and programmes. The NYP serves to promote equal access to employment and socioeconomic opportunities (National Youth Policy, 2019). In as much as such a principle exists on paper, some of the partnerships and programmes

that the government proposes to set up are mainly accessible to the urban youth and not rural youth. This would ultimately worsen the problem of rural-urban migration which is one of the major causes of youth unemployment in the country (Agnes, 2010; Bakare, 2011; Okafor, 2011; Uddin, 2013; Onah & Okwuosa, 2016).

The policy also recognises the right of youth to seek meaningful employment without discrimination. In reality, young Nigerians are marginalised by various employers, including Government, because they lack the relevant long-term experience that employers require. Many youths have therefore been denied the opportunity to utilise the skills that they have acquired in school. While the NYP acknowledges the prevalence of employment discrimination against the youth, it falls short in providing specific and meaningful ways of tackling the problem.

As part of the policy, the youth are under obligation to contribute to social and economic development at all levels, create gainful employment and take advantage of available education and training opportunities (National Youth Policy, 2019). Inasmuch as the NYP looks at education, training and capacity building as strategic areas necessary in order for it to fulfill its mission, goal and objectives; it does not look into prospects of amending or reviewing the current Nigeria curriculum so as to reduce on the widespread problem of a mismatch between the skills and knowledge schools are dispensing and the existing needs of the labour market. The other challenge surrounding the National Youth Policy is that it is a static document and is therefore not quickly adopted to cover the trends in the Nigeria economy, and plan accordingly.

One of the priorities of the National Youth Policy in terms of education, training and capacity building is to support vocational training in order to enable youth to acquire a range of skills and essential tools (National Youth Policy, 2019). Indeed, vocational training has the capacity to reduce the rate of youth unemployment as beneficiaries are equipped with practical skills for productive engagement post-graduation. However, the reality on the ground is that the government is doing very little to support the young people who take up vocational jobs. There is no policy in place to give them tax subsidies and the government has also failed to control inflation which negatively affects the business climate. The result is that other young people who are not involved in these kinds of businesses have a negative attitude towards vocational institutes and businesses of this nature.

Available literature reveals that successive Nigerian governments have tried to remedy the unemployment situation of youths in the country through various policies and programmes. These include: National Youth Service Corps (NYSC), National Directorate of Employment (NDE), National Accelerated Poverty Eradication Plan (NAPEP), Subsidy Re-Investment and Empowerment Programme (SURE-P), the Youth Enterprise With Innovation in Nigeria (YOU-WIN), N-Power, the Osun State Youth Employment Scheme (O'YES), among others. As lofty and laudable as these policies and programmes seem, their inability to affect the real target (youth) significantly is an indication of the lacuna between policy formulation and implementation.

2.3.2 The National Youth Service Corps (NYSC) Scheme

The National Youth Service Corps (NYSC) scheme was established in 1973 for graduate youths (also called corps members) as part of the country's post-civil war reconstruction policies (Balogun, 2018). The main objective of the scheme was to promote national unity among the various ethnic groups in Nigeria. This objective was expected to be achieved by posting corps members to different states other than their state of origin to undertake a one-year compulsory community service and interact with people from other ethnic groups in the country (Obadare, 2005). The certificate obtained after the completion of this one-year compulsory services qualifies the graduate to seek for employment in the private and public sector. Thus, undertaking the service year is a prerequisite to seeking employment in Nigeria.

Moreover, the NYSC has introduced Skills Acquisition and Entrepreneurship Development (SAED), as a way of encouraging young graduates towards self-employment and job creation (Balogun, 2018). This is achieved in collaboration with various international and local organisations. However, more than 30 years after the Skills Acquisition and Entrepreneurship Development courses were introduced into the NYSC scheme, little impact has been made in addressing the unemployment situation of graduates in Nigeria as it is evident in the rising number of unemployed graduates in the country. According to Amaka & Nor (2014), the failure of the scheme to address the rising unemployment issues can be attributed to the problems of coordination, inefficiency and corruption that have affected youth empowerment programmes in the country. In July 2020, the National Agricultural Land Development Authority (NALDA) announced its Back-to-Farm programmes with plans to train NYSC members on mechanised farming to foster food production and job creation.

2.3.3 The National Directorate of Unemployment (NDE)

The National Directorate of Unemployment (NDE) was instituted in 1986 to tackle the unemployment challenge confronting the youth. The core mandate of this programme was to implement policies that will reduce poverty, promote attitudinal change and enhance the generation of wealth. To achieve its mandate, NDE provides vocational training to youths (Ekong & Ekong, 2016). However, NDE does not provide access to start-up capital for its beneficiaries after their training nor does it have a job placement component (Ekong & Ekong, 2016). More recently, the National Accelerated Poverty Eradication Plan (NAPEP) was established in 2001 to address unemployment issues in the country. NAPEP focuses on training youths for employment in the automobile industry. Nevertheless, its success story was limited because the majority of its funds was directed to administrative costs in offices spread over the country (Anyebe, 2014).

2.3.4 Youth Enterprise with Innovation in Nigeria (YouWin)

In 2011, former President Goodluck Jonathan established the YOU-WIN programme with the goal of generating jobs by encouraging aspiring entrepreneurial youths in Nigeria to develop and execute business ideas (Odiyi, Nwoke & Adeseke, 2016). The initiative was designed as a collaborative effort of the Ministry of Women Affairs, Ministry of Youth Development, Ministry of Finance as well as the then Ministry of Communication and Technology (IMF, 2012). The principal focus of the YOUWIN programme was to mobilise funds for various entrepreneurship projects that can absorb 3,600 youths who are willing to start up a business in the country (Duruji, Olanrewaju & Duruji-Moses, 2019). The first phase of the initiative entailed the sensitisation of the teeming youth in the area of job creation with funding support through the initiative, while the second phase featured the award and approval of funds for start up to 1200 young women entrepreneurs.

During the third phase of the YOUWIN programme, 2500 young men and women entrepreneurs were supported with startup capital through the various participating commercial banks in Nigeria, so as to encourage them in their entrepreneurship endeavours (Abioye & Ogunniyi, 2018). Though, the underlying conditionalities for being eligible for the YOUWIN fund is that the individual must be a Nigerian citizen within the specific age bracket which qualifies an individual as a youth. Also, selection was made on the basis of those with a workable business plan and a duly registered company with the Corporate Affairs Commission

in Nigeria. However, the programme was stifled by corruption as well as lack of policy continuation as the succeeding administration did not support the programme.

2.3.5 The Subsidy Reinvestment and Empowerment Programme (SURE-P)

In 2012, the federal government introduced SURE-P to tackle unemployment in the country. The programme focuses on management and investment of federal government savings derived from proceeds accruing from the partial removal of petroleum subsidy (Nwosu & Ugwuera, 2014). SURE-P comprises activities and schemes such as the Vocational Training Scheme (VTS), Graduate Internship Scheme (GIS), Community Service Women and Youth Empowerment (CSWYE), and Community Services Scheme (CSS), among others. The GIS which offered unemployed graduates the opportunity to undergo a one-year internship in firms, ministries, banks, government agencies relevant to their disciplines was one of the successful schemes of SURE-P.

However, Nwosu and Ugwuera (2014) note that the programme was politicised and hijacked for selfish interest by the Nigerian politicians. The programme also suffered from tribalism as some parts of the country were not carried along, and also the physically challenged youths were excluded from the programme (Nwosu & Ugwuera, 2014). There is no doubt that the SURE-P program, a youth-oriented initiative, would have been a viable mechanism through which the youths could gainfully participate in the economic development process in the country. Regrettably, the SURE-P itself was another case of national policy failure triggered by the selfish interests of top political actors in the country (Chinenye & Ngonadi, 2017). For instance, in 2018, about N5.7 billion SURE-P Fund was reportedly diverted by those managing the programme into their pockets and for selfish gains (Ibrahim, 2018).

2.3.6 N-Power programme

The most recent initiative introduced by the federal government of Nigeria to tackle the youth unemployment situation in the country is the N-Power programme established on 8 June 2016 by the Buhari administration. The initiative was introduced under the cover of the National Social Investment Programme to boost social development in the country. The goal of this programme was to provide a structure for work skills acquisition and development for the unemployed youths in the country (Matthew & Victor, 2018). The federal government of Nigeria on 13 July 2019 revealed that about N279 billion was expended on the programme between December 2016 and June 2019 (Agbakwuru, 2019) to empower the youths in

education (N-Teach), health (N-Health), agriculture (N-Agro), construction (N-Build), vocational (N-Creative) and technology (N-Tech) sectors (Onehi, 2020).

However, the N-Power programme has been undermined by the same problems faced by the NDE. N-Power provides only training to unemployed youths. It has no plans to ensure that the youths actually find gainful employment after the training. As a result of this, the programme is only creating an influx of skilled workers without actually making any jobs available to them. Thus, with the rising spate of youth unemployment in the country (Lamidi & Igbokwe, 2021), the effectiveness of the N-Power programme remains in doubt.

2.3.7 Other Youth Empowerment Initiatives at State Level

At state level, various governments have established various forms of programmes in their effort to tackle unemployment. The most prominent ones include the Osun Youth Empowerment Scheme (OYES), Youth Agricultural Entrepreneur Programme (YAGEP), and the Skills Training and Entrepreneurship Programme (STEP). The OYES was established in Osun state in 2010 by the state government to curb the high rate of unemployment ravaging the state. Just like the federal government's N-Power scheme, OYES involves a two-year training programme for the unemployed youth. However, unlike the N-Power scheme, OYES has an exit plan that ensures availability of jobs for the trainees post programme. Trainees, who have successfully completed their training are deployed in public schools, civil service, agricultural initiatives etc.

The OYES was one of the most successful youth employment programmes in Nigeria with recommendation from the World Bank (Badejo, Agunyai & Adeyemi, 2015). The YAGEP and STEP were established in 2015 and 2017 respectively by the Delta state government. They provide vocational skills training such as fishing, baking, designing, fashioning, sewing etc. Further, the programmes provide start-up capital for successful trainees to encourage entrepreneurship and also allocate fish ponds located in various local government areas to beneficiaries of the programmes.

2.4 Entrepreneurship Education as a Panacea for Youth Unemployment in Nigeria

2.4.1. Entrepreneurship Education in Higher Education Institutions

Prior to independence in 1960, Nigeria's education system was designed with the main aim of serving the administrative needs of the Britain. Thus, educational systems and curricula were developed in such a way as to effectively produce clerical and administrative officers, teachers, interpreters, clergy, guards and other liberal art graduates who would foster British westernisation and the mission of colonisation (Aladekomo, 2004; Nwekeaku, 2013). Consequently, Nigeria inherited a severely flawed schooling system at independence, and as such could not provide support for the country's development agenda. Having inherited a flawed educational system, it behoved the Nigerian post-independence government to prioritise drastic restructuring of the system.

Unfortunately, as Nwekeaku (2013) bemoaned, nothing much was done to restructure the curricula of the schooling system resulting in liberal arts continuing to dominate the system, despite the multiplication of HEIs in the country. As one would expect, the demand for graduates of such disciplines in the labour market continued to decline, leading to a mismatch between demand and supply, and consequently, a high unemployment rate among university graduates (Akhueomonkhan *et al.*, 2013). This dilemma was also highlighted by Agboola (2010) who observed a mismatch between the skills and knowledge needed by the Nigerian labour market and those acquired in HEIs.

Furthermore, as Akhueomonkhan, *et al.* (2013) observed, the schooling system inherited from the colonial masters continued to produce not only graduates lacking self-motivation and the innovation of drive needed by the labour market, but also graduates lacking the entrepreneurial mindset required for boosting entrepreneurship in Nigeria. These institutions were seen as factories for the production of white-collar job-seekers who lacked professionalism and entrepreneurial skills (Omolayo, 2006). Even the business school students were not properly equipped with relevant skills and attributes required by a highly competitive business world (Nwekeaku, 2013). Consequently, tens of thousands of graduates are annually being pumped into the labour market for which they are not prepared and hence, millions of Nigerian youths roam the streets in search of jobs (Arogundade, 2011).

In order to effectively deal with the grave socioeconomic challenges of unemployment in Nigeria, the federal government directed all universities, polytechnics and colleges of education to include entrepreneurship education as part of their curricula, starting from the 2007/2008 academic session (Nwekeaku, 2013). For universities, the mandate was to be implemented through the National Universities Commission (NUC), while the National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE) were responsible for the polytechnics and colleges of education, respectively. In light of this development, all higher education institutions in Nigeria were to run entrepreneurship studies as a compulsory course for all students, irrespective of their fields of study.

The implementation of this mandate involved the design of a curriculum that is all-encompassing in developing the spirit and culture of entrepreneurship (Aja-Okorie&Adali, 2013). Despite the seeming urgency of the directive, Anaele *et al.* (2014) note that there was a staggered implementation of entrepreneurship education in various segments of education in Nigeria. The universities only implemented entrepreneurship education in the 2011/2012 academic session while polytechnics and colleges of education started theirs in the 2010/2011 academic session (Anaele *et al.*, 2014). Before the 2011/2012 academic session, only a few universities, namely Covenant University, University of Benin and Obafemi Owolowo University implemented the entrepreneurship education programme in a practical manner (Eze & Nwali, 2012).

However, in order to facilitate the implementation of entrepreneurship education, the federal government, in 2011, directed all universities to set up entrepreneurship education centres on their campuses, and these centres were tasked with the function of coordinating entrepreneurship education at each of these institutions (Eze & Nwali, 2012). Moreover, universities were also mandated to start offering courses leading to a degree in entrepreneurship starting from the 2011/2012 academic session (Eze & Nwali, 2012).

These entrepreneurship programmes were aimed at inculcating into students, the values, motivations, skills and knowledge required for active engagement in entrepreneurship. Amongst other things, entrepreneurship education is expected to enhance the following in students:

- Creative ingenuity, self-reliance and capacity to respond to change, as well as ability to generate, recognise and seize opportunities;

- Good perception of the demand and challenges of the workplace;
- Ability to identify opportunities within the workplace and to apply initiative; and
- The ability to take a greater degree of responsibility for the quality of their work.

(NBTE, 2007 cited in Eze & Nwali, 2012, p. 405).

It also aimed to build a learning culture that would empower the youth to take responsibility for their own future (through entrepreneurship); and gain a good perception of the relationship between their school, immediate community, and business and industry (Eze & Nwali, 2012). However, as Aja-Okorie and Adali (2013) observe, despite the compulsory entrepreneurship education in higher education institutions, many Nigerian graduates still remain unemployed long after their graduation. Therefore, it appears that the entrepreneurship education delivered to undergraduate students is failing to meet the set objectives and the purpose of the programme appears to have been defeated (Aja-Okorie & Adali, 2013).

2.4.2. Challenges to Entrepreneurship Education in Nigeria

The inability of entrepreneurship education to yield the desired fruits of enhancing entrepreneurial engagement, boosting job creation and reducing unemployment and poverty, can be attributed to many crippling factors. The first of these constraints is poor curriculum design. According to Agboola (2010), the curricula used by the Nigerian tertiary institutions are obsolete when viewed from the perspective of the modern global labour market. Thus, the orientation and content of the programme followed by students do not produce the graduate attributes needed for the current labour market.

Agboola (2010) also observes that the Nigerian educational system produces mostly general knowledge so that relevant skills in the technological, social, economical and political areas are lacking. Furthermore, as Tope, Otaki and Margret (2014) observe, identifying a wide range of entrepreneurship ventures and building comprehensive curricula from there is a critical area of concern for educators in Nigeria. Thus, the strategic document and curricula on entrepreneurship education would not yield fruits unless a holistic approach is taken towards the plan and implementation of entrepreneurship education (Tope *et al.*, 2014).

Another challenge crippling the effectiveness of entrepreneurship education in Nigeria is lack of funding. According to Tope *et al.* (2014), due to widespread inequality in Nigeria, many aspiring entrepreneurs lack the required capital to start up their ventures, and accessing bank

loans is challenging due to strident conditions. Agboola (2010) also asserts that young entrepreneurs in Nigeria suffer because of the inaccessibility of soft loans and funding. Furthermore, most Nigerian universities are characterised by a lack of sufficient and skilled manpower. It has been observed that Nigerian universities do not have adequate and high-level manpower required for effective teaching and learning of entrepreneurship education (Nwekeaku, 2013; Tope *et al.*, 2014). According to Tope *et al.* (2013), one of the major hindrances of entrepreneurship education in Nigeria is identifying and recruiting qualified teachers who have the appropriate knowledge and pedagogy to impart entrepreneurial skills and competences to the students.

Moreover, Nwekeaku (2013) asserts that the available teachers for the entrepreneurship programme were drafted from pre-existing faculties and do not have additional skills to cope with the challenges of the new curriculum. This is corroborated by Agboola (2010) who notes that there is a dearth of professionals and academic manpower (both in quantity and quality), that are capable of facilitating the entrepreneurship programme and translating it into reality.

Another major factor bedevilling entrepreneurship education in Nigeria is inadequate infrastructure. As observed by Nwekeaku (2013), the poor state of infrastructure in Nigeria is worrisome and as such, cannot support the newly introduced entrepreneurship education. The place of relevant infrastructure in entrepreneurship education cannot be overemphasised. Even with the best entrepreneurial intentions, the students may likely succumb to wage employment due to the hurdles of infrastructural deficit. For example, somebody who wants to start an IT business may be severely constrained by the erratic power supply in Nigeria. Fortunately, many of these challenges can be minimised through business incubation so that integrating incubation into entrepreneurship education in tertiary institutions may yield better dividends.

2.5 Youth Agricultural Engagement as a Panacea for Unemployment

In his keynote address to the thirty-fourth session of IFAD's Governing Council, the then UN Secretary-General, Mr. Kofi Annan (2011), set out a vision for Africa. He saw an Africa that could feed not only its own citizens but citizens of other continents. Mr Annan, however, noted that such a grand vision would only be realised if young people are adequately empowered to drive innovation and development of the agricultural sector. In his own words: "It is to the younger generation as well that we must look to ensure such scarcity belongs to history".

Developing the Agric sector can serve as a catalyst not only for food sustainability but job creation, income distribution and economic growth in Africa.

Agriculture is considered the most viable sector for youth employment generation in Nigeria (Adesina & Favour, 2016; Lyocks, Lyocks & Kagbu, 2013; Mastercard Foundation, 2019). The sector has immense and diverse opportunities which could be harnessed to transform the economy and create many jobs for the teeming young Nigerians who are released into the labour market every year. Engaging young people in agriculture will boost employment in the following ways. Firstly, it will help to reduce rural-urban migration which leads to high unemployment in urban centres. Most of the African youth live in rural areas and have limited opportunities for gainful employment (Allen *et al.* 2016). However, they have untapped potential to transform the agricultural sector through innovation and entrepreneurship (Koira, 2014). According to Nchuchuwe and Adejuwon (2012), the neglect of agriculture in Nigeria has resulted in mass exodus of rural dwellers into the urban centres. This phenomenon engenders high unemployment since many of these migrants do not have the requisite skills for employment in the cities, and also because it leads to excess labour supply in the urban centers.

Secondly, the energy and creativity of young people can be leveraged in resolving existing frictions in the agric value chain as young people turn those frictions into business opportunities. According to Olomu, Ekperiware and Akinlo (2020), the Nigerian agricultural value chain has systemic and services gaps which underpin the market failures, although the value chain has the potential of triggering economic growth on a higher scale with a trickle-down effect to other sectors of the Nigerian economy. With a more efficient agric ecosystem, the sector will experience greater growth and thus more employment. Also, the new business will help to mop up the excess labour supply being released into the market on a yearly basis.

It is important to note that not all agricultural activities are considered entrepreneurship. According to Churchill (1992), entrepreneurship can be defined as the process of uncovering and developing an opportunity so as to create value through innovation, either through the formation of a new business or within an existing company. It is the pursuit of market opportunities which have been discovered, evaluated and exploited in order to create innovative goods and services leading to new venture creation (Kunene, 2008). This means that for an agricultural activity to be considered entrepreneurship, the undertaker must have identified the market friction he/she intends to solve within the value chains, innovate a business idea to solve the problem, then assemble the requisite human and material resources to make the idea a

reality thereby reaping the attendant rewards/risks. Most of the agricultural activities in Nigeria centre around primary production (planting of crops and rearing of animals) while the other value chains remain largely unharnessed (Odetola and Etumnu, 2013). For example, the processing sub-sector is still severely underdeveloped leading to food spoilage as well as loss in export potential (Oxford Business Group, 2019).

With youth agricultural entrepreneurship, these gaps can be identified and turned into business opportunities leading to significant growth in the agric sector and job creation. The several challenges bedeviling Nigeria's agriculture is an indication of humungous potential for entrepreneurial engagement of young people. And considering the massive potential of agriculture, there is no doubt that youth agripreneurship is a most potent tool for massive employment creation and sustainable development in Nigeria. To achieve this, concerted efforts must be put into capturing the interest, energies and talents of young people who would then deliver profitable business solutions for agricultural development and employment generation.

Due to its potential for tackling the challenge of unemployment, youth engagement in agriculture has always been an issue of importance. Consequently, various governments and development partners have implemented numerous intervention programmes that facilitate youth engagement in agribusiness over the years (Yami *et al*, 2019). Such programmes in Nigeria include the Fadama Graduate Unemployed Youth and Women Agro-preneur Support (FADAMA-GUYS), IITA Youth Agripreneurs (IYA), Enable Youth Programme, Youth Employment in Agriculture Programme (YEAP), the CBN Anchor Borrowers Programme and the N-Power Agro programme. The quest to foster youth engagement is also getting attention in other African countries. A good example of such is the Youth in Agriculture Programme (YIAP) in Ghana (MoFA, 2014) which has led to a decline in youth unemployment rate from 11.40% in 2010 to 4.90% in 2017 (WDI, 2017).

Despite these interventions and the expanding markets for primary and secondary agricultural commodities, the involvement of the youth in agricultural activities in Nigeria has steadily declined in recent years (Adekunle *et al*. 2009). One of the major reasons why youth should be incentivised to actively participate in agribusiness is the ageing farming population in Africa. Available data from Nigeria reveal that the current average age of a farmer is between 55 and 60 years (Sahel Report, 2018). This means that the future of agricultural productivity in Nigeria hinges on enhancing the participation of young people in the sector.

Migration has been identified as a major factor in youth agricultural engagement. It has been noted that the decision to migrate from rural to urban areas involves both “pull” and “push” factors (Lewis, 1954; Harris and Todaro, 1970). The push factors are those unfavourable conditions which force the youth to move out of the rural agrarian settings. These include declining national resources, increasing cost of social amenities, loss of employment, oppressive religious, ethnic or political concerns, alienation from community, lack of opportunities for personal development, and/or effect of natural disasters (IFPRI Report, 2010). The “pull” factors are majorly the aspirations for a better life which the youth expect to attain by moving away from agriculture and its rural settings. Such factors include good education and social amenities and perceived assurance of a higher paying job. It is therefore important that addressing the migration problem should be at the forefront of every youth-led agricultural revolution.

2.6 Youth agricultural Initiatives in Nigeria

2.6.1 International Institute of Tropical Agriculture (IITA) Youth Agripreneurs (IYA)

The IYA programme was established in 2011 by the International Institute of Tropical Agriculture (IITA) to change the perceptions about farming and get more youths into agriculture. This group of enterprising young individuals coming from diverse disciplinary backgrounds aim to make young Africans see that agriculture can be an exciting and economically rewarding business venture. (IITA web report, 2015). As a means of expanding the IYA programme throughout Africa, the institute created the Enable Youth programme, with its sole aim of providing opportunities for underemployed young people, especially in rural areas, giving them the chance to establish innovative agricultural enterprises and improve their agribusiness skills (IITA web report, 2015).

Some levels of successes have been recorded in these programmes such as cultivation of a total of 46 hectares of cassava across Nigeria and harvesting 37 tons of cassava root in 2014. Value addition has also been a major part of this programme such as introducing and promoting a product, soymilk titbits- a cassava-cowpea snack. The programme also diversified into the production of other farm produce like okra, corn, watermelon and cucumber. Nyabam, Tarawali and Ijie (2018) however bewail that the success of the Youths in Agriculture and Agribusiness activities is crippled by a host of constraints. For instance, 21.2% of young Nigerians in Port Harcourt, Kano, Abuja, and Imo State, collectively, are reportedly constricted

by the problem of capital inaccessibility as well as the rising crisis surrounding the land tenure system in Nigeria (Nyabam, Tarawali & Ijie, 2018). Another notable limitation of the IYA initiative is the astronomical rise in the price of agricultural inputs (Effiom & Ebi, 2021) that exerts a demoralising influence on the active involvement of agripreneurs in the country.

2.6.2 Youth Employment in Agriculture Programme (YEAP)

The Youth Employment in Agriculture Programme was another attempt (though, short-lived) by the federal government of Nigeria to engage the youth specifically in the area of agriculture. Essentially, the initiative was introduced in December 2014 (Abioye & Ogunniyi, 2018) and was implemented by the technical arm of the Food and Agricultural Organisation of the United Nations (FAO) in partnership with The Federal Ministry of Agriculture and Rural Development (FMAYD), Agricultural Development Programmes (ADPs), Agricultural and Rural Management Training Institute (ARMTI), and the International Labour Organisation (ILO). To enhance agricultural output in the country; the principal objective of the Youth Employment in Agriculture initiative was to boost avenues for generating employment for over 750,000 young Nigerians referred to as ‘nagropreneurs’ (Adesugba & Mavrotas, 2016), through active participation in agriculture.

The programme recorded a significant success, following the successful completion of the training of 290 youths in leadership and entrepreneurship for value-chain development and 89 youths in poultry production and management (FAO Report, 2014, 2017). The eventual formation of 18 cooperatives specifically for all the youths that were trained in the course of the programme was another notable achievement attributed to the YEAP. In the southwest region of Nigeria, 140 trained youths were reportedly assisted in establishing pineapple farms (FAO Report, 2014, 2017). Although the focus of the project was institutional capacity building, over 80% of young beneficiaries were able to establish agribusinesses. The programme is said to have successfully changed the perception of youth about agriculture, thereby giving them an opportunity to earn a decent living while contributing positively to the Nigerian economy and reducing youth unemployment.

Nevertheless, despite the achievement recorded under the Youth Employment in Agriculture scheme, it is unfortunate that the programme was designed to last only from 1st November 2014 to 31st December 2016 (FAO, 2014). Another drawback of the YEAP was poor youth-coverage ratio as noted in the FAO 2014 report. For instance, Gar and Rodgers (2020) reveal that despite

the relevant skills and information acquisition under the coverage of the YEAP in the densely populated Alkaleri, Duguri, and Gar rural communities of Bauchi State, Nigeria, only 7 out of the over 461,200 young Nigerians in the surveyed area were captured as beneficiaries. This ultimately negated the core objective of the Youth Employment in Agriculture initiative. Similarly, the programme suffered from poor funding support, a lopsided harmonisation and allocation system, as well as a poor monitoring system, thus leading to declining motivation among the trained youths in the course of the training and skill acquisitions programme (Gar & Rodgers, 2020).

2.6.3 Fadama Graduate Unemployed Youth and Women Agro-preneur Support (FADAMA-GUYS)

This programme was created by the federal government of Nigeria under the FADAMA III project, with additional financing towards supporting the ramping up of production of four prioritised staple crops (rice, cassava, sorghum and tomatoes) (SBC Report, 2017). It focuses on supporting unemployed graduate youth who want to become agro-preneurs. With a focus of increasing the income for users of rural lands and water resources within the Fadama areas in a sustainable manner, the programme has six major components namely. Capacity building, Communications and Information Support; Small-Scale Community-owned Infrastructure; Advisory Services and Support for Acquisition of Farming Inputs; Support to the Agricultural Development programmes, Sponsored Research and On-Farm Demonstrations, Matching Grant Facility for Assets Acquisition through groups and finally, Project Management, Monitoring and Evaluation.

In a critical evaluation of the project's success, Nwoye and Nwalieji (2019) examined the level of male and female participation as well as constraints to the project in Anambra State, Nigeria. Findings reveal that both male and female respondents benefited immensely from the project in terms of access to improved farm inputs, access to facilitator, provision of training, increase in yield, increase in farm size and low cost of labour (Nwoye and Nwalieji, 2019). The programme however was not without constraints which included untimely provision of inputs, irregular advisory services, corrupt practices, lack of access to credit and poor road network.

Adeyanju, Mburu, Mignouna and Akomolafe (2021) further assessed the determinant of youth participation in agricultural training programs using Fadama program in case study. From the empirical outcome of the study, about 56% of the participants lamented that they find it difficult

to actively engage in agribusiness and agribusiness training due to lack of access to finance. The Fadama programme is also marred by similar constraints originating from lack of mentorship and quality information required for effective agricultural planning (Adeyanju, Mburu, Mignouna & Akomolafe, 2021).

In a similar study, Ogbodo, Aguaguiyi, Nwafor and Umebali (2021) examined the various “factors that drive adoption of improved agricultural technologies among cooperative rice farmers who participated in FADAMA programme” in the context of Enugu State. It was however established that effective implementation of the programme was encumbered by factors such as high agricultural project costs (cost of adoption), insufficient extension services, level of literacy, as well as the type of media used in the adoption process. This implies that high initial agricultural investment requirements, illiteracy rate among young agripreneurs as well as poor information dissemination, form a dispiriting portmanteau that hinders the successful adoption of the FADAMA programme in the state.

2.6.4 N-Power Agriculture (N-Power Agro or N-Agro)

The N-Agro is one of the many categories under the N-Power programme created in 2016 by the federal government (James, Ayobami & Adeagbo, 2019; Ogunmodede, Ogunsanwo & Manyong, 2020). Beneficiaries of this programme are taught how to become agricultural extension officers, farm developers and agricultural entrepreneurs themselves. The programme is open to university and polytechnic graduate youths from Nigeria (Adekannbi & Makinde, 2020), who will undergo training as agriculture extension service consultants, seed fertiliser and other input aggregators, farm managers, farming cooperatives managers among others. Beneficiaries are paid the sum of ₦30,000 every month (Idowu, 2019). A study conducted by Nwaobi (2019) examined the impact of the N-Power programme on youth unemployment in Nigeria, and its findings reveal that there is relatively little evidence on the mechanisms through which the programme affects the labour market.

Nevertheless, Ifatimehin, Isyak and Omale (2020) evaluated “the effect of the N-Power scheme on youth empowerment in Anyigba area of Kogi state, Nigeria”. Results of the empirical assessments reveal, among other things, that the N-Power programme has facilitated skills acquisition, enhanced the financial wellbeing, promoted self-reliance as well as improved the productivity of the youths in Anyigba area of the state.

Despite its positive impact on the Nigerian youths, the N-Power programme faces a stock of hiccups. For instance, a report from *Punch* newspapers (2019) expressed how the beneficiaries of the scheme bemoaned their ordeal stemming from the insistent postponements of payment of their monthly earnings, thus finding it difficult to cater for their immediate financial needs. In June 2020, a report from *Daily Trust* newspaper further showed that 500,000 beneficiaries in Batch A and Batch B of the N-Power scheme were unfairly disengaged from the scheme without receiving their entitlements (Abdulsalam, 2020), thus adding to the scourge of youth unemployment in the country, which the scheme was originally designed to address.

2.7. Summary of the Chapter

The chapter has explored Agric entrepreneurship as a viable tool for dismantling the manacle of youth unemployment in Nigeria. The chapter began by elucidating on the definition and the state of Nigeria's youth unemployment before delving into various programmes to address it. Furthermore, the chapter argued that agricultural entrepreneurship can play a significant role in tackling youth unemployment while touching on various programmes aimed at enhancing youth agripreneurial activities in Nigeria.



Chapter 3: Literature Review

3.1 Chapter Overview

Entrepreneurship development is considered a potent force for stimulating economic growth and employment generation in both developing and developed countries (Audretsch, Keilbach & Lehmann, 2006; Nkechi, Emeh, Ikechukwu & Okechukwu, 2012; Polas, Raju, Muhibbullah & Tabash, 2021). For developing countries like Nigeria, the agricultural sector is laden with immense potential (Adeyanju, Mburu & Mignouna, 2021) to be harnessed by youth participation through the instrumentality of entrepreneurship. Enhancing the involvement of young people in agriculture should be a major focus of development scholars and policymakers saddled with the task of employment creation through entrepreneurial programmes. The chapter aims to place the study in context through a thorough synthesis of extant literature on youth entrepreneurship and agricultural development in Nigeria, Africa and globally. It elucidates on both conceptual, theoretical and empirical understanding of youth agricultural entrepreneurship.

3.2 Entrepreneurship Development

3.2.1. The Concept of Entrepreneurship

There is no consensus on the correct definition of entrepreneurship among various scholars (Gedeon, 2010; Nwekeaku, 2013; Varadjanin, Viduka & Dimić, 2014). However, the study presents a number of definitions offered by various scholars in order to point out important characteristics of entrepreneurship. To begin with, it may be helpful to define entrepreneurship by defining the person who carries out the role of entrepreneurship, that is, the entrepreneur. According to Kirzner (1973), an entrepreneur is a decision-maker whose role arises from being alert to previously unnoticed opportunities. He or she is that person who creates an organisation in order to pursue a perceived opportunity (Bygrave & Hofer, 1991). From these definitions, it can be deduced that an entrepreneur must have certain qualities. The first is the ability to see opportunities. The second is the willingness to exploit such opportunities, and the third is the capability (knowledge, skills etc) to exploit the perceived opportunities through business formation.

The journey of an entrepreneur is encapsulated in the word, entrepreneurship, which comes from the French word “entreprendre”, meaning to undertake something or to do something

(Varadjanin 19 *et al.*, 2014). According to Churchill (1992), entrepreneurship can be defined as the process of uncovering and developing an opportunity so as to create value through innovation, either through the formation of a new business or within an already existing company. First, the entrepreneur perceives an opportunity, then he/she evaluates it before galvanising resources to exploit the opportunity through the provision of goods and services. However, Gedeon (2010) provides a more comprehensive and multidimensional definition of entrepreneurship:

Entrepreneurship is a multi-dimensional concept that includes owning a small business, being innovative, acting as a leader, or starting up a new company. It includes spotting opportunities to drive the market toward equilibrium or causing disequilibrium through creative destruction. It includes doing this on your own, in a team or inside a company. It involves starting without any resources and creating new values in the realm of business, social values, government or academia. (Gedeon, 2010, p.30)

This definition brings to the table the various facets of entrepreneurship. The first of these is the leadership dimension or proactivity. An entrepreneur must set himself/herself apart as a leader by identifying 'hidden' opportunities and channelling his/her will power and resources towards creating value from such opportunities. It also highlights the fact that one does not need to start an entirely new venture to be an entrepreneur. This is because an entrepreneur can still operate within an already existing company by, for example, altering the manner in which business is done in that company.

3.2.2. Agricultural Entrepreneurship (Agripreneurship)

In the domains of agriculture, entrepreneurship deals with the ability to identify opportunities across the value chains and then channelling the required resources towards exploiting such opportunities thereby creating value and reaping the ensuing rewards/risks. This concept is encapsulated in the word, agripreneurship, a portmanteau of agriculture and entrepreneurship. This means that for an agricultural activity to be considered entrepreneurship, the undertaker must have identified the market friction he/she intends to solve within the value chains, innovate a business idea to solve the problem, then assemble the requisite human and material resources to make the idea a reality and consequently reap the attendant rewards/risks.

The flip side of every market friction/problem is an opportunity for entrepreneurship. The several challenges bedevilling Nigeria's agricultural sector is an indication of humungous

potential for entrepreneurial engagement of young people. And considering the massive potential of agriculture, there is no doubt that youth agripreneurship is a most potent tool for massive employment creation and sustainable development in Nigeria. To achieve this, concerted efforts must be put into capturing the interest, energies and talents of young people who would then deliver profitable business solutions for agricultural development and employment generation.

3.2.2. The Entrepreneurship Process

A report by Herrington *et al.* (2011) reveals that the entrepreneurship process involves a number of stages. According to the report, the journey of entrepreneurship begins with the stage of **potential entrepreneurs**. These are individuals who believe that they have the capabilities needed to start businesses and would not be dissuaded from starting a business because of fear of failing. This intention may be underpinned by society's perception of entrepreneurs, societal status enjoyed by entrepreneurs or even the media's positive reflection of entrepreneurship. For those with strong enough intent, the next phase is **nascent entrepreneurial activity**. This stage represents the first three months of running a new enterprise. Considering the many challenges associated with starting a new venture, many fledgling businesses fail within the first few months, so that not all nascent entrepreneurs progress to the next stage.

The next stage of the entrepreneurship process involves **new business owners**, and this represents entrepreneurs who have been in business for more than three months, but less than three and half years. According to Herrington *et al.* (2011), nascent and new business owners account for the Total Early-stage Entrepreneurial Activity (TEA) as measured by the Global Entrepreneurship Monitor. **Established businesses** are those which have lasted for more than three and half years. The report further notes that **discontinued businesses** or **exited businesses** can serve as key resources for other entrepreneurs, providing them with various kinds of support like advice and finance.

3.2.3. Boosting Entrepreneurship through Entrepreneurship Education and Training

Various studies have shown that there is a positive relationship between entrepreneurship education and training on one hand, and entrepreneurial intention and success on the other hand (Galvão, Marques, & Ferreira, 2020; Herrington *et al.*, 2008; Isaacs *et al.*, 2007; Matlay & Farashah, 2013; Morris, Webb, & Singhal, 2013). Education is known to have a strong positive

influence on the entrepreneurial performance of any country (Robinson & Sexton, 1994). It is regarded as a key factor in establishing a culture of entrepreneurship (Steenekamp, Van der Merwe & Athayde, 2011).

Contrary to the notion that entrepreneurs are born, a longitudinal study by Penaluna, Penaluna and Jones (2011) revealed that, through entrepreneurship education, entrepreneurship can be taught, or at least enhanced. This position is corroborated by Kuratko (2005) who notes that entrepreneurial ability is neither mystical, nor magical but rather something that could be learned. Entrepreneurship education is a means of raising awareness of students of the value and nature of entrepreneurship, as well as delivering skills and knowledge. It is through education and training that the required human capacity for successful entrepreneurial engagement is developed. Therefore, a country with qualitative entrepreneurial education will likely produce successful entrepreneurs.

The terms 'entrepreneurship education' and 'entrepreneurship training' are generally used synonymously (Booth-Jones, 2012). According to Akhuemonkhan, Raimi and Sofoluwe (2013), entrepreneurship education refers to a set of specialised knowledge which inculcates into learners the traits of innovation, risk-taking, arbitrage and co-ordination of factors of production with the aim of creating new products and services for both new and existing users within human communities. Gedeon (2014) defines the term as a means of empowering students with a philosophy of entrepreneurial thinking, passion, and action-orientation which they can apply to their lives, their communities, their jobs and/or their own new ventures. It is the process of altering the mindset of students towards applying an innovative approach and creative thinking in order to proffer solutions to societal problems, assuming responsibility for both profit and risk, and thereby creating employment for others.

Entrepreneurship education therefore aims to alter the beliefs and attitudes of learners while equipping them with the entrepreneurial skills and knowledge requisite for success in business. It includes various programmes targeted at changing the world view of learners, from job seekers to job creators. Amongst other things, entrepreneurship education seeks to promote creativity, risk-taking, leadership, team-spirit, autonomy, sense of initiative, self-employment, self-confidence and innovation; it is a combination of all these features which set entrepreneurship education apart from general economic or business studies (Aja-Okorie & Adali, 2013). Unlike ordinary business management, entrepreneurship involves elements of risk taking, creativity and innovation (Booth-Jones, 2012).

3.2.3.1 Entrepreneurship Education in Nigeria

Prior to independence in 1960, Nigeria's education system was designed with the main aim of serving the administrative needs of the Britain. Thus, educational systems and curricula were developed in such a way to effectively produce clerical and administrative officers, teachers, interpreters, clergy, guards and other liberal art graduates who would foster British westernisation and the mission of colonisation (Aladekomo, 2004; Nwekeaku, 2013). Consequently, Nigeria inherited a severely flawed schooling system at independence, and as such could not provide support for the country's development agenda. Having inherited a flawed educational system, it behoved the Nigerian post-independence government to prioritise drastic restructuring of the system.

Unfortunately, as Nwekeaku (2013) bemoan, nothing much was done to restructure the curricula of the entire schooling system so that liberal arts continued to dominate the system, despite the multiplication of HEIs in the country. As one would expect, the demand for graduates of such disciplines in the labour market continued to decline, leading to a mismatch between demand and supply, and consequently a high unemployment rate among university graduates (Akhueomonkhan *et al.*, 2013). This dilemma was also highlighted by Agboola (2010) who observed a mismatch between the skills and knowledge needed by the Nigerian labour market and those acquired in HEIs.

Furthermore, as Akhueomonkhan, *et al.* (2013) observes, the schooling system inherited from the colonial masters continued to produce not only graduates lacking self-motivation and the innovation of drive needed by the labour market; but also graduates lacking the entrepreneurial mindset required for boosting entrepreneurship in Nigeria. These institutions were seen as factories for the production of white-collar job-seekers lacking professionalism and entrepreneurial skills (Omolayo, 2006). Even the business school students were not properly equipped with relevant skills and attributes required by a highly competitive business world (Nwekeaku, 2013). Consequently, tens of thousands of graduates are annually pumped into the labour market for which they are not prepared so that millions of Nigerian youths roam the streets in search of jobs (Arogundade, 2011).

In order to effectively deal with the grave socioeconomic challenges of unemployment in Nigeria, the federal government directed all universities, polytechnics and colleges of education to include entrepreneurship education as part of their curricula, starting from the

2007/2008 academic session (Nwekeaku, 2013). This is to equip students with the requisite knowledge, skills, attitudes that will enable them develop economically and become self-employed, thereby contributing to the country's economic development (Onuma, 2016). For universities, the mandate was to be implemented through the National Universities Commission (NUC), while the National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE) were responsible for the polytechnics and colleges of education, respectively. In light of this development, all higher education institutions in Nigeria were to run entrepreneurship studies as a compulsory course for all students, irrespective of their fields of study.

The effectiveness of entrepreneurship education in achieving the set objectives has been hampered by several factors. In evaluating entrepreneurship education in two universities in the country, Nwambam, Nnennaya and Nwankpu (2018) found that the lecturers and instructors are ill-prepared for the task. This assertion is in tandem with Nwekeaku (2013) who notes that the available teachers for the entrepreneurship programme were drafted from pre-existing faculties and do not have additional skills to cope with the challenges of the new curriculum. Tope *et al.* (2013) state that one of the major hindrances of entrepreneurship education in Nigeria is identifying and recruiting qualified teachers who have the appropriate knowledge and pedagogy to impart entrepreneurial skills and competences to the students.

Kulo, Agbogo and Okudarie (2018) also pinpoint insufficient instructional materials as one of the key drawbacks of entrepreneurship education in the context of Nigeria. The effectiveness of entrepreneurship education necessitates good quality and effective utilisation of instructional materials designed as a medium of information dissemination. These materials are important for recording, storing, transmitting or retrieving information used for teaching and learning (Kulo, Agbogo & Okudarie, 2018). These materials are highly instrumental to the successful transmission of relevant information, knowledge and skills in the course of entrepreneurship education and training.

Nevertheless, as a consequence of the lack of instructional materials and the low quality of the few ones available in the country, entrepreneurship education in Nigeria has been seriously hit, thus making it extremely difficult to speed up the acquisition of modern entrepreneurial skills that are apropos for socioeconomic progression. Kulo, Agbogo and Okudarie (2018) further point out that most higher institutions of learning in Nigeria lack quality entrepreneurial

textbooks and reference materials coupled with the obsolete teaching procedures which do not properly align with the practical requirements of entrepreneurial education in general.

Another major factor affecting the effectiveness of entrepreneurship education in Nigeria is lack of infrastructure (Nwekeaku, 2013). Akpochofo and Alika (2018) observe that facilities are inadequate to deliver effective teaching and learning of entrepreneurship education in Nigerian universities. The study however, noted that students believed that entrepreneurship education could enhance their creative and innovative capabilities if properly implemented. Considering these challenges, it is therefore not surprising that despite the introduction of entrepreneurship education in Nigerian higher education institutions, the country continues to churn out millions of graduates with neither requisite skills nor access to employment opportunities (Onuma, 2016).

3.3 Agriculture and Socioeconomic Development

3.3.1. The Concept of Agriculture

The term 'agriculture' comes from the Latin *ager* (field) and *colo* (cultivate), and connotes a wide spectrum of activities such as cultivation, horticulture, domestication, arboriculture, and vegiculture, as well as forms of livestock management (Harris & Fuller, 2014). It includes primary production such as farming, aquaculture, ranching, viticulture, apiculture, horticulture, and animal husbandry. It also involves the processing, storage, and marketing of agricultural products (Nchuchuwe and Adejuwon, 2012). Considering the wide range of activities that makes up agriculture, the sector offers copious opportunities for young people to engage entrepreneurially through the provision of goods and services targeted at solving existing market frictions.

3.3.2. Agriculture and Development

The role of agriculture in fostering development, especially, in emerging economies cannot be overemphasised. In Nigeria, the sector is considered the engine of economic development (Izuchukwu, 2011; Olukunle, 2013). The pivotal place of agriculture in Nigeria is evidenced by the presence of the green colour in the national flag and the black shield (symbolising rich agricultural soil) in the country's coat of arms (Abutu, 2014). Agriculture contributes immensely to the Nigerian economy in numerous ways. These include: food provision for the increasing population, supply of raw materials to the industrial sector, market for industrial

products, employment generation and source of foreign exchange earnings (Nchuchuwe & Adejuwon, 2012; Ogen, 2007; Olukunle, 2013).

Osabohien and Bamigbola (2017) as well as Odetola and Etumnu (2013) affirm that reducing poverty and enhancing nutrition and general wellbeing of the population are critically dependent on the performance of the agriculture sector. The impact of the sector drips into various segments of the country's socioeconomic life. Even in education, some scholars have found a strong positive relationship between food production and primary school enrolment ratio (Odetola & Etumnu, 2013). Similarly, there is a strong inverse relationship between food production and child mortality rates in Nigeria (Odetola & Etumnu, 2013). The following sections provide a literature review on the role of agriculture in enhancing economic growth and employment.

3.3.3. Agriculture and Economic Growth

The literature is replete with numerous studies with special interest in investigating the relationship between agriculture and economic growth in Nigeria (Oyetade, 2021; Amao, Antwi, Oduniyi, Oni & Rubhara, 2021; Jabbar & Singla, 2020; Buari, Alexander, Saheed & Alfa, 2020; Georgina, Ololade, Abosede & Afolakemi, 2020; Taiga & Amej, 2020; Adeshina, Tomiwa & Eniola, 2020; Abomaye-Nimenibo, *et al.*, 2019; Okunlola, & Ehimare, 2019; Inusa *et al.*, 2018; Owolabi, Bichi, & Onanaiye, 2017; Adenom, 2016; Ismail, & Kabuga, 2016; Matthew & Mordecia, 2016; Oluwatoyese, & Applanaidu, 2014; Adenom, & Oyejola, 2013; Odetola & Etumnu, 2013; Izuchukwu, 2011; Ogen, 2007).

Just like in most developing countries, Agriculture plays pivotal roles in the socioeconomic development of Nigeria. Apart from being Nigeria's largest sector employing two-thirds of the country's labour force, it contributes over 20% to its GDP (National Bureau of Statistics, 2019). By drawing from a comparison with the Brazilian experience, Ogen (2007) argues that Nigeria needs to develop its huge agricultural potentials for its economic development agenda to see the light of the day. Its continuous dependence on oil and neglect of the agricultural sector in Nigeria will stymie its economic progress, while Yakub (2008) notes that the excessive dependence on the petroleum sector makes Nigeria's economy susceptible to external shocks. There is therefore a need to adequately develop the agric sector as a means of diversifying its economy and reducing the impact of oil price volatility.

According to Yakub (2008), the petroleum sector contributed mere 0.6% to Nigeria's GDP in 1960 while agriculture contributed 67% the same year. Unfortunately, within 10 years (1970), the share of petroleum contribution to GDP had increased to 45.5% almost doubling that of agriculture which had decreased to 23.4% (Yakub, 2008). On average, between 1960 and 1965, agriculture contributed 60% to the economy (Achinewhu & Opigo, 2013), and from 1960 to 1970, its contribution was 55.8% (Matthew & Mordecia, 2016). However, with the oil boom of the 1970s and the relegation of agriculture, its contribution to the GDP fell to 28.4% between 1971 and 1980 (Adenomom & Oyejola, 2013). As of the 3rd quarter of 2019, the agric sector contributes 29.25% to the country's GDP (National Bureau of Statistics, 2019).

In an empirical study, Izuchukwu (2011) observes that there was a positive relationship between Nigeria's GDP and government expenditure on agriculture between 1986 and 2007. In a similar empirical study, which investigated the contribution of Nigeria's agric sector to its economic growth between 1960 and 2011, Odetola and Etumnu (2013) perceived that agriculture has contributed positively and consistently to the country's economic growth. While affirming the pivotal role of the sector to Nigeria's economic progress, the study also reveals that agriculture has been more resilient than other sectors as evidenced by its ability to quickly recover from shocks consequent on disruptive events (for example the Civil War of 1967-1970 and economic recession of 1981-1985). In the same vein, Nwankwo (2013) while investigating the effect of agricultural financing options on Nigeria's economic growth observed that agricultural financing had a significant effect on economic growth.

Similarly, in an empirical analysis of the impact of agricultural output on Nigeria's economic development between 1986 and 2014, Matthew and Mordecia (2016) determined that the country's per capita income could be explained by agricultural output and public agricultural expenditure. The study engaged annual time series to regress economic development proxied by per capita income on agricultural output and public expenditure. Among other things, the study determined that the greater contribution to shocks in Nigeria's economic development, apart from feedback shocks, was received from shocks to agriculture.

Other scholars that found a positive relationship between agriculture and economic growth in Nigeria include Okunlola and Ehimare (2019); Ismail and Kabuga (2016); as well as Oluwatoyese and Applanaidu (2014). While most of the extant literature do support a positive relationship between agriculture and economic development, some studies seem to differ. Adenomom (2016), in investigating the interrelation between GDP and agricultural production

in 1960 to 2014, found no long running association between the two variables. Other scholars found that the growth effect of agriculture on the economy is actually traceable to agric financing. Although Owolabi *et al.* (2017) observed a positive correlation between agriculture and economic growth, the study actually found that it was economic growth that has a causal impact on agriculture.

Matthew and Mordecia (2016) note that although the agric sector has been a mainstay of Nigeria's economy since 1960, it has been relegated by the government since the discovery of oil which currently generates most of its revenue. Hence, over the years, the agric sector's contribution to the country's GDP has dwindled. Prior to Nigeria's independence in 1960, agriculture contributed over 60% to the country's GDP (Nchuchuwe & Adejuwon, 2012). Abomaye-Nimenibo, *et al.* (2019) found that commercial banks' credit to the agricultural sector and the interest rate has a significant relationship with economic growth.

Jabbar and Singla (2020) also evaluated the “contribution of the Nigerian agricultural sector to economic growth in Nigeria” and the empirical result of the study showed that the growth of the Nigerian economy has been significantly influenced by the Nigerian agricultural sector through food production and employment creation. Buari, Alexander, Saheed and Alfa (2020) also assessed the extent to which general government spending on the agricultural sector has influenced the growth of the nation's economy with specific emphasis on the period spanning from 1980 to 2017. It was however empirically established that government expenditures on agricultural activities have helped in boosting agricultural output, which has in turn enhanced the growth of the Nigerian economy. The study therefore suggests the need for more robust policies that will drive economic activities through the implementation of capital projects in the agricultural sector.

Georgina, Ololade, Abosede and Afolakemi (2020) further investigated the linkage “between agricultural credit, cocoa exports and economic growth in Nigeria from 1990 to 2016”, with the empirical finding of the study showing that agricultural credit allocation to cocoa production, as well as cocoa exportation played a significant role in boosting the Gross Domestic Product (GDP) of Nigeria in the period of assessment. The implication of this finding is that agricultural credit to cocoa crop production has the propensity to boost economic expansion in Nigeria through increase in the volume of cocoa exports in the country.

In a similar study, Taiga and Amejì (2020) assessed the contribution of agricultural exports to economic growth from 1981 to 2017 using Nigeria as a case study. The empirical findings of this study reveal the existence of a significant positive effect of agricultural exports on economic growth in the context of Nigeria. The study thus advanced that the government should make efforts geared towards the provision of adequate funding to facilitate both agricultural research and the acquisition of sophisticated farm equipment with a view to tap from the enormous gains from agricultural exports.

Adeshina, Tomiwa and Eniola (2020) examined the extent to which agricultural financing affect the performance of the Nigerian economy and the empirical results of the study indicates that, compared to commercial bank loans and advances to agriculture as well as government expenditure on agriculture, Agricultural Credit Guarantee Scheme Fund (ACGSF) was a major financing tool that exerted a significant positive impact on economic expansion in Nigeria. The study thus concluded that poor agricultural financing is still a key challenge militating against the development of the sector, thus inhibiting agricultural output growth and economic performance in Nigeria.

Recent study of Oyetade (2021) also evaluated the “impact of agricultural output on economic growth in Nigeria” in the context of the ARDL bound testing approach. The empirical outcomes of the study however established the presence of both short-running and long-running association between agricultural output on economic growth in Nigeria. The study thus averred that agricultural output is essential for enhancing the nation’s economic stance. This suggests the need for a resilient agricultural policy that will drive agricultural output growth and economic progression in the long run.

A study of Amao, Antwi, Oduniyi, Oni and Rubhara (2021) is one of the most recent empirical attempts to assess the contribution of agricultural export commodities to economic growth in Nigeria from 1960 to 2016. The result of the empirical assessments reveal inter alia that, total agricultural exports commodities such as animal and vegetable oils and fats exhibited a statistically insignificant positive influence on to economic growth in the period of assessment. The empirical findings of this study are similar to findings of Taiga and Amejì (2020) who earlier established the existence of an expansionary effect of agricultural exports on economic growth in the context of Nigeria. The implication of this finding is that, agricultural exports may have exerted a positive impact on output growth, but such contribution is yet to be significantly felt by the nation’s economy. Thus, there is an urgent need for a critical review of

all existing policies, particularly those that have bearing on youths' participation in agriculture, aimed at promoting agricultural activities in the country.

3.3.4 Agriculture and Employment in Nigeria

Agriculture is Nigeria's biggest sector employing about 70% of its population (Otedola & Etumnu, 2013). The sector is acknowledged for providing employment opportunities not only in Nigeria, but Africa in general (Mkong, Abdoulaye, Dontsop-Nguezet, Bamba, Manyong & Shu, 2021). Ayinde, *et al.* (2008) provides an analysis of the Nigerian agricultural growth rate, its contributions, and examines the linkage and dimension of agricultural growth and unemployment rates between 1983 and 2003. The study which showed that unemployment was higher in the urban areas than rural areas also revealed that the agricultural sector contributed more to Nigeria's GDP than the oil and manufacturing sectors. However, the study also found that increase in agricultural production in excess of demand led to glut in the market, and subsequently led to laying off of workers in the following production year. Thus, stressing the impact of food spoilage due to lack of adequate processing facilities in the country. This also means that the processing aspect of the agric value chain offers huge business opportunities for young entrepreneurs to tap into.

Ayinde, *et al.* (2008) conclude by recommending that improving the agricultural sector is the most effective way to break the vicious cycle of the unemployment menace and to alleviate poverty in Nigeria. Similarly, Chambers (2014) observes that young people perceive agriculture as a career path for the poor and uneducated. The task of transforming agriculture therefore lies in helping young people to develop a positive mindset about the sector so that they can harness business opportunities in the sector while at the same time contributing significantly to the development of Nigeria. On the other hand, the study notes that an increase in urban unemployment led to a boost in agricultural growth. Thus, there was an inverse relationship between unemployment rate and agricultural growth. This was because when people were laid off from their industrial jobs, they tend to join the agricultural sector for survival. The observation also perhaps explains why agriculture is not favourably considered by many young people, and thus corroborates the assertion of Adesina and Favour (2016) that many Nigerian youth consider the sector as unattractive and non-lucrative.

Ochada and Ogunniyi (2020) explored the nexus between "agricultural output performance, employment generation and per capita income in Nigeria" for the period spanning 1981 to

2016. Agriculture-induced employment was captured using the agriculture value-added per worker, while the result of the study revealed no evidence of a stable long running relationship “among agricultural output, employment generation and per capita income in Nigeria as revealed by the Johansen Cointegration rank approach”.

Furthermore, the outputs of the Vector Autoregression analysis (VAR) as well as the post-estimation results generated from both the impulse response function (IRF) and the forecast error variance decomposition (FEVD) all showed the existence of a “positive dynamic interactions among agricultural output, employment generation and per capita income in Nigeria”. This implies that, while the agricultural sector boosts employment generation, an increase in the agriculture-induced employment will trigger a corresponding rise in the level of income per capita which in turn enhances the quality of life of the people.

Gar and Rodgers (2020) evaluated youth employment in agriculture programmes as a vehicle for tackling poverty and unemployment in the case of Alkaleri, Duguri and Gar Rural Communities of Bauchi State, Nigeria. The study however established that due to poor funding, poor coverage and lack of government support, the YEAP was ineffective in adequately reducing the level of poverty and unemployment in the surveyed area. In a related survey, Igwe, Rahman, Odunukan, Ochinanwata, Egbo and Ochinanwata (2020) assessed the drivers of diversification and pluriactivity among smallholder farmers with empirical indication from Nigeria, by utilising a sample of 480 agripreneurs who were made up of rural Nigerian farmers, the empirical result from the multivariate

Tobit analysis indicates that farm holders with higher level of education were more associated with increasing chances of choosing non-farm or wage employment. This is because those farmers believe that farming or agriculture in general is meant for the uneducated or the less educated individuals in the society. The findings of the study further demonstrated that, as the level of education (formal) among the smallholder farmers increased, there was a gradual decline in the level of agriculture involvement which eventually caused a decline in the share of agriculture in rural employment. This also saw a gradual rise in the level of employment in non-farm activities.

Similarly, the study of Ayomitunde, Pereowei, Abosede and Eusebius (2020) evaluated the contribution of agriculture to employment creation with special consideration to post-SAP Nigeria. By utilising the Johansen cointegration rank test, the dynamic ordinary least squares

(DOLS) as well as the Toda-Yamamoto's granger causality approach, it was established that the agricultural sector plays an insignificant role in the process of employment generation in Nigeria, though not significant in the post-SAP era. The study however expressed the urgent need for the government to diversify the economy with emphasis on agriculture-led growth that will enhance job creation.

One of the most recent studies linking agriculture to employment is that of Folarin, Osabuohien, Okodua, Onabote and Osabohien (2021), who examined "male and female employment in agriculture and agricultural productivity in Nigeria" and found that the number of females in the agricultural sector-induced employment is considerably lower compared to that of their male counterparts. Specifically, the study established that women account for only 37% of agricultural sector employment in Nigeria. This calls for the need to promote female participation in agricultural undertakings in the country so as to boost agricultural output and income generation for farm holders in Nigeria.

3.3.5. Challenges of the Agricultural Sector

While agriculture has immense potential to advance Nigeria's development agenda, the sector's productivity has been hampered by numerous challenges. The Agriculture Promotion Policy (2016-2020) developed by the Ministry of Agriculture and Rural Development (FMARD) identified two gaps that need to be filled for the country's agriculture to live up to expectations, namely the inability to meet domestic food demand and the inability to export at quality levels required by the international market. On one hand, Nigeria is unable to meet the local food demand thus necessitating the reliance on food importation. In 2008, for example, Nigeria produced about 2 million metric tons of milled rice and imported roughly 3 million metric tons in order to meet the 5 million tons needed to feed the country (FOA, 2020). In fact, Nigeria is one of the largest importers of rice in the world.

The country's inability to meet its local food demand is consequent upon productivity challenges arising from largely inefficient farming practices. The factors hampering agric production in Nigeria are inadequate infrastructure, the peasant nature of agric production, low technology adoption, inadequate supply of input resources, price instability of both input materials and final produce, poor quality of available input resources (e.g feeds for aquaculture, seeds etc), poor irrigation system, lack of fertiliser application, weak agricultural extension system, food spoilage, weak linkages between the argo and industrial sector, poor research and

development effort, transportation and logistics challenges, ageing farming population and lack of technical know-how (Adeoye *et al.*, 2012; Adesina & Favour, 2016; FOA, 2020; Odetola & Etumnu, 2013; Olukunle, 2013; Titilola, 2008). The second challenge which deals with the inability to meet international standards is also driven by productivity challenges listed above in addition to poor knowledge of target markets and how to produce according to international standards. Inadequate infrastructure like insufficient food-testing facilities also affects the standard of Agric produce obtainable in Nigeria.

Furthermore, lack of productivity in the Agric sector stifles export of Nigeria's cash crops. According to FOA (2020), the country loses 10 billion dollars in annual export opportunity from palm oil, groundnut, cocoa and cotton alone as a result of continuous decline in the production of those commodities. It is important to highlight that before the relegation of agriculture, in 1960, Nigeria was not only self-sufficient in food production but exports of major crops accounted for over 70% of total exports (Odetola & Etumnu, 2013). This means with the proper prioritisation and investment, Nigeria's Agric sector can be a major force of foreign earnings and socioeconomic transformation.

It has been noted that the development of the rural areas is crucial for overcoming the challenges of the Agric sector. Nchuchuwe and Adejuwon (2012) opine that Nigeria's agricultural sector has a strong rural base so concern for agriculture and rural development should be given proportionate consideration. The paper observes that the country's agriculture remains largely traditional and concentrated in the hands of smallholders and pastoralists, hence the severe underdevelopment of the sector. It also notes that the neglect of rural development has led to the rural-urban migration which reduces available labour for rural agriculture while increasing the unemployment in urban centres. Nchuchuwe and Adejuwon (2012) thus argue that for agricultural policies to achieve its objectives, there is need for an adequate investment in upgrading rural infrastructure, boosting productivity, and increasing competitiveness of the farm output while at the same time fighting corruption.

Similarly, Olukunle (2013) opines that for the agric sector to be fully developed, there is the need for the Nigerian government to invest heavily in rural infrastructure development as this will promote private investment in all areas of agriculture and facilitate linkage of agriculture to industry. Investing in rural development is critical because, among other things, it is a way to reduce rural-urban migration which impedes youth involvement in rural agriculture while increasing youth unemployment in the cities (Akpan, 2010). Scholars like Adesina and

Eforuoku (2016), Korankye and Frempong (2019) have also highlighted the importance of migration in youth agricultural engagements in Nigeria and Ghana, respectively.

Furthermore, it is unfortunate that despite the pivotal role of agriculture in Nigeria's socioeconomic development, the government investment into the sector has been abysmally low. According to Abutu (2014), Nigeria invests only 2% of its national budget into agriculture, annually, while most Asian countries invest 16% of their national budget into the sector. Elijah, Babale, and Orakwu (2017) argue that adopting the internet of things (IOT) and data analytics in Nigeria's agriculture can significantly mitigate against the numerous challenges the sector faces.

Nigeria's Agriculture Promotion Policy (2015-2020) identified the following six bottlenecks that must be resolved in order to unlock the full potential of the agric sector in Nigeria:

- Creating a policy structure that matches evidence-driven coordination among decision-making authorities with common and public goals for an agricultural transformation of the country.
- Political commitment at both Federal and State levels to enforce the needed reforms.
- Addressing the gap in adoption of agricultural technology in Nigeria.
- Providing the relevant infrastructures.
- Institutional reform and realignment for more effectiveness.

3.3.6. Agricultural Value Chains

It is crucial to note that for the full potential of agriculture to be realised, Nigeria needs to invest in developing the entire value chains of the sector, and not just in primary production. In a study which investigated the contribution of the agriculture sector to economic growth in Nigeria between 1960 and 2011, Odetola and Etumnu (2013), among other things, found that that growth in the agriculture sector is mostly dependent on growth of the crop production subsector. Within the stated period, the crops production sub-sector accounted for 83.5% of the contribution of agriculture to Nigeria's GDP while the livestock sub-sector contributed 9.2% within the same period (Odetola & Etumnu, 2013).

Also, most of the available literature on agriculture in Nigeria focuses on primary production. While primary production has been a major source of growth in Nigeria's agriculture, there is the need to develop the entire value chain for maximum productivity and job creation. Value chains are a key framework for understanding how inputs and services are brought together and then used to grow, transform, or manufacture a product; how the product then moves from the producer to the customer; and how value increases along the way (Webber & Labaste, 2009). For agriculture, the value chains include the input supply, primary production, storage and processing, marketing and trade of agricultural produce (PWC, 2017).

According to Webber and Labaste (2009), many Sub-Saharan African countries produce low-skill, low-value agricultural products and services, struggling to obtain a significant value-added share in global trade. This is corroborated by the assertion of the Oxford Business Group (2019) that Nigeria and other African countries have a greatly underdeveloped agro-industrial sector so they tend to export raw agricultural commodities and import finished goods. While there has been considerable effort towards the agricultural sector in Africa, little attention has been paid to the value chain through which commodities and products reach the final consumers both within the country and abroad. The consequence of this neglect is enormous losses of value-added and potential employment opportunities. Moreover, in the many rural areas of Africa, agro-processing is usually non-existent or quite basic where it does exist, and this has resulted in significant post-harvest losses (Oxford Business Group, 2019). Post-harvest loss, as noted earlier, is a major challenge of agriculture in Nigeria.

There is therefore the need to invest in developing the value chains so as to enhance productivity, wealth creation and the employment generation potential of the sector. The Food and Agriculture Organisation of the United Nations (2020) observes that value-added per capita in Nigeria's agric sector has merely risen by less than 1 % every year. Let us take cassava, as an example. Nigeria is currently the world's largest cassava producer (FOA, 2020). According to Adebayo (2016), cassava can be processed into several valuable products (like flour, and ethanol) for local consumption and export. By developing the cassava processing capabilities of the country, Nigeria can harness its numerous potentials, thereby reaping socioeconomic dividends.

Olomu, Ekperiware and Akinlo (2020) observe that Nigerian agricultural value chain has systemic and services gaps which underpin market failures, although the value chain has the potential of triggering economic growth on a higher scale with a trickle-down effect to other

sectors of the Nigerian economy. On the positive side, the existing gaps in the value chains offer great opportunities for tapping into the energy and creativity of young Nigerians who can add value to the various components of the ecosystem in an entrepreneurial manner. Various scholars have argued that youth participation is critical to fostering agricultural development and engendering job creation (Cheteni, 2016; Man, 2012; Njeru, 2017). The task of government agencies and other stakeholders therefore is to attract young people into the agric sector and adequately equip them to not only identify these gaps but to exploit the business opportunities for creating wealth and generating jobs.

3.4 Youth and Agricultural Development

Maximising the opportunities in the agric sector will require the utilisation of the energies and talents of young Nigerians. Literature abounds on youth agricultural engagement in Nigeria and other parts of the world (Nnadi & Akwiwu, 2008; Adekunle at al., 2009; Shaffril, 2010; Ahaibwe, Auta, Abdullahi & Nasiru, 2010; Akpan, 2010; Shaffril, 2010; Man, 2012; Amadi, 2012; Swarts, & Aliber, 2013; Abdullah & Sulaiman, 2013; Mbowa & Lwanga, 2013; Cheteni, 2016; Njeru, *et al.*, 2015; Adesina & Favour, 2016; Njeru, 2017; Pelzom & Katel, 2018).

3.4.1. Factors Affecting Youths' Participation in Agricultural Entrepreneurship

Some scholars have argued that low youth participation in agriculture is traceable to numerous constraints which makes agriculture not economically viable for them. For instance, Nnadi and Akwiwu (2008) investigated the determinants of youth participation in rural agriculture in Imo state, Nigeria using a combination of survey and logistic regression techniques. The study identified age, marriage, education opportunities, household size, parents' occupation, parents' farm income and dependence status of youth as significant factors. The sample size however appears too small (230 persons) to be generalised for the entire state.

In another study, Adekunle, at al. (2009), while examining the constraints to rural youth involvement in agriculture in Kwara State, Nigeria, note that youth participation in agriculture were hindered by inadequate credit facility, lack of agricultural insurance, poor returns to agricultural investment, lack of basic farming knowledge, and lack of access to tractors and other farm inputs. Shaffril (2010) opines that profitability is a major inducement for youth participation in agriculture.

Furthermore, Akpan (2010) observes that factors affecting rural Nigerian youth involvement in agriculture can be classified into economic, social and environmental factors. While the economic factors include inadequate low farming profit margins, credit facilities, lack of agricultural insurance, initial capital and production inputs; the social factors deal with public perception about farming and parental influence. On the other hand, the environmental constraints are lack of access to land and soil degradation (Akpan, 2010). The study also notes that youth agricultural engagement is contingent on location. While 80% of youth residing in the rural areas are engaged in agricultural activities, about 90% of those living in urban centres are engaged in non-agricultural activities.

The tripartite classification (social, economic and environmental) of this study is in tandem with Sen's capability approach as it offers a comprehensive analysis of the subject matter. However, the study by Akpan (2010) is limited by the extent of its methodological rigour as it was mostly based on literature reviews and interviews of five (5) people in one city (Abuja). It also focused on rural agriculture. Thus, they do not provide a full picture of the issue at hand in various parts of the country as far as youth engagement in agriculture is concerned.

Auta, Abdullahi and Nasiru (2010) observe that despite the vital role of agriculture in the rural social systems, little progress has so far been achieved towards raising the income and living standards of the youth engaged in agriculture. Other challenges being faced by the youth who are engaged in farming include lack of finance, poor access to farm inputs, good market channels and other services. The study however solely relied on descriptive statistics, which is likely to be biased when inferential statistics and regression could have provided better insights into the dynamics of youth participation in agriculture in Nigeria.

Amadi (2012) asserts that constraints to effective youth agricultural entrepreneurship development include inadequate educational curricular, societal norms and values, especially as it relates to agriculture, inadequate policy frameworks as well as undue parental and peer influence. However, it should be noted that dealing with these constraints and boosting youth successful agripreneurship have enormous significance on the current and future socioeconomic conditions of Nigeria. As observed by Swarts and Aliber (2013), apart from abating the youth unemployment crisis, enhancing youth engagement in agriculture is desperately needed to save the future of the sector due to the aging population of those currently operating in it.

In a Malaysian study, Abdullah and Sulaiman (2013) investigated factors that influence youth interest in agricultural entrepreneurship. The study asserts that attitude and acceptance have significant effects on youth agriculture entrepreneurship. However, the study also found that knowledge of agric entrepreneurship did not have a significant influence on youth interest in the sector. Since scholars have held that knowledge plays a role in entrepreneurial intention (Roxas, Cayoca-Panizales & de Jesus, 2008; Turker & Selcuk, 2009), it may be pertinent to understand the reason for this discrepancy. Other factors influencing youth agricultural entrepreneurship, according to the study, include family support, government support and promotion of agriculture through carnivals and festivals.

In a Ugandan study, Ahaibwe, Mbowa and Lwanga (2013) undertook a comprehensive analysis of the determinants of youth participation in agriculture. The study revealed that youth withdrawal from agriculture is higher than that of the older cohorts. According to the study, education also plays a role as educated (up to secondary school) young Ugandans are less likely to engage in agriculture. The study further indicates that increased earnings from agriculture tend to encourage youth participation. This means that in order to make agriculture a viable alternative for young people, they need to be assured that they can make a good living from it. However, most young farmers in Uganda lack access to improved farming resources (like quality seeds, fertilisers and veterinary drugs), which would enhance productivity and profitability. The study further reveals that youth are disenfranchised in the ownership and management of critical assets in agricultural production, especially land. Furthermore, they are less likely to access credit, and social capital (farmer group membership) and extension services which are critical factors in agricultural transformation.

A similar study was conducted in Tanzania by Shiwa (2014), who examined the degree of youths' involvement as well as the inherent challenges in self-employment agricultural activities using Kining'ina village of Kilombero District in Morogoro Region as a case study. The study employed a sample of 60 youths, 6 agricultural extension officers, 3 village leaders, 1 district agricultural officer and 20 young parents. The study further engaged various data collection mechanisms such as direct observations, documentary review, focus group discussions and interviews. The result of the empirical survey revealed that most of the youths that participated in agribusiness did so as a temporal means of survival. It was further established that youth participation in agricultural activities face setbacks stemming from lack

of education for agricultural activities, poor and lack of modern working tools, poor marketing system, and poor rural and unsupportive infrastructures.

Similarly, in a case study on Youth in Agriculture Programme (YIAP) in Ondo State Nigeria, Adesina and Favour (2016), examined determinants of participation in YIAP. Among other things, the study found that attitude plays a role in enhancing participation in YIAP. The study also identified constraints to the participation of young people in the programme. These include: inadequate training facility, lack of agricultural equipment and machinery and low profit margins in agricultural enterprise. It can be argued that the low profit margin provides further reason to enhance value addition in Nigeria's agricultural ecosystem. This finding is in consonance with Lyocks, Lyocks and Kagbu (2013) who state that inadequate incentives, lack of training opportunities, poor infrastructures as major constraints to youth agricultural participation in Kaduna State, Nigeria. However, both studies are limited by the fact that it is solely based on a single agric programme in one state of Nigeria. Thus, it cannot be generalised to other parts of the country.

Adeyanju *et al* (2020) further examined the impact of agricultural programmes on youth engagement in Agribusiness in Nigeria using the Fadama Graduate Unemployed Youth and Women Agro-preneur Support (FADAMA-GUYS) programme as a case study. Factors such as age, years of formal education, perception of agricultural programs and type of employment were reported to influence participation in the agricultural programme. It further reveals that the agricultural programmes showed a positive impact on youth's likelihood to engage in agribusiness in the future. The authors call for more investment in similar intervention programmes as they have potential for creating jobs and improving the perception of young people in agriculture.

Similar efforts were noted in the study of Adeyanju, Mburu and Mignouna (2021), who evaluated the influence of "agricultural training programmes on youth agriprenurship performance in Nigeria " under the coverage of the Fadama Graduate Unemployed Youth and Women Support (GUYS). The study employed a sample of 977 participants across Nigeria. The empirical results of the study revealed inter alia that the level of agribusiness training significantly affects the performance of young agripreneurs in agricultural activities in the period of assessment.

Zulu, Djenontin and Grabowski (2021) explored the factors that influence youth-inclusive sustainable agriculture intensification in the context of Ghana and Malawi, with the aid of focus group discussions as well as key informant interviews. It was however revealed that among the challenges faced by the youths in the course of engaging in agricultural entrepreneurship include, but not limited to unwarranted exclusion of youth in decision making and in farmer/development groups, negative attitudes from community members and officials as well as unavailability of land and capital, citing the increasing complexity of land acquisition, particularly in Malawi.

A similar study of Mulema, Mugambi, Kansiime, Chan, Chimalizeni, Pham and Oduor (2021) examined the barriers and opportunities associated with youth participation in agribusiness with empirical testaments from Zambia and Vietnam. From the empirical outcome, it was established that while the youths were fully involved in full-scale agricultural entrepreneurship (production) in Zambia, the experience was different in the case of Vietnam, where most of the youths engaged in more differentiated agricultural activities. Specifically, the study found that youths in Vietnam engaged in activities such as “input supply, transportation as well as advisory services delivery”. Similarly, while it was established that negative perceptions toward agriculture hindered effective youth participation in agribusiness in the case of Vietnam, similar barriers in the context of Zambia include declining profitability of enterprises, lack of clear personal aspirations as well as limited access to start-up capital.

Mkong, Abdoulaye, Dontsop-Nguezet, Bamba, Manyong, and Shu (2021) investigated the “determinant of university students’ choices and preferences of agricultural sub-sector engagement in Cameroon” by employing a sample of 550 university undergraduates across the country. To accomplish the objectives of the study, a SWOT analysis was adopted to assess students’ thoughts and opinions regarding the barriers and prospects embedded in the Cameroonian agricultural sector. The results of the study indicated that the motivation to study agriculture as a university major was largely influenced by a participant gender, family income, parent's level of education, pre-university academic background, in addition to pre-university farming experience. When participants were further evaluated, the result showed that their penchant for agricultural entrepreneurship was pointedly influenced by their current academic progress (level) as well as their family base, implying that those whose family homes were located in the rural areas were more eager to undertake agricultural entrepreneurship after successful completion of their academic programme, due to perceived availability of

land/space for such projects. On the other hand, those whose family homes were located in the city have the thought of seeking alternative employment due to their perceived inability to get a piece of land where they can establish their own commercial farm project. This suggests that access to land is a key factor influencing youth perception in agricultural entrepreneurship in the surveyed areas.

In a more recent study, Inegbedion and Islam (2021) explored the factors that influence the “willingness and motivation of Nigerian youth to pursue agricultural careers after graduation” with the aid of a sample of 900 undergraduates taking agriculture as a course in four Nigerian higher institutions of learning. The study employed both summary statistics as well as principal component analysis (PCA). The results of this study were purely analogous to the findings of Mkong, Abdoulaye, Dontsop-NGuezet, Bamba, Manyong, and Shu (2021) who reveal that participation in agripreneurship among university undergraduates is influenced by the location of family home with the strong perception that when a family home is located in the rural area, there is a likelihood of gaining access to land for agricultural production. The study further reveals that most of the undergraduate youths currently taking a course in agriculture are influenced by their perceived own ability/competence to effectively manage an agricultural enterprise as well as perceived impact of agriculture on their long running career progression.

3.4.2. The Role of Perception in Youth Agripreneurship Engagement

As revealed earlier, a host of conversion factors exists that have the propensity to influence the perception of individuals about entrepreneurship intention and active participation. These factors could be in the form of personal conversion factors which include physical conditions, mental alertness, attitudes, metabolism, skills, etc. There are also social conversion factors such as institutions, power relations, society hierarchies, race, culture, gender, family and education that can in one way or the other affect a person’s perception about entrepreneurship. The environmental conversion factors on the other hand include infrastructure, learning environment, economic policies, access to finance, ease of doing business.

Previous studies have also acknowledged the role of perception in moderating the intention of youth in entrepreneurship engagement in both developed and emerging economies. Thus, this section reviews the contributions of earlier studies that have explored the influence of agricultural perception on agricultural intention, which in turn affects individual’s success in agripreneurship engagement.

Essentially, one of the notable studies that have made significant contribution to the perception-induced agripreneurship participation is that of Njeru, Gichimu, Lopokoiyit and Mwangi (2015), who assessed the influence of Kenyan youth's perception towards agriculture and attributed the negative perception of young people towards agriculture in Kenya to the poor state of Agric education in rural areas, inadequate agricultural training curricula, and the use of agricultural activities as punitive measures by schools. Similarly, Cheteni (2016) found that low youth agricultural engagement in South Africa is triggered by the fact that young people have a negative perception of agriculture which they often see as an unattractive sector.

In a related study, Njeru (2016) evaluated the various determinants of youth participation in agriculture using the youths of Kajiado North Sub-County of Kenya as a case study. The empirical analysis was conducted using a stratified sample of 397 youth. The study further employed the Pearson Product Moment Correlation Coefficient to confirm the existence of a statistically significant positive relationship (67.5 per cent) between youth perception of agriculture and active agripreneurship participation in the context of Kenya. The study thus recommended that the government and relevant stakeholders in the agricultural value chain should “develop a coherent and integrated initiative to address core challenges facing the youth when entering the agriculture sector” so as to enhance youth perception of agriculture to further tap from the pool of opportunities in the Agric sector.

In another Kenyan study, Njeru (2017) observed that youth perception about agriculture influenced their degree of participation in agriculture. Also, those with positive perceptions participated more in agricultural activities than those with negative perceptions. The study also noted that some of the youth felt that there were no good role models in agriculture, while others felt that agriculture was unprofitable. The youth also considered agriculture a low status career reserved for the old and illiterate members of the society.

To further explore the dynamics of perception and agripreneurship involvement, Priyaraj (2017) investigated the factors that influence the decisions of individuals to take up a career in agriculture by utilising a sample of 90 participants from Kannur district of Kerala, India. The study found among other things that wrong perceptions about agripreneurship significantly influence the decision of individuals to take up an agripreneurial occupation. The study thus advised the need to implement awareness campaigns to acquaint individuals with the necessary information relating to the pool of opportunities in the sector for active agripreneurship participation.

Mukembo (2017) examined “how a project-based learning (PBL) approach involving agripreneurship enhanced students’ understanding and application of poultry science knowledge and concepts and related entrepreneurial competencies learned at school to real-world settings”. The study adopted a sample of 280 participants and further utilised analysis of covariance to estimate the likely existence of statistically significant interactions among the variables employed in the study. Empirical outcome of the study however showed that perceived agripreneurship competencies exert a statistically significant effect on agripreneurship. The above finding implies that one's perception about his/her level of ability to manage an agripreneurial venture, will determine their intentions towards becoming agripreneurs.

On the impact of gender, Mukembo (2017) also established that the number of females with strong intention to actively participate in agripreneurship were more than their male counterparts. This is in sharp contrast to the findings of Mukembo, Edwards and Robinson (2020), who reveal that males were more interested in participating in agripreneurship than females in the context of Uganda. This variation across countries could be largely influenced by the level of available opportunities in agripreneurship or the degree of awareness about those opportunities.

In a related study, Mukembo, Edwards and Robinson (2020) carried out a “comparative analysis of students’ perceived agripreneurship competencies and likelihood to become agripreneurs” using Uganda as a case study. The study adopted a “quasi-experimental, non-equivalent control group design” and established that perceived agripreneurship capabilities exerted a statistically significant effect on their intention to emerge as agripreneurs. Nevertheless, there was an established perception differential among males and females in their respective quest to engage in agripreneurial undertakings. The study thus recommended the need to devise avenues to reverse the low female youth intention to explore the agripreneurship space for speedy socioeconomic expansion. Though, the above finding negates the earlier finding of Mukembo (2017) who established that the number of females with strong intention to actively participate in agripreneurship were more than their male counterparts.

In another study, Pelzom and Katel (2018) evaluated “the perception and knowledge of youth towards agriculture” with specific emphasis on rural areas of Bhutan. The empirical results of the study showed that perception about current family location or place of residence influenced the agripreneurship intentions among most of the youths in the rural areas whose parents were

farmers. The participants perceived that agriculture is a viable tool for employment generation for the youths and this drives their intention and active participation in agripreneurship.

Similarly, Adeyanju (2019) carried out an empirical examination of the significant role of agricultural training programmes in the enhancement of the performance of youth in agripreneurship using the Fadama GUYS programme in Nigeria as a case study. A sample of 977 youths was employed, while the “Propensity Score Matching technique” was used in achieving the objective of the study. The study reveals among others, that perception of training and agribusiness influences the success of agripreneurship participation in Nigeria. It was further submitted that there is a need to influence the prevailing youth perception about agripreneurship through youth empowerment so as to enhance their intention to actively participate in agricultural activities.

Ng’atigwa, Hepelwa, Yami and Manyong (2020) also evaluated the predictors of youth participation in horticulture agribusiness in the context of Njombe region of Tanzania. The study adopted a multi-stage random sampling technique to collect data from a sample of 576 Njombe youths. An ordered logit model was used in conjunction with descriptive statistics in the course of the empirical analysis. The empirical outcomes of the study however reveal, among other things, that positive perception about horticulture for agribusiness was a significant predictor of youth horticulture agribusiness participation. It was thus argued that a boost investment in youth capacity development will drive post-harvest management innovations which will enhance the perception of the youth about agripreneurship which, in turn, will drive their intention to actively participate in horticulture agribusiness.

Magagula and Tsvakirai (2020) further explored the direction of youth perceptions (whether positive or negative) and the probable influence of such perception on youth’s intentions to fully participate in agripreneurship. Empirical findings of the study established that the youth maintained positive perceptions in participating in agricultural activities. Though it was revealed that their perception about agripreneurship were largely shaped by perceived financial support, which exerted a direct impact on their intentions to take part in agripreneurship.

Shidiq (2020) further investigated the predictors of agricultural university students’ intention towards becoming agripreneurs with the aid of the adapted theory of planned behaviour. The study employed a sample of 204 agricultural students. Also, a partial least squares structural equation modelling (PLS-SEM) approach was utilised to analyse the data. The empirical

outcomes of the study established that attitudes, characteristics of individuals, subjective norms, as well as perceived behavioural influences of agricultural students significantly predicted their intent to participate in agripreneurship.

Additionally, Ephrem, Nguezet, Murimbika, Bamba and Manyong (2021) assessed the link between perceived social norms and agripreneurial intention among youths in the eastern region of the Democratic Republic of the Congo (DRC). Specifically, the study explored the role of perceived social norms and psychological capital in influencing youths' intentions to establish agribusiness using a sample of 600 Eastern DRC youths. Just like Shidiq (2020), the study adopted Partial Least Squares Structural Equation Modelling (PLS-SEM) approach in analysing the data set. From the empirical result, it was found that majority of the youths did not select agribusiness as their top career choice. However, it was clearly established that the youths who perceived that agripreneurship ventures are "socially valued and supported" demonstrated higher intention to engage in agribusiness activities compared to those with contrary perception. This suggests that psychological capital (positive perception) through perceived social norms, plays a significant role in moderating individuals' intention to take up a career in agripreneurship.

In a more recent study, Ikuemonisan and Akinbola (2021) explored the dynamics of "agripreneurial intentions among students in the state-owned tertiary institutions in Ondo State, Nigeria". The study utilised both descriptive and inferential statistics to analyse the data. A sample of 120 students were arbitrarily nominated during the survey process. The descriptive statistics include percentages and frequencies distribution, while the inferential statistics include estimates of the logistic regression analysis. From the result, it was ascertained that students' perceptions about learning and age exerted a significant influence on the likelihood of students participating in agripreneurial activities in Ondo State. On the other hand, perceptions of mentorship exerted a negative influence on the participants' intention to engage in agripreneurship.

3.5 Evaluating the gaps in the extant literature

The literature review has unveiled that, while there is a consensus that agricultural perception plays a crucial role in agricultural engagement, there is currently a limited number of studies in Nigeria that explores the perception of young graduates towards agricultural entrepreneurship. Moreover, there is a paucity of literature on the experience of existing youth

agripreneurs and ways to develop successful young agripreneurs. This review also shows that there is currently little or no harmonised comprehensive programme to foster and ensure successful youth agripreneurship in Nigeria. Factors affecting youth agric engagement are multidimensional and could be economical, social, personal, environmental or cultural (Schusler & Krasny, 2008; Harris, Wyn & Younes, 2010; Afrin, Islam & Ahmed, 2010; Majali, 2012; Pavlis, Terkenli, Kristensen, Busck & Cosor, 2016; Giaccio, Giannelli & Mastronardi, 2018; Gregorio, 2019; Moreda, 2020; Dunne, Sietou & Wilson, 2021). Consequently, a comprehensive approach is needed in order to effectively boost youth engagement in agriculture.

Furthermore, while a number of studies have explored youth agricultural engagement in Nigeria, none of the extant literature empirically explored the entrepreneurial dimension of youth agricultural engagement. Moreover, virtually all available studies on youth agricultural engagement took a subnational dimension and therefore cannot be extrapolated to the entire country. Considering the role of contextual factors in shaping attitudes and perception to agricultural entrepreneurship, there is the need for a nationwide study that explores the perception of the Nigerian youth towards agricultural entrepreneurship. Furthermore, none of the extant studies leveraged Sen's capability approach which has been adjudged a very comprehensive approach for assessing socioeconomic opportunities.

To this end, this study examined the perception that young Nigerian graduates have towards agricultural entrepreneurship in a bid to provide understanding on the various factors affecting such perception. Moreover, the study which leveraged Sen's capability approach also delved into the experiences of current young agripreneurs in a bid to explore youth agripreneurship as a valuable functioning. Considering the fact that most of the youth who are currently involved in the sector reside in rural areas and focus mainly on primary production, the study also explores ways of engaging young Nigerians (both urban and rural) in the various value chains for agricultural transformation. Ultimately, the study developed a model for enhancing the participation of youth in agricpreneurship as well as increasing their odds for success in agric ventures. It is hoped that the model will be applicable to not just Nigeria but other African countries as a means of dealing with the perennial challenge of youth unemployment ravaging the continent.

3.6 Summary of the Chapter

This chapter presented a thorough synthesis of extant literature on youth entrepreneurship and agricultural development in Nigeria, Africa and globally. It also discussed both conceptual, theoretical and empirical understanding of youth agricultural entrepreneurship. From the reviewed literature, it is clear that youth agricpreneurship engagement is a potent force for dismantling the mountain of unemployment and stunted economic growth in Nigeria. It is also evident that low youth participation in agric entrepreneurship requires urgent policy attention in order to tap into the energy and talent of the youth for agricultural revolution. While the government and other stakeholders have shown interest in boosting youth agricultural engagement, there is still a dearth of empirical studies in this domain, hence the need for further research exploring this phenomenon.



Chapter 4: Theoretical Framework

4.1 Chapter Overview

The chapter deals with the theoretical and conceptual frameworks for the research. The increasing relevance of Sen's capability approach among scholars and policymakers lies in its ability to bring to the table salient issues underlying development which many other frameworks tend to ignore. As a holistic approach to programme evaluation, the capability approach helps to point out certain important issues surrounding the journey of agricultural entrepreneurship and the business ecosystem that facilitates such. Apart from shedding light on critical aspects of agripreneurship development, it also serves as a comprehensive lens to explore the lives of entrepreneurs.

The aim of this chapter is to provide the necessary grounding for the research through a thorough presentation of the theoretical frameworks used for the study. It also aims to demonstrate the justification for using the capability approach as a holistic approach for exploring entrepreneurship development. The chapter begins with an exposition of the capability approach to development which represents the theoretical framework underpinning the research. Also, the chapter discusses various capability approach concepts like functioning, capability and conversion factors. Moreover, it provides a critique of the capability approach while attempting to respond to the critiques. It also utilised the capability approach as a lens for understanding agricultural entrepreneurship.

4.2 Sen's Capability Approach

The capability approach places intrinsic value on humans and argues that the ultimate aim of any developmental endeavour should be to expand the capabilities of people. The approach argues that an individual's substantive freedom (to lead a life he/she has reason to value), should be the primary aim of development while economic measures should be seen as a mere means to this end. Thus, the approach strikes an analytical distinction between the means and the ends of wellbeing and development (Robeyns, 2005).

According to Robeyns (2005), the capability approach is a normative framework for evaluating and assessing individual wellbeing and social arrangements, policy designs as well as proposals about social change. It offers a framework for analysing social issues like development, gender, poverty and wellbeing, freedom, bias and inequality, justice and social ethics (Sen, 1993). The

approach indicates important information which is needed for making judgment on social issues, and so rejects approaches considered normatively inadequate (Robeyns, 2000). It focuses on the available opportunities or freedoms (capabilities) for a person to achieve various beings and doings (functionings) which he/she has reason to value (Sen, 2011). Thus, the capability approach serves as a theoretical perspective for understanding relevant developmental concepts, and can be used as a practical tool for evaluating services, institutions and social arrangements.

4.2.1 Historical Background to Capability Approach

The capability approach, in its current form, was pioneered by an Indian philosopher and professor of economics, Amartya Sen, who developed, refined and defended the framework (Robeyns, 2000). It was first articulated in Sen's 1979 essay titled, "Equality of What?" presented as the Tanner Lecture on Human Values (Clark, 2005; Sen, 1993). However, Sen's work was influenced by a number of other thinkers. The foundation of the capability approach can be traced back to the works of Karl Marx, Aristotle, Adam Smith, Isaiah Berlin, John Stuart, Frances Stewart, Paul Streeten, John Rawls and the classical political economy (Clark, 2005; Robeyns, 2000; Sen, 1990).

The development of Sen's capability approach was influenced by Adam Smith's works on the importance of economic growth in enhancing human development and his analysis of necessities and living conditions (Clark, 2005). Moreover, the capability approach has a link with Karl Marx's concern with freedom and human emancipation, and like Aristotle, Sen believes that wealth is not the end but merely a means to enhancing human development (Clark, 2005).

Furthermore, Aristotle's discussion on the imperative of freedom of choice for living a good life, his analysis of eudaimonia (human flourishing), and his theory of political distribution, also influenced Sen's work (Clark, 2005). Other influencers include Rawls' theory of justice as well as his emphasis on access to primary goods and self respect, Isaiah Berlin's (1958) classic essay known as "Two Concepts of Liberty", and the Basic Needs approach of Frances Stewart and Paul Streeten (Clark, 2005).

The conceptual roots of the capability approach can be observed in its critiques of utilitarianism, with an aspect of traditional welfare economics. Amartya Sen observed the problem associated with the fact that welfare economics measures wellbeing by utility

achievement or command of commodity. He criticised the welfare approach because it focused on what people derive from goods (i.e., utility e.g. happiness), and thus observes mental reactions which are adjustable and adaptable to different conditions (Cohen, 1993). Thus, the welfare approach is susceptible to the negative consequences of adaptive preference which connotes choices made less from one's own reflection than from habituation/socialisation or resignation. For example, a young woman living in a patriarchal society like Nigeria might have been socialised into thinking that entrepreneurship is only for men. She might have accepted the notion as an unchangeable reality, making her comfortable with just being a housewife or a subordinate worker.

On the other hand, Sen argues that a focus on primary goods does not take cognisance of the fact that different people may need different amounts of goods in order to satisfy the same basic needs (Cohen, 1993). For example, using the same training technique for a visually impaired student and a sighted student might yield different results because they possess a varying ability to fully harness the benefits of the training. Thus, Sen intended to provide a framework that will offer a comprehensive view of the conditions of humans and the opportunities available to them. In order to develop a conceptual space for accessing social welfare other than utility or primary goods, Sen used the term functionings (combined with freedom to do and to be, also known as the capability of a person), as the fulcrum on which the capability framework rests, thus setting it apart from other approaches.

Before proceeding further, a brief biography of Amartya Sen might help contextualise the development of the capability approach since his life experience must have impacted on his work. Amartya Kumar Sen was born on 3 November 1933 in Dhaka, Bangladesh (Uddin, 2019), and witnessed the Bengal famine of 1943 (De, 2021) which cost the lives of 2 to 3 million people (Patel, Kumar, Paul, Rao & Reddy, 2011), as well as the Muslim day labourers' murder in the time of partition. He earned a PhD in economics from Cambridge University, taught at a number of institutions, received the Nobel Prize in 1998 for his contribution to welfare economics, and was conferred with Spain's top Princess of Asturias Award in the Social Sciences category in 2021 (*Economic Times*, 2021). Amartya Kumar Sen is currently a professor of Economics and Philosophy at Harvard University (Alkire, 2009; *Economic Times*, 2021).

4.2.2 Functionings

Functionings are the various aspects of life that people value. According to Conradie (2013), functionings can be defined as anything that an individual can be or do. They are the various doings and beings which humans have reason to value. The concept runs across many activities and situations which people consider important. Expanding the opportunity for these doings and beings is the focus of the capability approach. Some of the examples of functionings are: being able to succeed academically, being able to think innovatively, being creative, being able to launch an agric enterprise or being an entrepreneur, being able to ride a bicycle and being able to take part in a social debate. Sen's capability approach argues that any effort to evaluate a person's or a group of people's wellbeing should be done with regard to their functionings and the freedom to achieve them (capabilities).

4.2.3 Freedoms or Capabilities

The achieved functionings of a person, at any given time, refer to those functionings which the person has pursued and successfully actualised (Alkire, 2002). For example, a graduate who is successfully running his own agric venture can be said to have achieved the functioning of being an agropreneur. However, just like the utilitarian sole focus on utility, focusing on functionings alone only amounts to an impotent means of assessing human development. This is because functionings alone do not reflect one's freedom to decide on which path to take, or even the freedom to actualise what one deems valuable, whether or not such achievements engender wellbeing or not (Alkire, 2002). For example, even though being an agropreneur may be regarded as a functioning, it does not tell us whether the student really wanted to be an agropreneur or was forced (against his will) due to the high unemployment in Nigeria, to start his/her own venture. For example, Ayinde, *et al.* (2008) observed an increase in urban unemployment led to a boost in agricultural growth. Thus, some youth may be pushed into agricultural engagement when bereft of other employment opportunities.

Sen (1992, p. 40) asserts that "capability is a set of vectors of functionings which reflects a person's freedom to lead one type of life or another". It refers to a person's or a group of persons' freedoms to achieve or promote valuable functionings (Alkire, 2002). Thus, capability or freedom reflects the genuine opportunities which one has, and can use in one way or another. For example, if one is given a gift of a million Naira without any condition attached, he or she

can decide to buy a house, start an agricultural venture, or buy an expensive car. Similarly, if one is provided opportunities to learn the rudiments of Agric enterprise coupled with access to funding, the person may decide either to work within existing Agric business or to start his/her own Agric venture.

From the above elucidation, it is clear that both concepts (functionings and capabilities) are interrelated, although they also involve distinctive connotations. The following quotes from Sen buttress this conceptual relationship:

A functioning is an achievement, whereas a capability is the ability to achieve. Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions. Capabilities, in contrast, are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead (Sen, 1987, p. 36).

A person's position in a social arrangement can be judged in two different perspectives, viz. (1) the actual achievement, and (2) the freedom to achieve. Achievement is concerned with what we manage to accomplish, and freedom with the real opportunity that we have to accomplish what we value. The two need not be congruent (Sen 1992, p. 31).

Furthermore, Sen (2001) identifies five main freedoms which are instrumental in policy issues. These five freedoms (namely political freedom, social opportunities, economic facilities, protective security and transparency guarantees), complement one another and all contributes to a person's general capability to live freely (Sen, 2001). This study mostly deals with economic facilities which are the opportunities people have to use economic resources for production, consumption or exchange (Sen, 2001).

Availability or ownership of resources as well as conditions of exchange (defined by market and prices), are some of the factors which determine this freedom. In order to enhance economic facilities, the economic conditions of the entire population must be considered, and not just the national wealth of the country. This means that GDP does not indicate the level of economic facilities; neither does GDP per capita since it does not reflect fair distribution of wealth. According to Sen (2001), adequate distribution of wealth is needed in order to improve people's quality of life.

4.2.4. Agency

Sen (1985a) sees people from a wellbeing perspective and an agency perspective. Agency relates to the freedom one has to set and pursue his/her own interests and goals (Zheng, 2007). It can go beyond the pursuit of one's own wellbeing to include values like furthering the wellbeing of others. Agency refers to the capacity to act on behalf of the things one values, or in line with one's concept of what is good (Alkire, 2009; Sen, 1984). According to Sen (1985a), a person's 'agency freedom' refers to what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important. Thus, a person's agency cannot be assessed without consideration of his/her own conception of good. The good might have an impact beyond the wellbeing of the agent. In this way, an 'agent' is differentiated from a 'patient' whose only concern is his/her own wellbeing (Robeyns, 2000).

Agency manifests as the ability and autonomy of a person to select those capabilities which he/she values, and to perform the activities required to turn those valued goals into actual beings and doings (Conradie, 2013). The assessment of agency achievement of a graduate would therefore focus on how well he/she had pursued the objectives previously decided on in a reasoned, evaluative process (Conradie, 2013). This focus on agency implies that any evaluation methods informed by the capability approach must take into account the aspiration and needs of the affected people. Exploring agency towards agricultural entrepreneurship is one of the focus areas of this study.

The consideration of aims, objectives, norms and obligations brings to bear issues of adaptive preferences and restricted agency, thus highlighting the link between a person's social conditions and his/her preferences (Zheng, 2007). Sen (1984) explains adaptive preference by arguing that the most blatant forms of inequalities and exploitations persist in the world through making allies out of the deprived and the exploited persons in situations when 'people learn to adjust to the existing horrors by the sheer necessity of uneventful survival, the horrors look less terrible in the metric of utilities.

The assessment of adaptive preferences, aspirations, choice or agency helps to provide understanding as to whether people exercised choice freely or whether their choices were limited (Conradie, 2013). Thus, the role of restricted agency implies a caution against unconditional acceptance of whatever a person happens to perceive as valuable (Zheng, 2007). For example, in evaluating the agency of a housewife, caution should be taken against

accepting her condition as a reflection of her true values since she might be a product of a culture which applauds patriarchy and espouses relegation of women to domestic work.

Furthermore, Sen emphasises the role of conversion factors in a person's bid to translate the characteristics of a particular resource(s) into achieved functioning. These include personal, social and environmental conversion factors; all of which will be elucidated upon at a later stage while discussing the application of the capability approach.

4.2.5 Critiques of the Capability Approach

Sen's capability approach has invited a number of critiques. A major critique of the capability approach regards the lack of a specific set of capabilities (Nussbaum, 2003). Some scholars consider the approach as an unworkable idea while others accused the approach of being insufficiently specified (Robeyns, 2000). The consequence of the lack of a capability list is that any evaluative framework making use of the approach will need to do its selection of valuable functionings. It is argued that the challenge also threatens the operationalisation of the capability approach.

However, Sen argues that leaving the capability approach 'incomplete' rather than having it prescriptive and precise like most other development theories, is intentional, and that is so it could serve a wide range of purposes (Robeyns, 2005). He argues that there are two reasons for his decision not to endorse any list of functionings. Firstly, Sen intends the capability approach to be seen as a general approach for evaluating individual advantage and social condition rather than as a well-defined theory (Robeyns, 2003). Therefore, the capability approach is too general to endorse a particular list. The consequence is that any application or specification of the approach will require a combination with a particular social theories selection, and each case might produce a different selection of valuable functionings (Robeyns, 2003). This coupling of theories was achieved in this study by incorporating the sustainable livelihood approach, and other findings of previous studies.

Secondly, Sen places emphasis on the choice process and the freedom to reason in any attempt to select relevant functionings. He argues that the identification of capability set for any group should be achieved through a democratic process entailing public deliberation, so as to ensure the participation of the people in the process of reaching valuable functionings and capabilities (Sen, 1985a). This means that when the capability approach is to be used for any policy work, for example, the people whose lives will be affected by the policies should be given the freedom

to decide what should count as valuable capabilities. In this way, Sen intends to return the power of agency to the people, so that they become active participants in the process of deciding their fate.

However, Robeyns (2005) argues that the public deliberation processes (suggested by Sen), are rarely perfectly democratic as some members of the group tend to have more power than others. In any social situation, it is virtually impossible to provide a perfectly equal representation of everybody's view. This is because some people are usually more powerful than others in any group, and thus their voices tend to overshadow that of the other members. Even a democratic process effectively favours the majority group in many cases, and leaves the minority to acquiesce to the majority.

Following Sen's approach of giving voice to each individual, this study, among other things, qualitatively explored the capabilities of each of the interviewed agric entrepreneurs in a bid to understand their available opportunities towards successful entrepreneurship in different parts of Nigeria. This will help to provide policymakers with a comprehensive list of issues to focus on in the effort towards youth agricultural development.

Furthermore, scholars like Nussbaum have tried to make the capability approach more applicable by generating a list of basic capabilities (Nussbaum, 2000, 2003). Nussbaum's ten (10) central human functional capabilities emphasised in the study of Mousavi, Forwell, Dharamsi and Dean (2015) include the ability to live a complete and sustaining life into old age (life), ability to enjoy good health (bodily health), ability to go where you want to go (bodily integrity), ability to apply one's senses (imagination and thought), ability to get attached to other things and people (emotion), ability to align with one's conscience (practical reason), ability to interrelate with others (affiliation), ability to derive the benefits offered by nature and appreciate its beauty (other species), no form of restriction on one's enjoyment and recreation (play) and ability to actively engage in political activities (control over one's environment).

Sawyer (2007) found that Nussbaum's list was helpful for analysing complex problems, but noted that a gap still exists for identifying specific functionings for international, and even national comparisons. Robeyns (2003), on the other hand, criticised Nussbaum for claiming that Sen ought to endorse a specific list. According to Robeyns (2003), Sen's capability approach is not a theory but a framework, and considering the under-specification of the approach, it is not feasible to have a definite all-purpose list. A list of capabilities ought to be

context dependent. The advantage of the broad nature of the capability approach is that it can be applied to diverse fields, and so can be activist, academic or policy oriented. This under-specification of the approach makes it applicable, for example, in the assessment of both poverty and business incubation. Among other things, this study explores the available capabilities for Nigerian youth to engage and succeed in agricultural entrepreneurship.

Another criticism that has been raised by scholars is that the capability approach is too individualistic, and thus pays insufficient attention to groups and social structures (Corbridge, 2002; Devereux, 2001). According to Robeyns (2003), such critics argue that any good theory ought to regard the individual as part of a larger social environment and not treated in isolation. Stewart and Deneulin (2002), for example, have followed this line of criticism, arguing that agents should be seen as socially embedded and interconnected to others, rather than as isolated humans. In defence of the capability approach, the paper will differentiate between ethical individualism; and methodological and ontological individualism.

Ethical individualism claims that individuals should be the unit of moral concern in any evaluative endeavour (Robeyns, 2003). Therefore, whenever one is to evaluate the state of social affairs, the focus ought to be on the impact of such situations on the individuals (whether directly or indirectly).

Ontological and methodological individualism, on the other hand, claims all social phenomena ought to be explained wholly and exclusively in terms of individuals and their properties (Bhargava, 1992). Using the previously mentioned example of women in Nigeria, ethical individualism will urge that the impact of lack of freedom to choose a career should be assessed, based on how it affects the individual women and not just the community in general. The community might perceive any attempt to empower women, career wise, as a threat to social cohesion. They might argue that leaving wives with the full right to decide what career to choose will not only jeopardise their culture but will also affect the wellbeing of the husbands and children negatively. However, ethical individualism, considers of paramount importance, the wellbeing of the individual, in this case the individual woman. In this way, the good of the individual takes precedence over that of the community. The capability approach, being a humanitarian-oriented approach, seeks to provide an evaluative framework that will help uncover social ills that are being perpetrated (against the marginalised) in many societies by providing a paradigm that is based on giving a fair chance to each and every single member of society. In that manner, assessment of wellbeing must be evaluated at an individual level, and

not just at a group level. This ethical individualism was considered in this study by giving a group of young graduates and young agripreneurs the opportunity to express their perceptions regarding agricultural entrepreneurship in Nigeria.

4.2.6 Application of the Capability Approach

4.2.6.1 Previous Application of the Capability Approach

A number of scholars have been inspired by Sen's work to further develop the capability approach, but the most prominent is Martha Nussbaum (1995; 2000). Inter alia, Nussbaum developed a list of essential capabilities (Nussbaum, 2000). Her works were significantly influenced by John Rawls' "idea of the citizen as a free and dignified human being" (Garrett, 2008). Moreover, there have been several attempts to apply the capability approach to the assessment of poverty and wellbeing (Martinetti, 1994; Balestrino, 1996; Klasen, 2000; Majumdar & Subramanian, 2001; Clark & Qizilbash, 2002).

Some studies have investigated the links between expenditure (or income) and various capabilities. Examples of such studies are Sen (1985b), Balestrino (1996), Laderchi (1997) and Klasen (2000). The results of most of these studies suggest that capabilities and income do not always go together, thereby giving credence to Sen's claim about the limitation of the income-based assessment of quality of life. The works of other scholars have highlighted gross inequalities that exist along gender, race, age, caste and class lines in terms of nutrition, literacy, and life expectancy (World Bank, 2000; Clark, 2008; Jackson & Rao, 2009; Bishwakarma, 2011; Mallick, 2013; Benería, Berik & Floro, 2015; Nelson, 2021; Gutterman, 2021; Peyton-Caire & Stevenson, 2021).

The capability approach has also been applied in assessing small-scale development projects. Alkire (2002) developed a capability analysis of three poverty alleviation projects in Pakistan. More recently, Ruswa, Chikobvu and Walker (2014), in a case study on South Africa, assessed the impact of human capabilities on the wellbeing of students. Conradie (2013) applied the approach in her study on a group of women in Khayelitsha, South Africa. Her focus was on the relationship between aspiration and capabilities and how it might help to reduce poverty. The capability approach has also been applied in assessing quality of education. For instance, Vermeulen (2013) applied the approach in the assessment of the quality of public primary education in rural Uganda.

Furthermore, Sen's capability approach is considered the theoretical foundation of the human development approach, initiated by Mahbub ul Haq, and which is an approach that aims at providing a policy framework for development based on human development dimensions and indicators (Conradie, 2013). Just like the capability approach, the human development approach acknowledges the importance of money, economic growth and the market, but also sees them as a means, not as an end. In the field of Information and Communications Technology (ICT), Zheng (2007) drew upon the approach in providing theoretical reflections on ICT development. Downs and Swailes (2013) provide a radical reimagining of organisational talent management strategies using the Sen's capability approach. The authors posit that through a focus on freedoms rather than resources, the capability approach circumvents discourses of scarcity and therefore can restore vital social and ethical considerations to ideas about talent management.

So far, there have been few applications of the capability approach in the domain of entrepreneurship but most of which are theoretical rather than empirical. In a theoretical analysis, Gremmen and Akizawa (2018) argue that a combination of the capability approach and effectual process approach of entrepreneurship research can contribute to the robust development of Artificial Intelligence robots by providing the entrepreneurs with a tool for establishing a permissible action range within which to develop this robotics. In another theoretical paper, Gries and Naude (2011) offer a model of entrepreneurship through the capability approach lens. From the capability approach point of view, the authors assert, entrepreneurship is not just a production factor, or a means to an end, as the economists would say, but also an end in itself.

Entrepreneurship can be seen as a human functioning which can contribute towards expanding the set of human capabilities through being both a resource and a process. Moreover, the authors note that entrepreneurship should not be automatically taken as a valuable functioning, and that even when it is a valuable functioning, it is important to consider the available capabilities for engaging in it. This study takes Gries and Naude's (2011) analysis further by exploring agricultural entrepreneurship as a valuable functioning among Nigerian youth while also investigating the available capabilities for young Nigerians to engage in it.

Empirically, Ikebuaku and Dinbabo (2018) engaged Sen's capability approach in investigating business incubation as an effective tool for enhancing entrepreneurial capabilities beyond entrepreneurship education in Nigeria. Among other things, business incubation provides

young technology entrepreneurs with increased access to infrastructure and resources necessary for business, thereby enhancing their real opportunities (capabilities) for success.

4.2.7 Application of the Capability Approach to Agricultural Entrepreneurship

In recent years, there has been so much focus on getting young Nigerians into agricultural entrepreneurship as a way of effectively dealing with the perennial challenge of youth unemployment. While this is undoubtedly a step in the right direction, little emphasis is placed on the available capabilities (opportunities) for the Nigerian youth to engage in and succeed in agricultural venture creation. Being a comprehensive framework, the capability approach can help shed light on various factors that are critical to ensure real success for young Nigerians in the agricultural domain.

The study argues that Sen's capability approach can serve as a lens for holistically assessing the agricultural ecosystem in Nigeria with the aim of identifying better strategies for improving both engagement and success rate of young agripreneurs. The following sections explored the application of the capability approach to agricultural entrepreneurship using the concepts that are central to the approach, that is, functioning, agency and capability (Alkire & Deneulin, 2009).

4.2.7.1 Agricultural Entrepreneurship as a Valued Functioning

As noted, before, functionings are the various doings and beings which humans have reasons to value (Alkire, 2008). While some may value agripreneurship for non-pecuniary reasons (e.g. sense of achievement, acceptance and identity, independence and lifestyle), others may value such engagement as a means to acquire material wealth (Gries & Naudé, 2011). Moreover, assessing agricultural entrepreneurship as a valued functioning is important because it can help to distinguish between necessity-based agripreneurs and opportunity-based agripreneurs. Fairlie and Fossen (2018) define individuals who were initially unemployed before starting businesses as "necessity" entrepreneurs while individuals who were not unemployed before starting businesses are considered "opportunity" entrepreneurs.

In the same vein, Dawson and Henley (2012) assert that entrepreneurs may be pushed towards self-employment due to negative external forces, such as a layoff from work and subsequent lack of available paid employment. On the other hand, entrepreneurial motivation may stem from pull factors, like when an individual perceives an opportunity or desires to turn his/her

idea into reality (Hakim, 1989). Thus, a distinction can be made between push (necessity) entrepreneurs and pull (opportunity-based) entrepreneurs (Dawson & Henley, 2012; Fairlie & Fossen, 2018). Moreover, it has been noted that entrepreneurial motivation can affect the financial profitability and growth of a venture (Edelman, Brush, Manolova & Greene, 2010; Boluk & Mottiar, 2014).

According to Amit and Muller (1995), entrepreneurs with push motivations have been found to be less financially successful than pull entrepreneurs (Amit & Muller, 1995). Considering the impact of entrepreneurial motivation on business success (Amit & Muller, 1995), it is crucial to understudy entrepreneurship as a valued functioning among Nigerian youth. Furthermore, entrepreneurship as a valuable functioning can be used to provide a deeper understanding as to the reason why agricultural engagement is not favoured among young people.

4.2.7.2 Agency and Agricultural Entrepreneurship

One of the major aims of the human development approach is to enable people to become agents of change in their lives, families and community (Alkire & Deneulin, 2009). Sen did assert that an agent is a person who acts and brings about change (Sen, 1999). Agency, according to Alkire and Deneulin (2009), is a person's ability to pursue and realise goals that he/she values and has reasons to value. Such pursuance demands that one reflects on one's situation and then acts to bring about change. In the case of agropreneurship, a person's agency can be reflected in his/her ability to identify problems in the agric value chains, perceive such problems as business opportunities and deploy human and material resources into exploiting such opportunities through products or/and service delivery. By so doing, the agropreneur adds value to the ecosystem, effect socioeconomic change through job creation and economic growth and reap the attendant financial and non-pecuniary rewards.

4.2.7.3 Capability for Agricultural Entrepreneurship

As stated before, the capability approach focuses on the effective opportunities which people have to do to become what they value. Goods and services are considered important only in the light that their characteristics enable people to do and to be what they value, that is, in the light of the capabilities which one can generate from these goods and services (Robeyns, 2005). Thus, a crucial aspect of exploring youth agripreneurship using the capability lens, is to investigate the available opportunities for young people to engage in and succeed in agro

venture creation. This goes beyond personal factors to social and institutional factors that either foster or inhibit youth agropreneurial undertakings in Nigeria.

As noted by Sen (1999), capabilities connote a combination or a set of institutional or social opportunities which are in interaction with agency, or personal engagement. Thus, we need to ask the question, in lieu of the prevailing factors in the Nigerian business environment, what opportunities do Nigerian youth have to engage in and succeed in agripreneurship? To answer this question, we need to x-ray the various factors that can impact one's ability to engage in and succeed in Agric business. These are called conversion factors, in the capability approach parlance. The three conversion factors reflect the personal, social, and environmental characteristics that can either aid or hamper the achievement of a given functioning (Robeyns, 2005; Sen, 1992). These do not have to work in isolation but are interwoven in their manifestation. For example, a patriarchal culture can inhibit a girl's agency or sense of ability to undertake Agric entrepreneurship (Roomi, Rehman & Henry, 2018).

Personal Conversion Factors

An aspiring agripreneur may be unable to translate his/her desires into reality due to a certain impairment like a physical disability. For example, being able to perceive business opportunities requires a degree of mental alertness and attitude. Robeyns (2000) notes that personal characteristics (like physical/mental condition, metabolism, reading skills, etc), affect how a person is able to convert the features of a commodity into a functioning. This line of thought is supported by Morris *et al.* (2013), who assert that individual differences can lead to variation in how participants are affected by an entrepreneurship intervention.

Social Conversion Factors

Similarly, social conversion factors also play a significant role in the conversion of goods and services to functionings. According to Robeyns (2000), social characteristics (like institutions, public policies, power relations, society hierarchies, etc) play a significant role in the conversion of a good's characteristics to individual functioning. Conradie (2013) emphasises that social issues like race, culture, class and gender can be regarded as social conversion factors. As a mainly patriarchal society, gender discrimination is pervasive in Nigeria (Charles & Ikenna, 2009). A study by Okpara *et al.* (2011) on the business and social profiles of 67 women entrepreneurs in Nigeria, reveals that family responsibilities are among the constraining factors which affect female entrepreneurship engagement. Running one's own Agro business

requires an enormous investment of time and resources. If women are expected to be preoccupied with housework, then it may inhibit their chances of starting their own enterprise. Furthermore, a culture that sees women as mainly housekeepers will not be a conducive environment for creating the right mindset necessary for female entrepreneurship activities. This is in line with the social learning theory which argues that social environments like family, culture and ethnicity influence entrepreneurial intentions (Henderson & Robertson, 1999).

Bird (1988) notes the impact of the external environment on thoughts, which, in turn, shapes attitudes and intentions, which consequently leads to action while Morrison (1999) argues that the entrepreneurial spirit needs a conducive social and cultural background to initiate motives for venture creation. However, the constraints facing female entrepreneurs go beyond cultural perceptions, so that lack of access to resources (which might be linked to cultural and social issues), poses a great challenge for them. Nwoye (2007) highlights that woman in Nigeria have been historically disadvantaged, making access to material resources (like property and credit), education, market information and modern technology difficult, thus crippling their entrepreneurial engagement.

Therefore, as Conradie (2013) argues, it is crucial to analyse how gender discrimination and cultural issues can constrain young people (especially women), in the pursuit of their goals. These cultural values, when internalised as personal perception, become part of the person, and therefore influence their judgment and choice (Conradie, 2013). The impact of socio-cultural factors on entrepreneurship engagement is best articulated by Lee and Peterson (2000) who argue that great entrepreneurs do not develop by themselves, but are rather the products of entrepreneurship-oriented societies and cultures. Furthermore, Lee, Chang and Lim (2005) assert that “entrepreneurs are cultivated during their lifetime, and that social and cultural environment, personal experience, and education are very important to building entrepreneurship”.

Environmental Conversion Factors

Environmental conversion factors deal with infrastructural limitations like inadequate infrastructure, inadequate teaching and learning environment, entrepreneurially unfriendly fiscal/monetary policies, poor library facilities, and lack of access to loans and start-up funds etc. Isaacs *et al.* (2007) asserts that exogenous factors like access to finance, infrastructure and favourable business environments affect the translation of entrepreneurial intentions,

knowledge and skills into entrepreneurial activities. For example, it has been observed that Agro processing facilities are lacking in the many rural areas of Africa, and even where they exist, they are quite basic, and this has resulted in significant post-harvest losses (Oxford Business Group, 2019).

4.3 The Conceptual Model

So far, the theoretical framework of this study has been extensively discussed in this chapter. Specifically, the various issues discussed under Sen's Capability Approach which includes functionings, freedom or capabilities (real opportunities), conversion factors (personal, social and environmental), which have the propensity to influence one's ability to engage in and succeed in Agric business. Other issues addressed in this chapter include the various critiques of the Sen's Capability Approach, application of the capability approach in entrepreneurship in general and agripreneurship in particular. Issues relating to agency and agricultural entrepreneurship were also discussed in the chapter.

Nevertheless, the section presents an abridged model which summarises the link among the principal components of the capability approach. The conceptual model is apropos for gaining a clear insight into the sequential flow of resources (human and material), ideas, opportunities and constraints that influence individuals' desire to actively participate in agripreneurship. In a nutshell, the model captures the flow of activities from within and across interventions, supportive efforts, capability set, choice, conversion factors, achieved functioning (active participation in agripreneurship), leading to employment generation, poverty reduction and social transformation, which, in turn, facilitate economic growth/development in the country. The model is presented in Figure 1 below.

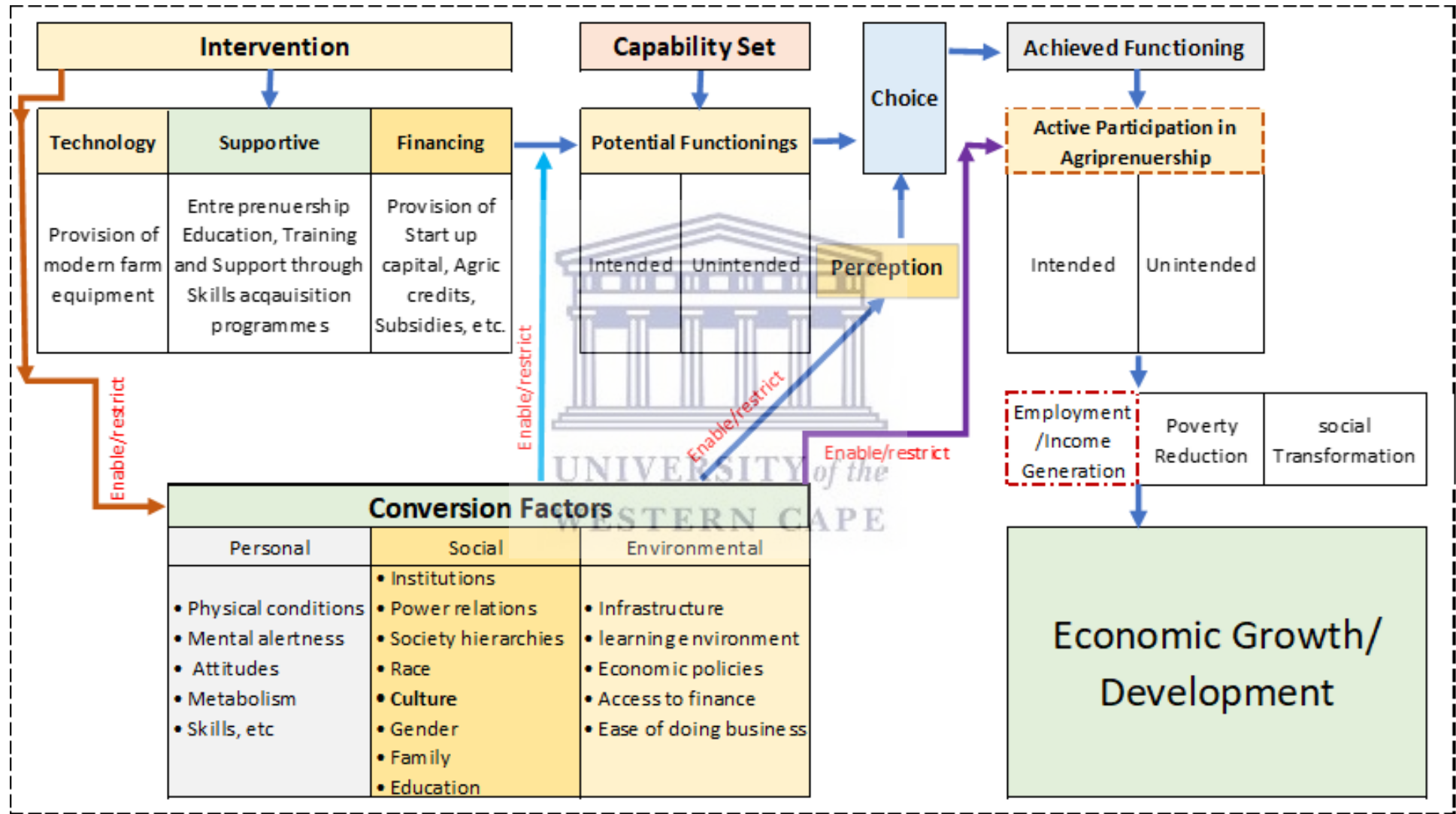
4.4 Summary of the Chapter

This chapter has provided the necessary grounding for the research through a thorough presentation of the theoretical frameworks used for the study. It also demonstrated the justification for using the capability approach as a holistic approach for exploring entrepreneurship development. Apart from elucidating on the capability approach to development, the chapter discussed various capability approach concepts like functioning, capability and conversion factors. Moreover, it provided a critique of the capability approach

while attempting to respond to the critiques. Furthermore, it utilised the capability approach as a lens for understanding agricultural entrepreneurship.



Figure 1: Conceptual model of the study



Source: Adapted from Robeyns (2005, p.98)

Chapter 5: Philosophy and Methods of Research

5.1 Chapter Overview

The focus of this chapter is to present the philosophical stance in addition to the methodological procedures utilised in the course of the entire empirical survey process. Essentially, the chapter focuses on critical realism as a philosophical view of this study with a view to linking the discrete quantitative and qualitative research approaches espoused in this study. Other issues captured in the chapter include research design, population and sampling techniques, data gathering as well as the analytical technique adopted in the study. The last segment of the chapter is devoted to the discussion of the ethical procedure that was followed during the course of conducting this research.

5.2 Philosophy of Research

5.2.1 Critical Realism

Critical realism can be described as a philosophical thought championed by Roy Bhaskar which originated as an attempt to address the criticisms levelled against empiricism and positivism philosophical schools (Sturgiss & Clark, 2020). One of such arguments is the idea that humans have the ability to fully comprehend the dynamics of truth and reality (Bhaskar, 2013). In sharp response to such criticism, critical realism maintains that the events that are directly observable may be close to reality, yet remain “fallible, social and subjective accounts of reality” (Sturgiss & Clark, 2020). Another provision of critical realism is the rejection of the theory of constructivism that maintains a parallel ground between human perceptions of reality and reality itself (Collier, 1994).

In his philosophical stance, Bhaskar postulates that reality is independent of the mind, implying that whatever man perceives about the reality does not alter the reality itself (Bhaskar, 1975). In the submission of Sturgiss and Clark (2020), human perceptions may be vital in analysing the events that happen around us. However, such perceptions can never account for the totality of such real-life occurrences. For instance, an individual who enjoys excessive intake of alcohol may have the strong perception that excessive consumption of alcohol does not harm their body, but the objective biological state of their heart is not influenced by the person’s beliefs since science has proven that excessive intake of alcohol is linked to increased risk of congenital heart diseases as revealed in the study of Jennison (2004).

By drawing a key distinction between human perception and reality, critical realism also claims that the mind-reality independence is demonstrated by physical dimensions of reality, such as the moving train or the existence of a physical office complex as well as the social and cultural characteristics (Archer & Archer, 1995), such as the existence of certain languages or the number of children born to a family. The implication of the mind-independent nature of culture is that, the perceptions of individuals concerning the cultures of a group of people can't be tied to the cultural reality of the people, since such perceptions cannot translate into the reality of the cultures themselves. Sturgiss and Clark (2020) thus note that, the fact that individuals can exhibit certain beliefs and personal understandings of certain phenomena, does not alter the practical state of the reality of such occurrences.

One of the enormous advantages of the critical realism approach is its application in both qualitative and quantitative research (Allana & Clark, 2018; Iosifides, 2017; Craig & Bigby, 2015; Downward, Finch & Ramsay, 2002). Interestingly, the approach is employed in explaining outcomes and events in natural situations, particularly as they relate to inquiries into the reasons for and sequences of events or phenomena that occur. Clark (2013) earlier emphasised that the critical realism approach is worth embracing for its effective capturing of interventions and systems that encapsulates a series of evolving channels that can best guide individuals when exploring the reasons for dynamics of outcomes. This implies that the various forms of interventions in youth agripreneurship and the changing nature of the numerous components of the complex environment (political, economic, sociocultural, legal, etc.) can influence the variation in youth perception in agripreneurship involvement.

In the light of the foregoing, this understanding of critical realist approach can be applied to the convolutions of youth involvement in agricultural entrepreneurship where several youths are daily confronted with manifold and interrelated circumstances, such as interventions, capability set, conversion factors that dictate their perception, choices and success as it relates to agripreneurship. On a more practical note, the study considered a critical realist approach, sequel to the fact that the research approach can help provide quality and reliable answers to the proposed research questions with significant bearing on the degree (high or low) and direction (positive or negative) of the correlation existing among interventions/and or partnership programmes and youth agripreneurship participation in the context of the complexities of agricultural production in Nigeria.

Though, critical realism is not a method used for analysing research, it can be well-understood as an amalgam of a range of philosophical doctrines that can carefully guide a researcher on the application of an avalanche of quantitative, qualitative or mixed methods designs, that are useful for gaining in-depth understanding of the various phenomena that can merit different research interests (Sturgiss & Clark, 2020). In real sense, this philosophical tenet is apropos in establishing a clear and logical ground that explains the reasons for certain occurrences as well as the processes that lead to such manifestations.

This research philosophy is thus vital for explaining the “how” and “why” questions arising from certain occurrences in the course of human endeavours. In addition, critical realism extends human understanding by revealing the influence of a particular context (such as youth’s perception and choice) on the outcomes of an event (such as active participation in agripreneurship). The understanding gained following an outcome of a critical analysis of a certain phenomenon is expected to usher in a significant degree of emancipation in relation to the subject matter (Wilson & McCormack, 2006).

This research philosophy is informed by the fact that, when certain unexpected events take place, people tend to wonder why and how those outcomes took place. For instance, one may be interested in knowing how and why certain policy initiatives were more successful than others even though the less successful initiatives received more policy efforts and inputs than those that were more successful. In achieving this aim, one may investigate certain aspects of the initiatives (for instance, training or financial incentives/start-ups supports for young Nigerians) that accomplished the set objectives (for instance, active participation in agripreneurship) and other aspects that failed to do so.

One would also expect that the initiative that received more input support (for instance, budgetary allocations) will be more successful, or at least achieve the set objective compared to another initiative that received less inputs in the implementation process. However, things don’t always happen as expected. In fact, the unexpected is bound to occur in certain astonishing circumstances, thus generating the how and why question. If well-established, the understanding gained from such exploration will help in projecting similar occurrences in the future. For instance, it can assist policymakers in determining what agricultural programme will facilitate youth participation in agripreneurship in the course of conceiving, formulating and implementing various agricultural or agriculture-enhancing policies for speedy socioeconomic advancements.

While a number of earlier studies invested much interest in exploring the reasons for youth apathy in agripreneurship, it is not sufficient to know how many young Nigerians are interested in venturing into agripreneurship. This is because, even though their perceptions are revealed, it is plausible to further evaluate the various factors that shape those perceptions. This will enable various stakeholders in the agricultural sector in creating avenues for stimulating not only youths' perceptions, but also empowering them for effective agripreneurship participation.

Although, a number of previous studies that examined agricultural programmes dynamics have largely disregarded the critical role perception plays in moderating active and effective agripreneurship participation, especially in Nigeria, critical realism is therefore appropriate for bridging this gap, thereby overcoming the inherent weakness in understanding how active and effective agripreneurship participation can be influenced by youth perceptions, while acknowledging the moderating effects of intervention and conversion variables in the agripreneurship model.

Another notable contribution of critical realism is the ability to combine qualitative and quantitative data in a single research exploration. It is interesting that qualitative and quantitative data represent data drawn on events that have occurred. The data may be in the form of previous experiences on youth participation in agripreneurship, or various agricultural initiatives put in place to support such participation. Similar data bordering on youth perceptions are also treated as data on past events, even though those youths are yet to venture into agripreneurship. This is because, in the process of investigating the research participants, data were collected on the basis of what those respondents (youths) reportedly perceived about agripreneurship involvement.

Thus, the data obtained in this regard represent events that have occurred (revealed perception), since subsequent findings from similar (renewed) research efforts on the subject matter may prove otherwise, if such perceptions have been influenced by intervening factors such as government interventions or changes in conversion factors, especially entrepreneurship culture.

Nevertheless, Sturgiss and Clark (2020) argue that mere descriptions of certain phenomena (such as perception of youths) may or may not always translate into future outcomes in the context of the objects of investigation (youths, in this respect). This therefore necessitates the

adoption of robust and advanced tools, such as advanced descriptive methods utilised in economics for predicting outcomes. Though, the failure of such tools to correctly predict the global financial crisis also questions their efficacy as earlier noted in the study of Lawson and Tony (2010). On the other hand, a critical realist tool can be employed in similar situations to gain an in-depth understanding of the process, and consequently, determine what outcome is more or less likely to be realistic in the long run.

There is no doubt that critical realism plays a significant role in understanding the reasons and processes leading to specific outcomes; this research philosophy is rather more relevant in absorbing the theoretical dynamics of such explorations. The implications is that, the research philosophy is more efficient in addressing the theoretical context of the research problems. Thus, it is less efficient in modelling empirical findings. This weakness of critical realistic philosophy thus necessitated the use of a more complementary research philosophy that is both useful for capturing qualitative and quantitative research designs as well as facilitating empirical modelling. Arising from the foregoing, this study further utilised the pragmatic research philosophy as a complementary (rather than an overriding) tool for addressing the research issues raised in the preceding phase of the study.

5.2.2 Pragmatic Approach

Pragmatic research philosophy was championed in the work of Charles Sanders Peirce published in the 1870s (Shook & Margolis, 2008; Dixon, 2020), and later gained support in the study of William James in the 1890s (McGranahan, 2017; Ross, 2014; Taylor, 2011, 2010). As noted earlier, the pragmatic approach to research is useful for addressing the practical applications of ideas and opinions in relation to certain phenomena, rather than getting deeply engrossed with their theoretical ideologies and abstractions as evidenced in critical realistic philosophy discussed earlier. In a more practical sense, this study sought to proffer a realistic solution or viable explanations for the true causes of the problem of agripreneurship participation among Nigerian youths, rather than focusing too much on the avalanche of contentious academic theories that touch on identified problem(s).

Essentially, pragmatism can be conceived as a philosophical concept that supports the sequential development of in-depth understanding of certain research phenomena with the aid of practical applications and the achievement of wide-ranging knowledge arising from the instrumentality of thoughts and experiences (Ihuah & Eaton, 2013). This approach involves an

in-depth inquiry (Giacobbi, Poczwadowski & Hager, 2005) and analysis of the identified research problem to be solved, so as to derive the most viable practical solutions that will further aid resounding conclusions on the subject matter. Pragmatic research philosophy is often regarded as a human-centered research style that facilitates innovation management (Auernhammer, 2020).

The use of qualitative research has been widely celebrated for its potency in aiding quality information that provides an in-depth understanding of the increasing psychological dynamics in the society (Yardley & Bishop, 2008). For instance, the concept of perception is deeply rooted in social psychology, and it is largely influenced by both directly observed phenomena as well as the cognitive capacity of individuals. The implication is that one individual (X) may see things differently from the perception of another individual (Y) when given equal opportunities to analyse certain events (such as perception about agripreneurship participation). The qualitative research design will thus help in the course of collecting the various opinions of the participating young Nigerians in the entire survey process.

In lieu of the foregoing, pragmatism becomes very useful in obtaining qualitative data (Smith, Bekker & Cheater, 2011) on the different thoughts and experiences of both individuals in relation to their perception of active agripreneurship involvement. It therefore follows that, rather than feeding more on what theories say about youth perception about agripreneurship involvement, a substantial percentage of the issues can be better understood with the aid of their practical application and sequence, arising from a one-on-one interaction with the youths who will provide information that directly represents their opinions, thoughts and experiences. This first-hand information obtained from a large number of participants can then be collated and used to design a comprehensive data collection template for further pragmatic explorations.

Another provision of the pragmatic research philosophy is the use of quantitative research. Quantitative data will be discussed in subsequent sections of this chapter. As enumerated earlier, one of the significant pitfalls of critical realism is lack of profound practical insights into the object of investigation. This shortcoming is however addressed under the pragmatic research philosophy, which offers investigators the liberty to utilise different forms of analytical techniques (such as percentage analysis, correlation analysis, analysis of variance (ANOVA), chi-square, regression, among others) in the course of carrying out research analysis, using both qualitative, quantitative or mixed approach (Nunfam, 2021; Izquierdo & Anguera, 2021; Dawadi, Shrestha & Giri, 2021; Fox, Wiseman, Cahill, Fleure, Kinsella, Curtis

& Van-Hemelrijck, 2021; Hall, 2013; Cameron, 2011; Yvonne, 2010; Onwuegbuzie, Johnson & Collins, 2009; Cameron, 2009; Denscombe, 2008). The pragmatic research philosophy was thus employed in this study in the course of modelling the respective empirical findings arising from administering both the interviews and questionnaires, which served as the main data collection processes.

5.3 Research Design

Essentially, a research design offers a comprehensive and precise roadmap that shows the various channels in which research was carried out. It presents a holistic view of the plan on how the research will be carried out. Research design is highly instrumental to gaining an overview of how the entire research process will be conducted as well as the kind of research outcomes to be expected. In the submission of Adeniyi (2019), “research design provides a blueprint or plan on how a researcher intends to undertake research”. This implies that the overall strategy adopted by the researcher in conducting research is well presented using a research design. The research design is also useful for understanding the concise and logical plan to be followed by a researcher in addressing the identified research question(s). The ultimate goal of a research design is thus to offer a strategic framework for providing viable solutions to research problems.

According to Creswell and Creswell (2017), a research design offers a description of the type of study the researcher(s) intends to carry out. This could be in the form of “descriptive, correlational, semi-experimental, experimental, systematic review, literature review, or meta-analytic” (Jalil, 2013). The research design also describes whether the study sub-type is “descriptive-longitudinal case study” or otherwise. Other elements described by the design of a research include “research problem, hypotheses, independent and dependent variables, experimental design, data collection methods and a statistical analysis plan”. (Creswell and Creswell, 2017).

Previous studies conducted by Wright, O'Brien, Nimmon, Law and Mylopoulos (2016) as well as Tobi and Kampen (2018) have argued that the disciplinary areas of the researcher often determine the perspective, opinions and beliefs of the researcher(s), which are important in predicting the choice of the research techniques to be adopted in the research design. Creswell and Creswell (2017) note that the identified research problem and the degree of experience of the researcher(s) can affect the choice of a particular research design. Seaman (1995) identifies

two principal types of research designs which include fixed/quantitative as well as flexible/qualitative design. The combination of fixed and flexible designs is thus referred to as a mixed research design (Turnbull, Chugh & Luck, 2021; Åkerblad, Seppänen-Järvelä & Haapakoski, 2021; Jackson, Mohr & Kindahl, 2021).

5.3.1 Mixed Methods Research Design

Creswell (2012) describes a mixed methods research design as the “procedure for collecting, analysing, and *mixing* both quantitative and qualitative research and methods in a single study to understand a research problem”. Thus, a mixed method research design can be understood as a research design that integrates elements of both quantitative and qualitative data, and analytical techniques. Under this research design, the researcher employs both quantitative and qualitative data to provide solutions to the identified research problem(s). The mixture of both quantitative and qualitative data therefore necessitates the researcher to adopt a mixed research methodology consisting of a pure descriptive method for analysing the qualitative data as well as a range of quantitative data analytical methods such as correlation analysis, regression analysis, ANOVA (analysis of variance), data development analysis, stochastic dominance analysis, principal component analysis, survival analysis, among others. Johnson, Onwuegbuzie and Turner (2007, p. 123) define mixed methods research as follows;

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e. g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.

In the submission of Tashakkori and Teddlie (2010), mixed methods research design requires the engagement of a team comprising a professional in quantitative research, a well-versed individual in qualitative research, as well as a professional who is well-grounded in mixed methods research. This team of experts is important for aiding the dialogue and continuous integration process in the course of carrying out a mixed research design. Under the mixed methods research design, the team of research experts assist in choosing various criteria for measuring and testing the validity and reliability of the data to ensure improvement in the quality of the overall research outcomes (Johnson & Christensen, 2014, 2019).

The ability of the researcher to achieve higher quality of data used for analysis will determine the extent of the validity and reliability of the results, which, in turn, affect the kind of inferences drawn from the study outcomes (Johnson & Christensen, 2019). This implies that poor research data will lead to poor analytical results, which can also lead to the production of spurious results. In this regard, spurious results are the types of research findings in which estimates produced from the research analysis cannot merit policy considerations, since such results do not represent the true characteristics of the population under investigation and the phenomena or object of the research.

It therefore suggests that the production of quality research outcomes that will guarantee quality decisions, requires the researcher to carefully figure out and cautiously tackle every germane issue that may encumber the validity of the research outcomes irrespective of whether the researcher employs qualitative, quantitative or mixed research approach in carrying out that particular study. When all the underlying validity issues are properly tackled, the researcher will achieve a high degree of accuracy in the overall empirical assessments' outcome. Thus, with a high confidence level, it can be ascertained that the researcher will be able to draw the kinds of inferences and meta-inferences that are required to reap optimal benefits of conducting mixed research (Ivankova, 2014; Johnson & Johnson, 2014; Venkatesh, Brown & Sullivan, 2016).

Furthermore, Johnson and Christensen (2019) note that when designing or conducting a mixed methods design, the researcher should always take into consideration a number of salient research features, which Schoonenboom and Johnson (2017) refer to as primary dimensions in a research design process. The identified primary design dimensions in the study of Johnson and Christensen (2019) include “purpose of mixing, theoretical drive, timing, point of integration, typological use, and degree of complexity”. Schoonenboom and Johnson (2017) further presented other attributes of a research design process which are classified as secondary dimensions of research design.

Specifically, the identified secondary design dimensions include “phenomenon, social scientific theory, ideological drive, combination of sampling methods, degree to which the research participants will be similar or different, degree to which the researchers on the research team will be similar or different, type of implementation setting, degree to which the methods are similar or different, validity criteria and strategies, and full study vs. multiple studies” (Schoonenboom & Johnson, 2017).

Table 1: List of Primary and Secondary Design Dimensions

Dimensions	Description
Primary Dimensions	
Purpose	The main and secondary objectives of the research.
Theoretical drive	How does theory explain the entire research process?
Timing (simultaneity and dependence)	What is the timing of both qualitative and quantitative approaches? Are both approaches undertaken simultaneously or independently?
Point of integration	At what point or research stage are the two approaches integrated/combined?
Typological vs Interactive design approach	Do the research approaches follow a systematic or an Interactive design style?
Planned vs Emergent design	The research design can be an already developed one to be adapted from previous studies, or a fresh initiative that is unique to other existing designs.
Complexity	This has to do with the simplicity or complexity of the research design
Secondary Dimensions	
Phenomenon	The emphasis is on the object that is being investigated

Social scientific theory	Income for social science theory (theoretical income)
Ideological drive	This entails the analysis of the practical relevance of the research and the motivation behind the entire research process
Combination of sampling methods	Are the data collection strategies combined in a single research instrument or separated (e.g. interviews with questionnaires, or focus group discussions with questionnaires, or interviews only, or questionnaires only).
Degree to which the research participants will be similar or different	The research participants may be drawn from different strata (such as age, gender, educational attainment, income set, cultural affiliation, religion group, etc.) or from the same group (same age set).
Degree to which the researchers on the research team will be similar or different	This has to do with the extent of the variation among qualitative research experts, quantitative research professionals and mixed research expert that make up the entire research team.
Type of implementation setting	This can be a purely theoretical study, empirical study or a combination or both. It can be a primary or secondary study or an amalgam of both.
Degree to which the methods are similar or different	The extent of the similarity of the analytical technique is also important in the entire research design process.
Validity criteria and strategies	Quality criteria and strategies. These can be in the form of data treatment, the use of reliability tests (for primary data) or other statistics that measure the validity of the data employed in the study. In the case of secondary data, the data can be tested for stationarity or cointegration to ascertain the extent to which the analytical method is supported to achieve optimal outcomes.

Full study vs multiple studies	The research can be conducted as a single study. It can also be broken down into different studies across different locations or over time.
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Source: Adapted from Schoonenboom and Johnson (2017, p. 109).

5.3.2 Research Setting

Essentially, the Federal Republic of Nigeria is located on the western axis of Africa. The country shares boundaries with Niger Republic due north, the Republic of Chad in the north-east axis, Cameroon due east, as well as the Republic of Benin due west. Nigeria's southern seashore is found on the Gulf of Guinea bordered by the Atlantic Ocean. The country comprises of six geopolitical zones (see Table 2 and Figure 2), 36 states as well as the Federal Capital Territory (see Figure 3), located in Abuja. The survey was conducted across the six geopolitical zones in the country. The country has a total population of more than 200 million people (Singh, Speizer, Ijdi & Calhoun, 2021) which places her in the position of "the most populous country in Africa and the seventh-most populous country in the world" (Baptiste, Masresha, Wagai, Luce, Oteri, Dieng & Hak, 2021; Owoo, 2021; Reuben, Danladi, Saleh & Ejembi, 2021).

The Federal Republic of Nigeria is located between "latitudes 4° and 14° N, and longitudes 2° and 15° E with about 263 billion cubic meters of water and two of the largest rivers in Africa, namely Rivers Niger and Benue" (Fertilizer Suppliers' Association of Nigeria, Federal Ministry of Agriculture & Rural Development, Nigeria and Federal Fertilizer Department, 2014). In the submission of Okoye and Adamade (2016), Nigeria's agricultural outputs are categorised into two major sets. For instance, the country produces food crops which are essentially for domestic/immediate consumption, while a small percentage is produced/processed for exports. The country also produces cash crops which majorly serve as sources of raw materials for the production of other commodities.

The most significant among the various crops produced in the country are "beans, sesame, cashew nuts, cassava, cocoa beans, groundnuts, gum arabic, kolanut, maize (corn), melon, millet, palm kernels, palm oil, plantains, rice, rubber, sorghum, soybeans and yams" (Abbas, 2019; Agaviezor, 2018; Okotie, 2018; Jelilov & Bahago, 2017; Imaenyin, 2015; Ntukidiem, 2015; Enisan & Adeyemi, 2013; Babalola & Glick, 2012). Similarly, cocoa is one of the notable cash crops and the most prominent, among others. Cocoa is Nigeria's biggest source of non-

oil foreign exchange earnings (Adebile & Amusan, 2011), and the country's second leading source of foreign exchange earnings trailing behind crude oil (Gavrilova, 2020). In addition, rubber is another notable cash crop trailing behind cocoa in terms of non-oil foreign exchange earnings (Okotie, 2018; Oyewole & Oyewole, 2010).

Adebile and Amusan (2011) bewail that, before the outbreak of the Nigerian civil war that lasted between 1967 and 1970, the country could produce far beyond the volume of food that was demanded, thus, achieving the status of "self-sufficient" in food production. Ake (1996) further notes that the bulk of the country's foreign exchange earnings was attributed to the Nation's Agricultural sector performance. The most heart-wrenching situation is that the country now relies heavily on other countries to feed her populace through the mechanism of food impartation (Amao, Antwi, Oduniyi, Oni & Rubhara, 2021; Olowe, 2021).

One of the interventions of the Nigerian government since the 1970s is the provision of subsidies to farmers for the procurement and utilisation of inorganic fertilisers for boosting agricultural production in the country (Pasquini & Alexander, 2005). To mitigate the illegal influx of food products into Nigeria, and further demonstrate her commitments toward enhancing food production in Nigeria, the government shut down her boundary with Benin Republic and other neighbouring countries in August 2019 (Abiodun, 2021; Omale, Olorunfemi & Aiyegbajeje, 2020; Vanni & Tsietsi, 2020; Obah-Akpowoghaha, Ojatorotu & Tarro, 2020). It is however lamentable that despite all efforts to revamp the nation's economy, a preponderant of the citizens still wallow in unemployment. For instance, the Nigerian's National Bureau of Statistics (2010) reported that approximately 30% of Nigerians face the scourge of unemployment in the country's agricultural sector.

Olowe (2021) also bemoans that Nigeria has slipped into the position of lower middle-income economy since 2014 with very discouraging development indicators. For instance, Nigeria has been trending poorly way behind her counterpart oil-exporting nations citing that, over 110 million representing about 57% of total population are currently bedevilled by the menace of penury (Olowe, 2021). Olowe (2021) further expresses that approximately 36.4% of the nation's population is currently ravaged by moderate to severe food insecurity. Given the prediction that the country's population will increase to 800 million in the year 2100 the demand for food will rise significantly, thus compounding the problem of food insecurity in the country, if urgent measures are not taken to optimise limited crop land (Rahmann, Grimm, Kuenz & Hessel, 2020). In addition to the projected rise in the country's population, it is

estimated that the expanse of agricultural land to be accessible per farmer will decline from the 2,100m² that was available in 2019 to 504m² in the year 2100 (Olowe, 2021).

One of the schemes initiated by the Nigeria government to facilitate youth participation in nation building is the National Youth Service Corps (NYSC) established under Decree No. 24 of 1973. The scheme was essentially designed and introduced on 22 May 1973 to serve as an avenue to engage Nigerian graduates in nation building and speedy economic development (Marenin, 1990). After the Nigerian civil war that ended in 1970, the NYSC was introduced as a vehicle to promote the “reconciliation, reconstruction, and rebuilding of the nation after the civil war” (NYSC Directorate Headquarters, 2017). Following the provisions of Decree No. 51 of 16 June 1993, the National Youth Service Scheme is aimed to promote unimpeded labour mobility across the country, facilitate the development of diverse entrepreneurship skills among the youth to drive self-employment and career progression in addition to promoting the spirit of self-reliance for accelerated economic growth and development.

Yearly, corps members (graduate participants in the National Youth Service Scheme) receive their posting to various states across the nation and are taken to their specific Places of Primary Assignment (PPA) following a 3-week orientation exercise. In the course of discharging their duties at their respective PPAs, each participant is engaged as a full-time staff member for a period of one year. During this programme, the young graduates are trained in different entrepreneurship areas under the tutorship of professionals from reputable companies with a wide range of skills and experience (Alawiye, 2020).

However, the scheme has been greeted by a host of criticism stemming from a rising spate of insecurity that has claimed a number of serving corps members in the course of their national service (Timothy, 2021; Olusola, 2021). Specifically, in May 2021, the National Assembly (the law-making organ) initiated a legislative process (sponsored by Hon Awaji-Inombek Abiante) seeking the dissolution of the scheme on the grounds of unwholesome and unwarranted killing of corps members coupled with the failure of companies to absorb those who have successfully completed the mandatory one-year programme (Adedapo, 2021). As of June 2021, the proposed bill seeking the abolition of the National Youth Service Scheme is yet to scale through the necessary legislative stages.

Studies have also shown that despite the various efforts to boost youth participation in entrepreneurship in the country, the system is still faced with pockets of resistance from the

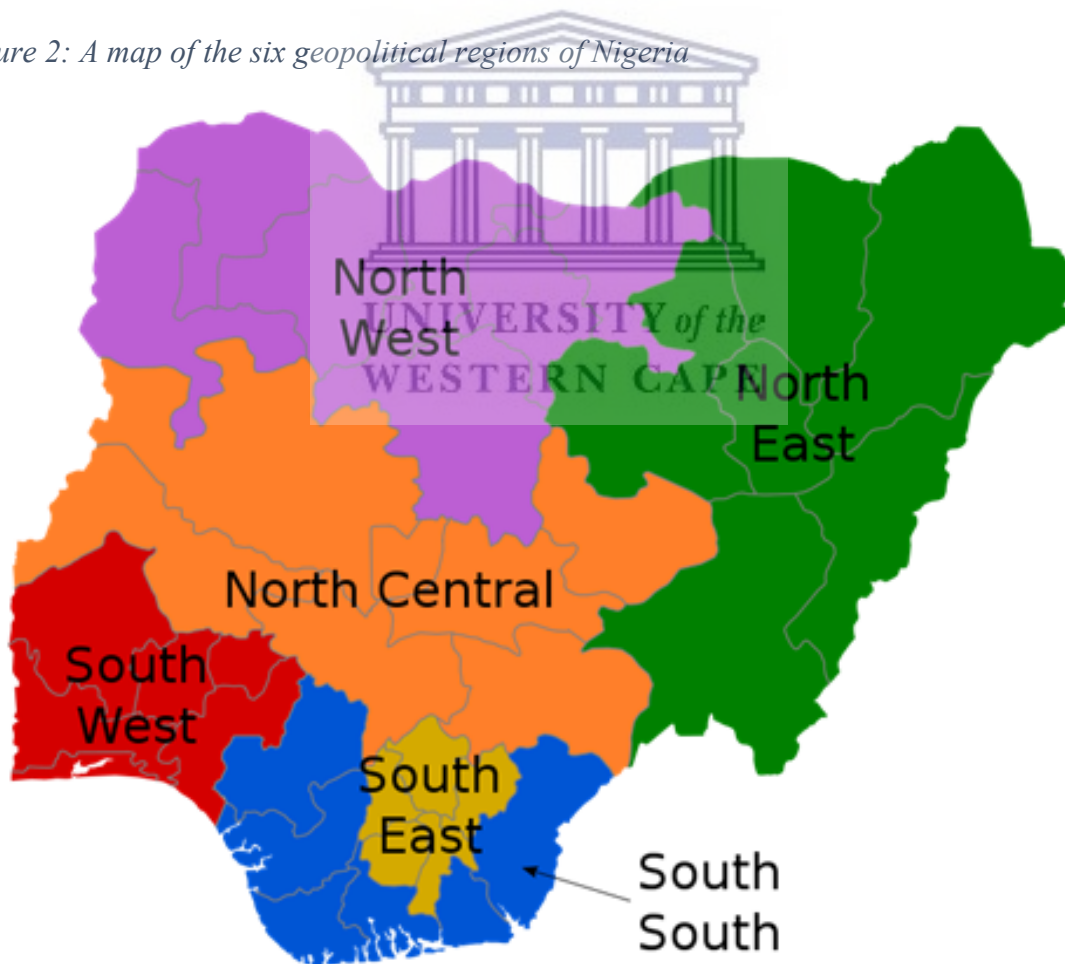
youth, especially in the area of agricultural entrepreneurship involvement. For instance, a study of Maïga, Christiaensen and Palacios-Lopez (2015) found that a number of Nigerian youths have quit agriculture in recent times. This further informed the need for this current study to extend to the six geopolitical zones across the country in ensuring a balanced representation of the youths in the course of the entire survey process. The six geopolitical zones as well as the 36 states that form each of the geopolitical zones are presented in Table 2 below.

Table 2: The six geopolitical zones in Nigeria and the states that make up each of the geopolitical zones.

Geopolitical Zones	States that make up each of the geopolitical zones
North Central (Middle Belt)	<ul style="list-style-type: none"> o Benue o Kogi o Kwara o Nasarawa o Niger o Plateau o Federal Capital Territory
North East	<ul style="list-style-type: none"> o Adamawa o Bauchi o Borno o Gombe o Taraba o Yobe
North West	<ul style="list-style-type: none"> o Jigawa o Kaduna o Kano o Katsina o Kebbi o Sokoto o Zamfara
South East	<ul style="list-style-type: none"> o Abia o Anambra o Ebonyi o Enugu o Imo

South-South (Niger Delta region)	<ul style="list-style-type: none"> o Akwa Ibom o Bayelsa o Cross River o Rivers o Delta o Edo
South West	<ul style="list-style-type: none"> o Ekiti o Lagos o Ogun o Ondo o Osun o Oyo

Figure 2: A map of the six geopolitical regions of Nigeria



Source: Leviavery (2020)

Figure 3: A map of Nigeria showing its 36 states and the federal capital territory.



Source: Bomah, K. B. (2014)

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5.3.3 Data Collection Methods

This section describes the process used in collecting the qualitative and quantitative data used for the study. The data collection strategies were divided into two distinct sampling processes (interviews and questionnaire administration). Essentially, the qualitative data were collected through the use of an online survey and semi-structured interview, while the quantitative data were collected with the aid of online survey questionnaires. In addition, the entire data collection (interview and survey administration) took place from March, 2020 to April 2021. The data generated through the retrieved questionnaires were transferred into Microsoft Excel Spreadsheet for further treatment/cleansing, while the documented responses from the interviews were transcribed into texts using Microsoft Word processing application.

5.3.3.1 Qualitative Data Collection Methods

As stated earlier, the first phase of the data collection process involved the use of a semi-structured interview. The interview participants were selected with the aid of a purposeful sampling strategy. Cresswell and Plano (2011) note that purposeful sampling technique involves the process of identifying and selecting participants or groups of respondents with prior experience in the subject matter. This implies that the selected participants for the interview were engaged on the basis of their experience in agricultural entrepreneurship. Thus, this technique was adopted due to its ease of utilisation, since the participants could be easily located.

According to Bernard (2002), one of the advantages of this sampling technique is that it allows the researcher to easily approach the respondent(s) who will participate in the survey at their most convenient time. Thus, a purposeful sampling technique is useful for engaging the selected participants on the basis of preparedness and willingness to take part in the survey, while acting with the utmost ability to willingly share their experiences and opinions in a comprehensible and diplomatic way (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015).

In addition, eight (8) interviewees were engaged during the semi-structured interview process. In terms of characteristics, the selected interviewees comprised four (4) established agripreneurs (2 male and 2 female), who are thriving in different areas of the agricultural value chain. The interview also featured four (4) recent graduates who are potential agripreneurs consisting of 2 male and 2 female and were carefully selected from the pool of those who completed the survey questionnaires.

Moreover, one (1) entrepreneurship educator/expert included in the interview. In addition to being an expert/educator at a top business school, this participant is an Agric entrepreneur (processes Agric product) and a consultant with comprehensive experience in several youth Agric intervention programmes. This particular interviewee was highly instrumental in providing a near perfect holistic angle to the debate.

5.3.3.2 Quantitative Data Collection Methods

As noted earlier, the quantitative data were collected through the use of an online survey. In the course of the survey, an electronic copy of the research questionnaire was designed and administered to the research participants online. This entire survey process covered the six (6) geopolitical zones consisting of the 36 states and the Federal Capital Territory (FCT). The

survey was entirely restricted to corps members who were either currently serving or had just completed their National Youth Service within the past six (6) months. Key persons such as Corps members Liaison Officers (CLO) within the same PPA, Fellowship coordinators and influencers were identified and utilised as moderators across the geopolitical zones. To enhance their motivation, the moderators were rewarded for every unique and valid response received through them. To speed up the data collection process, the moderators were allowed to nominate and orientate one or two participants, who also reported directly to them (the moderators). The aim of this strategy was to expand the empirical coverage to ensure that each geopolitical zone had a fair representation, rather than having a skewed geographical distribution of respondents.

5.3.3.3 Structure and layout of the questionnaire

In this study, both closed-ended and open-ended questions were used to address the research questions. Closed-ended questions require respondents to choose their responses from the options provided. The options provided therein were informed by the information obtained from the reviewed literature and to a large extent, the responses of the participants that were interviewed prior to the questionnaire design and administration stage of the survey process. In the open-ended questions, respondents were permitted to use their own words to respond to the set questions.

Open-ended questions therefore offered the respondents the freedom to elaborate on their responses and avoid opinion representative bias (Powell & Connaway, 2004). The information obtained from the open-ended questions formed part of the qualitative data, except in the instance that such responses were later assigned numerical values in the process of converting them to quantitative data. Conversely, the information generated from the closed-ended questions were strategically coded such that numerical codes (values) were assigned to each option (response) provided by each participant in the survey process.

To sufficiently obtain the different information needed for the empirical analysis, the research questionnaire was partitioned into five (5) sections. In the first section, relevant explanations about the subject matter, consent form and information sheet about the study were provided to guide the participant in completing the questionnaires. Essentially, the consent form and information sheet became important for ensuring full compliance with relevant provisions of the social research ethics (Israel & Hay, 2006; Wiles, Crow, Charles & Heath, 2007; Greaney,

Sheehy, Heffernan, Murphy, Mhaolrúnaigh, Heffernan & Brown, 2012; Sim, 2021; Willmott, White, Feeney, Chambaere, Yates, Mitchell & Piper, 2021). Similarly, the socio-demographic information of the participants were sought through the second section of the research questionnaire.

In addition, the third section was designed to address pertinent issues relating to the perception of the participants (the youths) about agriculture, entrepreneurship and agriculture entrepreneurship, while the fourth section provided the platform for obtaining relevant information relating to the perception of the participants about potential determinants of low participation of youth in agriculture entrepreneurship. The last segment of the research questionnaire was however structured to facilitate the collection of relevant data that border on the entrepreneurship/career prospects of the participants in addition to their thoughts about how the problem of youth unemployment in Nigeria can be solved through agriculture entrepreneurship.

The choice of the potential determinants of youth perception about agriculture entrepreneurship outlined in the questionnaire (as closed-ended questions) was hinged on Sen (2001) capability approach, opinions of the participants arising from the semi-structured interview, as well as reviews from existing literature. As discussed earlier, the capability theory focuses on how available opportunities/freedoms for a person can influence a person's being and functioning.

5.3.3.4 Sampling Frame and Sampling Technique

A sampling frame is a comprehensive list of the members of the population of interest (Williams, 2003; Conrad & Serlin, 2006). It is an important element of the overall sample design and provides a means of identifying and locating the population elements (Kalton, 1983). It is important for an investigator to define the population, including describing the elements in terms of content, units, extent and time (Kish, 1965 cited in Ngulube, 2005). In this regard, a sampling frame should be able to provide a correct description of the target population. For the sampling frame to do this, the description should be complete, accurate and current. A sampling frame is complete if it has adequately covered all members of the population, and accurate if each member of the population is included only once. It also has to be current in order to be complete and accurate, because an old sampling frame would be inaccurate and incomplete due to changes that occur over time (Kalton, 1983).

The sampling frame for the study involves recent graduates in Nigeria, these include graduates that are currently undertaking their one-year National Youth Service, graduated but are awaiting their National Youth Service posting or have successfully completed their one-year National Youth Service at most six (6) months prior to the survey. The choice of young graduates as the sample frame was based on the need to explore the perspective of those who have recently completed their tertiary education. The choice of sample frame was further motivated by the fact that these young Nigerian graduates would either seek work or start a business after their one-year National Youth Service. Another motivation for the choice of young graduates is that they must have gone through entrepreneurship education, which is now a compulsory course/module in all Nigerian tertiary institutions (Akinboade, 2014; Olorundare & Kayode, 2014; Onuma, 2016). The study thus focuses on youth and recent graduates as this is a pivotal stage that exerts a significant impact on their decision to either seek for a paid job or set up an entrepreneurship venture.

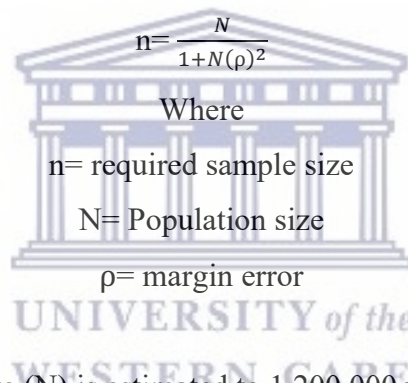
The study used a combination of stratified and snowball sampling techniques. According to Taherdoost (2016), stratified sampling is the technique often used where a great deal of variation exists within the population. Snowball sampling, on the other hand, is a non-random sampling method that uses a few cases to help encourage other cases to take part in the study, thereby increasing sample size. To ensure the sample is evenly distributed across the country, the total population was partitioned into six (6) different strata, with each stratum representing a geopolitical zone and in each geopolitical zone, a snowball sampling technique was used to reach every participant in each stratum.

The stratified sampling technique was adopted in order to ensure the sample is representative of the country at large. Due to the heterogeneous distribution of the country's population and the diverse nature of Nigerian culture, it was apropos to partition the entire population into various strata to ensure every young person in almost every part of the country is represented in the sample. Snowball sampling is a non-random sampling method that uses a few cases to help encourage other cases to take part in the study, thereby increasing sample size. Snowball sampling approach is most applicable in small populations that are difficult to access due to their closed nature (Waters, 2015). Thus, due to the clustering nature of the target respondents, a snowball sampling technique was utilised in the study.

5.3.3.5 Sample and Population of the Study

The study deals with the Nigerian youth employment and agricultural entrepreneurship. However, the population for the study is recent graduates. These are young Nigerians who graduated within the last 2 years and so, are either serving, just served or about to serve the country through the NYSC programme. According to Babalobi (2019), Nigeria's degree awarding institutions produce about 600,000 graduates every year. This means that every two years, about 1.2 million graduates are produced.

In determining the appropriate sample size for the study, the Yamane (1967) formula for sample size determination was adopted. Yamane's formula gained popularity with researchers due to the difficulty of obtaining population variance in existing methods (Israel, 1992). Yamane argued that with a known population size and the margin error, one can estimate the appropriate sample size in a qualitative study. The formula is explicitly specified below;



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

Where

n= required sample size

N= Population size

ρ = margin error

In this study, the population size (N) is estimated to 1,200,000 while the margin error was assumed to be 3%

$$n = \frac{1200000}{1 + 1200000(0.03)^2}$$

$$n = \frac{1200000}{1081}$$

$$n = 1110.083$$

Thus, the appropriate sample size for the study based on the Yamane's Formula and estimated population is 1110.

5.3.4 Data Cleaning

There is no doubt that data play a significant role in the day-to-day decision-making process of every organisation (Oni, Chen, Hoban & Jademi, 2019). This is because every decision-making unit, whether at the household, firm or government level, requires information that will aid the entire decision-making process. Thus, the quality of available data goes a long way in influencing the overall quality of decisions made at every point in time. One of the returning issues facing researchers and statisticians in the field of data analytics is the ability to detect and repair *defective* data. When such defects are not promptly detected and corrected, the credibility and consistency of the entire research outcomes can be impaired. This is because data error can lead to wrong analytics and unreliable decisions (Chu, Ilyas, Krishnan & Wang, 2016).

In conducting empirical research, the data collection process is prone to errors irrespective of the adopted error-prevention strategies or degree of caution applied in the course of generating the data (Van den Broeck, Cunningham, Eeckels & Herbst, 2005). Thus, obtaining improved data quality necessitates the recognition of the likelihood that such data contain impurities that need to be addressed before they can be used for analysis. When such impurities or errors are detected, the researcher subjects such data to a critical purification process called “data cleansing”. Thus, in the submission of Van den Broeck, Cunningham, Eeckels and Herbst (2005); Hamad and Jihad (2011); Dai and Gao (2013), data cleaning involves the procedure for detecting, diagnosing, correcting and editing defective data with the aim of minimising the likely effect of such defects on overall outcome of the study.

Errors can be detected by carefully scanning through the entire data space for possible outlier(s) (a particular value or data point that is outside the expected data range or limit). After detecting such error, the researcher further investigates the source of the error and eliminates it by carrying out data editing. Data editing in this regard, though, a stage in the data cleansing process, involves the systematic elimination of defective data and the replacement with the correct value of data (Van den Broeck, Cunningham, Eeckels & Herbst, 2005; Oni, 2018).

Arora, Pahwa and Bansal (2009) explain that data cleansing is essential for improving and maintaining the quality and reliability of data. Though, the ease of error detection is hinged on the complexity of the data space or warehouse. Thus, it is easier to detect faulty data when the sample size is relatively small compared to a large sample space. Recent technological

advancements have led to the design of special computer programs (such as q-grams) that can help in detecting errors in a data set within a short time period.

After collecting and entering the survey responses, data cleansing was conducted to ensure that participants who failed to satisfy the requirement of the status of “recent graduates” were erased from the entire data space. Specifically, respondents who were affected during the data cleansing process include graduates who have completed their National Youth Service prior to October 2019 (6 months before the commencement of the empirical survey), alleged graduates with unknown location, as well as those who have exceeded the NYSC specified age range (graduates above the age of 30). In addition, all participants were recategorised into the six (6) geopolitical zones on the basis of their states and local government of primary assignment as evidenced in their responses.

During the data cleansing process, participants who failed to indicate their State and/or local government of primary assignment were also excluded from the analysis. This was to ensure that each participant was properly accounted for, in terms of geographical distribution. In line with the general objective of this study, the participants were further grouped into Agric and non-agric related fields on the basis of their course of study. The reason for the above grouping was to identify those with a degree in agriculture, who want to harness their agriprenurship potentials after their National Youth Service. Those who had no interest in agriprenurship and those whose agriprenurship momentum had soon died off after obtaining a degree in agriculture were also identified in the course of the survey. This was largely motivated by the need to capture their perception about youth agriprenurship, while deploying relevant avenues through which their agriprenurship spirit can be reinvigorated.

5.3.5 Variable Coding

Quantitative research process necessitates the use of numerical values for the research analysis. Thus, to analyse the text-oriented or string responses (text characters) of the participants in the survey, there is a need to replace the responses with numerical data known as a code. Arising from the foregoing, variable coding can be described as a systematic process through which a numerical value is assigned to a variable (Krippendorff, 2011) such as location or course of study, with a view to facilitating quantitative analysis of the data generated from it.

During the variable coding process, all the categorical (multi-response) items captured in the survey instrument under the perception of youth about agriculture entrepreneurship were

assigned numerical values such that where the statement is negative, “Strongly Disagree” was coded as “5” while “Strongly Agree” was assigned “1”. Thus, the coding process followed a progressive order as the responses swing from strongly agree to strongly disagree. To maintain the logical flow in the variable coding process, “Strongly Disagree” was coded as “1”, while “Strongly Agree” was coded as “5” where the statement is positive. Thus, higher weights were allocated to responses as they turn from negative to positive (from strongly disagree to strongly agree). The various coding procedures are presented in the table below.

Table 3: Coding Procedures

Variable	Category	Coding Scheme	Variable Treatment
Perception Score	Dependent variable	Sum of all Likert items relating to perception	Continuous
Starting an agriculture business soon	Dependent Variable	Yes=1, No=2 & Not Sure=3	Nominal
Lack of government Support	Independent Variable	1=Strongly Disagree 5= Strongly Agree	Continuous
Lack of infrastructure	Independent Variable	1=Strongly Disagree 5= Strongly Agree	Continuous
Lack of institutional financial support	Independent Variable	1=Strongly Disagree 5= Strongly Agree	Continuous
Lack of market for agriculture products	Independent Variable	1=Strongly Disagree 5= Strongly Agree	Continuous
Course of Study	Independent Variable	Agric related courses=1, Non-Agric related courses=2	Nominal
Participation in Youth Agriculture Intervention programmes	Independent Variable	Yes=1, No=2	Nominal
Participation in Youth Entrepreneurship programmes	Independent Variable	Yes=1, No=2	Nominal

Family Income Status	Independent Variable	Poor=1, Low Income=2, Middle Income=3, Upper Income=4	Nominal
Tribe	Independent Variable	Hausa=1, Igbo=2, Others=3, Yoruba=4	Nominal
Gender	Independent Variable	Male=1, Female=2, Prefer Not to say=3	Nominal

5.4 The Model

Linear Regression Model

Essentially, the linear regression model is very useful for forecasting the behaviour of a variable such as youth perception about agriculture entrepreneurship given a set of explanatory variables like government support, institutional and financial support, markets for Agric products, technological infrastructure, agriculture intervention programmes (Montgomery, Peck & Vining, 2021; Hassan, Khan, Bibi, Khan, Nayyar & Bilal, 2021; Choong, Raof, Sudin & Ong, 2021; Bhattacharyya, Biswas, Sujatha & Chiphang, 2021).

In accordance with objective four of this study (to investigate the factors responsible for the perception of young graduates towards agriculture), the linear regression model was estimated. The essence of the model specification was to empirically evaluate the impact of some selected factors on youth perception about agriculture entrepreneurship. The estimated model is specified below;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \epsilon \dots\dots\dots 1$$

Where;

Y = dependent variable

X₁ ... X_k = independent variables

β = regression coefficients to be estimated ϵ = error or residual term of the model.

Multinomial Response Model

Also, with the aid of the collected survey data, the likelihood of a particular youth setting up an Agric business can be assessed based on the same set of variables captured in the perception model above. Specifically, the youth agripreneurship participation model is expressed in a multinomial response/multinomial logistic regression model earlier adopted in the studies of Senyolo, Long, Blok, Omta and Van der Velde (2021), Manda, Azzarri, Feleke, Kotu, Claessens and Bekunda (2021), Hasan (2021). The model is presented below.

$$\text{logit}(Y) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \epsilon \dots\dots\dots 2$$

Note

The perception model in equation 1 stated above was used to estimate the impact of some selected factors on youth perception about agripreneurship, while the youth agripreneurship participation model in equation 2 stated above was used to estimate the impact of the selected factors on youth agripreneurship participation.

Where;

Y = polytomous outcome (A series/variable with more than two separate options or categories)

Logit(Y) = natural logarithm of the odds of Y (youth agripreneurship participation)

X₁, ... , X_k = Explanatory Variables (predictors of youth agripreneurship participation)

B₁, ... , B_k = Parameters associated with each of the predictors or explanatory variables (measures of effect of each predictor on youth agripreneurship participation)

α = Intercepts.

- **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 intention to start up an agriculture business.

- **Independent Variables**

Similarly, the independent/explanatory variables (set of predictors) considered in this study are listed below;

- 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
- Geopolitical Zones



5.5 Reliability and Validity of Data

5.5.1 Reliability and Validity of Quantitative Data

A pilot survey was conducted to understand young graduate disposition towards agriculture entrepreneurship and potential determinants in an open-ended approach. As indicated by Van Teijlingen and Hundley (2002), the utilisation of a pilot study is essential as it gives *apriori* signal where the research process, protocols, methods or instruments may be inappropriate or too complicated, thus, becoming unsuitable for the survey data collection process. In the light of the foregoing, ten (10) young graduates were randomly engaged in the pilot study to understand the underlying perception of youths about entrepreneurship, agriculture entrepreneurship and possible reasons why they may not consider a career in agriculture entrepreneurship after their national youth service.

The motive for the pilot study was to enhance the reliability of the research instrument (the questionnaire) and to further ensure that appropriate questions are asked in the course of the survey. The validity of the responses was ascertained by ensuring that no participant has a

chance of responding more than once. Also, the respective respondents' email address was also required and verified as a way of ensuring content validity.

As noted earlier, all the items under "Youth Perception about Agricultural Entrepreneurship" were measured using the 5-point Likert scale ranging from strongly agree to strongly disagree. Thus, the reliability of the scale was tested using the Cronbach alpha test. The test was necessitated by the fact that when a research instrument involves a measurement scale, the validity and reliability of such scale need to be tested before the data generated through the scale can be used for further analysis (Younas & Porr, 2021). This is to ensure that the results obtained are of a high quality.

As earlier submitted by Twycross and Shields (2004), "testing for reliability ensures that consistent results would be obtained in identical situations". Since perception is a psychometric variable that needs to be measured using proxies like Likert scale questions, it became necessary to find a credible means to validate or justify the use of both construct and content validity of the research instrument utilised in the course of the data collection process. This followed the deep recognition that youth perception about agripreneurship can vary and can be measured using different scales or diverse measurement approaches.

Thus, to ensure that the 5-point Likert scale employed in this study is suitable for measuring youth perception about agripreneurship, testing for the internal consistency of each perception variable became necessary. This will also ensure the replicability of the results when a similar survey is conducted on the subject matter using the same measurement scale (Twycross & Shields, 2004). Leung (2016) also argues that internal consistency of a variable ensures the replicability of the research procedures as well as the overall findings of the study.

Arising from the foregoing, the Cronbach alpha reliability coefficient was used to evaluate the internal consistency of all perception 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).

In addition, the Cronbach alpha approach was considered, since the validation process necessitated a single-test single-administration design (Viladrich, Angulo-Brunet & Doval, 2017) that will provide a unique reliability coefficient which falls within the acceptable range

at the conventional 5% test level or 95% confidence level. The Cronbach alpha reliability coefficient provides an internal consistency evidence in support of the estimation model being tested using data collected through the measurement scale. The test was further motivated by the fact that the variable tested for internal consistency (youth perception about agricultural entrepreneurship) forms the crux of the study.

5.5.2 Reliability and Validity of Qualitative Data

The reliability and validity of the qualitative data are hinged on the researcher's ability to comprehend the string responses provided by the participants during the qualitative research process. In the case of the semi-structured interview, the validity of 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 where the researcher was not clear about the responses provided by the interviewees, more clarification were 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. Thus, the audio records were meticulously digested and transcribed into readable and well-articulated texts for further discussions. Specifically, some of the participant's direct statements were indicated with quotation marks, while others were translated and simplified for proper understanding and policy inference. This is in agreement with the study of Corden and Sainsbury (2006); Rosenthal (2016), and Castleberry and Nolen (2018).

Furthermore, it is worth noting that, while ensuring that the information analysed in the study are perfect representations of the thoughts and beliefs of the participants, the overall validity of the entire qualitative research process hinges on the plausibility, credibility, truthfulness, as well as the extent to which the participants can convincingly defend their claims. This is in consonance with the submission of Johnson (1997) who argues that the qualitative responses of research participants should be truthful and defensible so as to be considered valid and reliable.

Finally, on this note, the researcher adopted the tenet of reflexivity in translating the interview responses as a way of avoiding possible transcription bias originating from one's own beliefs, judgments and practices, which could have encumbered the accuracy and consistency of the overall research outcomes (Davis, 2021; Lazard & McAvoy, 2020; Dodgson, 2019; Watts, 2019; Subramani, 2019). This was further motivated by the need to reinforce high rigour during the entire qualitative research process (Jootun, McGhee & Marland, 2009).

5.6 Data Analysis Procedure

The accuracy of research outcomes is dependent not only on the quality of data used, but also the appropriateness of the technique adopted in analysing the data. Thus, the focus of this section is to present the analytical techniques used in actualising the objectives of the study.

5.6.1 Qualitative Analysis

In line with the submission of Creswell and Creswell (2017), the study adopted a contemporaneous procedure for gathering and analysing the qualitative data. This was necessary to allow for the filtering of the responses during a critical assessment of the opinions and beliefs of the participants in the course of the entire data gathering process. The qualitative data obtained in the course of the survey were migrated to Microsoft Word application for further processing, while responses generated through interviews were duly transcribed. In addition, primary analysis was conducted to establish the main line of argument using responses with similar perception.

The procedure for analysing the qualitative data was inductive as this method allowed the researcher to draw inferences based on the views of the participants in relation to similar circumstances. The essence of the inductive method is to analyse the underlying qualitative data for the purpose of pinpointing prominent issues raised by the participants. The analysis was conducted to highlight, compare and underscore any evolving thought patterns originating from the participants' responses which may suggest probable links between cases (Aranda, Sele, Etchanchu, Guyt & Vaara, 2021; Koesten, Gregory, Groth & Simperl, 2021; Wessel, Baiyere, Ologeanu-Taddei, Cha & Blegind-Jensen, 2021). The researcher uncovered the evolving patterns by drawing evidence directly from the verbal summaries of the responses from different participants in the course of data collection (Koesten, Gregory, Groth & Simperl, 2021).

Pappas and Woodside (2021) further describe qualitative inductive reasoning as the analysis of data “by case” and not “by variable”. Cases in this esteem, refer to the different opinions, perceptions and beliefs of several individuals regarding a particular phenomenon (Levitt, 2021). Thus, qualitative inductive reasoning/analysis was appropriate in analysing the pool of opinions and beliefs of youths who participated in the qualitative research process. Similar cases were integrated into a subtheme that represented the common line of thought of the participants. The analysis was also tailored to the principal objective of the study by using a system of explanatory inquiry to decode and interpret the information supplied by the participants for policy considerations.

5.6.2 Quantitative Analysis

To empirically accomplish the objectives of this study, both the descriptive and inferential analytical approaches were utilised. The descriptive approach involved the use of charts, frequency distribution table and cross-tabulation to highlight some attributes of the series considered in the study, while the inferential approach involved the empirical estimation of the coefficients of the General Linear Model as well as the Multinomial Logistic Model.

Specifically, the inferential analytical approaches were utilised in achieving specific objectives of the study which include; “to evaluate perception of youth about agriculture entrepreneurship in Nigeria”, “to assess the factors influencing youth perception about agriculture entrepreneurship in Nigeria” and “to assess the dynamics of agriculture entrepreneurship and unemployment in Nigeria”. Also, the General Linear Model was adopted because of its capability to accommodate explanatory variables of various scales such as variables in ratio scales (continuous), interval scales, nominal or ordinal scales (Kiebel and Holmes, n.d).

The multinomial logistic model, on the other hand, was adopted due to the number of categories (“Yes”, “No”, “Not Sure”) associated with the response/dependent variable (youth agripreneurship participation). This approach is suitable for analysing the effects of independent variable(s) on a dependent variable that has a polytomous response as seen in the case of youth agripreneurship participation. One of the advantages of the multinomial response/multinomial logistic regression approach is that it is used to evaluate not only the effect of the predictor(s) on the log odd of an event occurring, but also the effect of such variable(s) on the the log odd that the same event will not occur. In a multilevel regression

analysis, the multinomial logistic regression approach is used to examine the effect of the predictor(s) on each of the response categories rather than the response variable itself.

Thus, multinomial logistic regression approach enabled the researcher to evaluate the effects of the set of predictors (Government support, institutional and financial support, markets for Agric products, technological infrastructure, agriculture intervention programmes, agriculture entrepreneurship programmes, gender, family income category, tribe, and geopolitical zones) on both the decision of youths to participate in agripreneurship, the decision not to participate, as well as the uncertainties surrounding their choice of participation in agripreneurship. Interestingly, the outcomes of the multinomial logistic regression analysis will help identify the inherent constraints as well as viable avenues through which such constraints can be converted to opportunities for effective youth agripreneurship participation.

In the course of analysing the dataset generated from the survey process, a number of statistical software was utilised. First, the data were transferred to Microsoft Excel spreadsheet for cleansing, after which they were migrated to the Statistical Package for the Social Sciences (SPSS) Version 24.0 for coding and preparation for descriptive analysis. In addition, the inferential analysis was conducted with the aid of R Studio and STATA, while the graphical presentation of the data was achieved using Microsoft Excel program. The tables generated from the analysis were further enhanced with the aid of Microsoft Word Processor.

5.7 Researcher's Role and Reflexivity

Essentially, the concept of reflexivity entails the critical assessment of one's own beliefs, judgments and practices in the course of carrying out research (Hammond, 2017). The conscious awareness of "self" in assessing, processing and reporting the various research phenomena from theory to practical application of concepts necessitates the researcher to follow relevant provisions of research ethics to circumvent all sorts of confirmation bias in the entire research process. The views, opinions and beliefs of the researcher during the research process can exert a significant effect on the entire research outcomes (Field & Derksen, 2021). When researchers become too attached to their own beliefs, their ability to see things from other perspectives become impaired as it becomes easy for them to dislodge every other option that negates their position about certain phenomena (Hammond, 2017). Reflexivity therefore compels the researcher to avoid such bias when analysing the various research objects and situations.

There is no doubt that before a researcher embarks on a particular research exploration, that the researcher has some background knowledge of the research phenomenon of interest. Generally, reflexivity focuses on what the researcher does with this knowledge in the course of conducting an empirical investigation. Even if a particular hypothesis has been tested and rejected in previous studies, it does not warrant the researcher to conclude on the likely research outcomes in an ongoing survey. Prior knowledge is undoubtedly good, but shouldn't erode the possibility of obtaining contradicting research outcomes in the current study. Reflexivity requires the researcher to constantly review and monitor one's own overlooked assumptions. This corroborates with Eagleton (2004):

Another anti-theoretical stratagem is to claim that in order to launch some fundamental critique of our culture, we would need to be standing at some Archimedean point beyond it. What this fails to see is that reflecting critically on our situation is part of our situation. It is a feature of the peculiar way we belong to the world. It is not some impossible light-in-the-refrigerator attempt to scrutinize ourselves when we are not there. Curving back on ourselves is as natural to us as it is to cosmic space or a wave of the sea. It does not entail jumping out of our own skin. Without such self-monitoring we would not have survived as a species.

Arising from the foregoing discussion, the researcher embraced the tenet of neutrality, openness and acceptance in conducting the empirical research. This was to ensure that personal opinions, views and beliefs did not erode the credibility and strength of the research findings (Finlay 1998). During the entire research process, the researcher deeply acknowledged his role which was highly instrumental to the data collection and analysis processes. Thus, to avoid all forms of confirmation bias, all personal assumptions, preconceptions and principles that have the propensity to encumber the research design, process and outcomes were discarded at the beginning of the research.

Thus, using deep self-reflexivity the researcher became objective about the inherent socio-psychological realities of the research environment. Thus, all opinions and perspectives of the participants about youth agripreneurship participation were duly respected and transmitted accordingly without having to manipulate the context in which those opinions and perceptions were established. It therefore follows that all sentiments and prejudices that may have arisen

from the data collection and analysis process were promptly eliminated at the beginning of the study to avoid their negative impacts on the overall research process and outcomes.

5.8 Ethics Considerations

The concept of ethics can be viewed from different perspectives (Hammersley, 2015). For instance, Hammersley and Traianou (2012) describe ethics as “a field of study that has to do with examining what is good or right in the eyes of the community and how people should govern this”. In the context of the research community, there are rules which every researcher is expected to observe in the course of conducting research. This set of rules covers virtually every aspect and stage of the entire research process. For instance, when conducting research, the researcher utilises a number of information sources obtained from previous studies. Thus, research ethics necessitate the researcher to give credit to authors whose original ideas were used in the current study.

Similarly, data collection is a phase in the research process which involves the interaction between researchers and research participants, who share their respective experiences in relation to the phenomenon under inquiry (Archibald, Ambagtsheer, Casey & Lawless, 2019). This process involves the understanding of the pool of experiences of the participants, which form the context of the final research findings in qualitative research. Meeting participants requires the researcher to strictly follow underlying ethical procedures to safeguard the security, safety and privacy of the participants (National Research Council, 2003; Sanjari, Bahramnezhad, Fomani, Shoghi & Cheraghi, 2014). This is sequel to the deep recognition that research participants play a key role in achieving the principal aim of the study. When research participants perceive that their safety is threatened, their commitments gradually wear out. They eventually resort to giving information that does not directly or correctly bear with their true position on the research phenomenon under investigation.

The research process also involves the “collaboration between researcher and participants, over time, in a place or a series of places, and in social interaction with milieus” (Azzahrawi, 2021). During this process, the researcher goes into the research matrix to assemble opinions and perceptions of individuals about certain phenomena of interest. The motivation for engaging in the data collection process is the same spirit that drives the analysis of the data collected, interpretation of the results obtained from the analysis, as well as the reporting of the overall findings of the study. These findings are products of individuals’ experiences. Thus, to ensure

that the safety of those individuals is not jeopardised in the research process, there is a need for the researcher to observe ethical rules when conducting research (Hammersley, 2015).

Arising from the foregoing, this present study was conducted in full compliance with the ethical research standards of the University of the Western Cape. First, the commencement of this study was contingent upon the granting of approval by the University of the Western Cape Senate, the Faculty of Economics and Management Sciences Board, and the Institute for Social Development. In line with the tenet of “informed consent”, permission was sought from the respective participants in the course of the dual research approaches (qualitative and quantitative approaches).

Specifically, the researcher utilised the consent form to seek the consent of the participants before the research questionnaires were administered. The consent of the selected participants for the interviews was sought before they were finally engaged in the interview process. In addition, information sheets enclosed in Appendix 5 and 6 respectively, were employed in acquainting the participants with the objectives and scope of the research. The researcher also ensured that the participants were informed of their rights which empowered them to either participate or decline the request to participate in the empirical survey process. This implies that participation in the survey was entirely voluntary as no participant was compelled to respond to the questionnaire or the questions asked during the interview.

Similarly, the participants were assured that all information provided will be in strict confidence and strict confidentiality will also be observed throughout the period of the study. In full compliance with the ethical research standards of the University of the Western Cape, the author hereby asserts that there is no noticed nor supposed conflict of interest between concerned parties (both the researcher and the participants). Also, the author ensured that all literatures utilised in this study were meticulously cited all through the body of the work, and further provided an all-inclusive list of references in the references segment of this work.

In conclusion, the researcher was fully committed to the utmost safety and security of all data utilised in the study. The data collected in the survey process were processed exclusively for the actualisation of the principal aim of this study. During data presentation, and discussion of research findings, the researcher employed various pseudonyms as substitutes for the participants’ real names. The raw data generated from the survey process were stored on a

password protected computer to ensure maximum access control, while avoiding unwarranted data breach by unauthorised users.

5.9 Chapter Summary

The chapter discussed the philosophy and methods of research employed in this study. Specifically, the first segment of the chapter presented an overview of the chapter, while the second segment covered the philosophy of research adopted in the study. The chapter adopted both critical realism and pragmatic approach due to their complementarity. The chapter further presented the research design utilised in the study. Other subset issues discussed in the chapter include the mixed methods research design, research setting, data collection methods such as qualitative data collection methods and quantitative data collection methods. In addition, the structure and layout of the questionnaire, sampling frame and sampling technique, the sample and population of the study, data cleaning as well as variable coding were discussed in this chapter.

The chapter also presented the model specifications in the light of the linear regression model and multinomial response modelling. The respective dependent and independent variables were identified, while the chapter also presented the models for forecasting youth agripreneurship participation. Other prominent issues addressed in the chapter include reliability and validity of quantitative and qualitative data, data analysis procedure, including qualitative and quantitative analysis, as well as the researcher's role and reflexivity during the survey. The last segment of the chapter discussed the various ethical processes the researcher undertook in the entire research process to ensure full compliance with ethical research standards.

Chapter 6: Analysis and Discussion of Youth Perception of Agricultural Entrepreneurship in Nigeria

6.1 Introduction

Agriculture can play a principal role in alleviating the scourge of unemployment in Nigeria. Given the vast arable land and other opportunities in the country, the nation's growth and development ought to be largely driven by agriculture. However, lack of manpower in the nation's Agric sector has occasioned a significant decline in agricultural production and a rise in youth unemployment in the country. This can be well understood by the rising spate of food insecurity in the country. Given the large population of the youth who are trapped by unemployment especially, after the successful completion of their tertiary education, the sector would have been a viable avenue to absorb these young Nigerians with promising agripreneurship skills.

Essentially, the various findings of this study have pinpointed that the decision of a number of Nigerian youths to venture into agripreneurship is largely shaped by their perception, which, in turn, is influenced by a host of personal, social and environmental factors. This chapter thus presents a detailed analysis of youth perception of agricultural entrepreneurship in Nigeria. Specifically, the chapter discusses the dynamics of youth agripreneurship perception and its attendant determinants with significant testament from the empirical survey conducted in the course of this study.

6.2 Youth Perception about agripreneurship in Nigeria

The idea of youth perception borders on the ability of the youths to grasp or become aware of the subject of agripreneurship with particular reference to both the merits and the demerits associated with Agric venture. Youth agripreneurship perception also implies the way in which the youth regard, understand, or interpret agripreneurship based on personal, social and environmental variables surrounding the individual in particular. The ability of these young Nigerians to mentally process the prevailing opportunities given a set of constraints will help shape their perception about Agric business in Nigeria.

Though perception varies across individuals, the study highlights different ways through which youth perception about agripreneurship can be thoroughly understood. For instance, youth agripreneurship perception can be analysed by examining whether these young entrepreneurs

see agripreneurship as a business for the poor (Fabiya, Obaniyi, Olukosi & Oyawoye, 2015) and uneducated, or whether they see entrepreneurship in agriculture as stressful, and risky (Cristea, Bozga, Tița & Munteanu, 2019), highly capital intensive or a lucrative venture (Asiribo, 2009; Sarah, 2013; Osarenren & Ojor, 2014; Onyekuru, IHEMEZIE & Chima, 2019; Nabay, Koroma, Johnson & Kassoh, 2020).

Furthermore, youth perception about agripreneurship in Nigeria can be ascertained by assessing whether young entrepreneurs see Nigeria as a safe country for agripreneurship, or whether Agric profession is admirable, or it is mainly for old people. Thus it can be generally established that youth agripreneurship perception can either be positive as earlier found in Tanzania and Nigeria (Adesina & Favour, 2016; Kimaro & Towo, 2015; Vera-Tascona, Gómez-Limón, Moyano & Garrido, 2008), or negative as seen in the context of Ethiopia (Tadele & Gella, 2012), Kenya (Maina & Maina, 2012; Njeru, Gichimu, Lopokoityit & Mwangi, 2015; Noorani, 2015), Ghana (Anyidoho, Leavy & AsensoOkyere, 2012; Shiraz, 2017), Malawi (Zidana, Kaliati, & Shani, 2020), rural Sahel (Mertz, Mbow, Reenberg & Diouf, 2009), KwaZulu-Natal North Coast, South Africa (Zwane & Van Niekerk, 2017), Nigeria (Fabiya, Obaniyi, Olukosi & Oyawoye, 2015; Saliu, Onuche & Abubakar, 2016), Malaysia (Hassan, Mohamed-Shaffril & Abu Samah, 2012; Ratnasingam, Vacalie, Sestras & Ioras, 2014), India (Satapathy & Panda, 2014), among others.

6.2.1 Result and Discussion

This section presents the empirical findings on youth perception about agripreneurship in Nigeria. Essentially, a descriptive analytical approach was utilised in evaluating the perception of youth about agriculture entrepreneurship in Nigeria. The descriptive analytics involves the evaluation of socioeconomic characteristics of youth in Nigeria, their perception about agriculture entrepreneurship as well the association between the perception and the socioeconomic characteristic of the youth using frequency distribution table, chart and cross-tabulations.

In addition, the study adopted chi-square statistics in assessing the significance of the association between perception of the youth about Agriculture entrepreneurship and each of the selected socioeconomic attributes. The statistical significance of the statistics was determined at the 5% level of significance. Thus, the decision to reject (or otherwise) the null hypothesis (no significant association) depends on the reported p-value for the respective chi-

square statistics. As noted earlier, the selected participants for the study's survey includes National Youth Service Corps members, awaiting corps members as well as youth who finished service in less than six (6) months to the time the survey was being conducted.

6.2.1.1 Socio-Demographic Characteristics of Participants

Table 4 reports the socio-demographic characteristics of the participants selected for the survey. From the empirical result, the majority of the participants were currently observing the mandatory National Youth Service or have successfully completed the Youth Service Scheme, while others were awaiting their National Youth Service posting. Specifically, when the participants were analysed based on their youth service year of completion, the result showed that 113 participants representing about 11.0% successfully completed their National Youth Service in 2020, while 253 participants representing about 24.7% successfully completed their National Youth Service in 2021.

Furthermore, the result established that 636 participants representing about 62.2% of all the youth that participated in the survey were currently observing the mandatory National Youth Service as at the time the survey was conducted, while 21 participants representing about 2.1% were fresh graduates awaiting youth service posting to their respective areas/regions of primary assignments.

In similar fashion, when the data were analysed based on the geographical distribution of respondents, it was further established that the highest number of participants (about 27% of the total) were from the southwestern region of the country, while the remaining five (5) regions accounted for a total of 71% of the participants. In addition, it was found that 21 participants representing about 2% were graduates awaiting National Youth Service posting. Specifically, the North-Central region accounted for 181 participants representing about 17.9%, while the North-East region accounted for 173 participants, who represented about 17.1% of the total sample drawn for this survey.

Moreover, the North-West region accounted for 147 participants representing about 14.5%, while the South-East produced a total of 97 participants representing about 9.6%. Furthermore, the result reveals that the South-South (Niger-Delta) region of the country accounted for 119 participants representing about 11.7% of the total sample drawn for the survey.

Based on the age distribution of respondents, it was further established that the highest number of participants (about 65.7%) were found between the ages of 26 and 30, while those between the ages of 20 and 25 were about 33.7%. Nevertheless, it was also registered that only six (6) participants (about 0.6%) who were below 20 years participated in the survey. This finding thus validates the sample frame (the youth) of the study.

Results from a similar analysis carried out on the basis of gender distribution of respondents revealed that 665 of the participants representing about 65.6% were male, while the remaining 324 respondents representing about 32% who took part in the survey were females. It was however established that the remaining 24 of the participants representing about 2.4% were rather comfortable in selecting the option not to reveal their gender identity.

When the respondents were analysed on the basis of their primary course of study, the result showed that 106 participants representing about 10.5% of the total sample drawn for the survey indicated agriculture-related programmes as their primary course of study during the survey period, while the remaining 907 participants representing about 89.5% reportedly studied non-agriculture-related courses during their undergraduate years.

The percentage of youths belonging to either Hausa, Igbo or Yoruba are about 64.8%, while the remaining 35.2% belonged to other tribes. Specifically, the result showed that the Hausas accounted for 192 respondents representing about 19% of the total sample drawn for this survey, while the Igbos accounted for 217 participants representing about 21.4% of all the youth who took part in the survey. Similarly, the Yoruba accounted for 247 respondents representing about 24.4% of the youth who participated in the survey, while the remaining 357 participants representing about 35.2% belonged to other tribes.

Lastly on this note, about 70% of the youths are from families falling within the low and middle-income category, while about 23% came from families whose income fall in the upper class, the rest (6%) are from poor families. Specifically, 63 participants representing about 6.2% were reportedly poor, while 308 participants representing about 30.4% belonged to the low-income household category. Also, the result revealed that 414 participants representing about 40.9% belonged to the middle-income household category, while 228 participants representing about 22.5% belonged to the upper-income household category in the course of the survey. The results of analysis of the socio-demographic characteristics of the participants are reported in Table 4 below.

Table 4: Socio-Demographic Characteristics of Participants

Socioeconomic Characteristics	Frequency	Percent
Youth Service Year of Completion		
2020	113	11.0
2021	253	24.7
Currently Serving	636	62.2
Awaiting Youth Service	21	2.1
Youth Service Region		
North Central	181	17.9
Northeast	173	17.1
Northwest	147	14.5
Pcm	21	2.1
South-East	97	9.6
South-South	119	11.7
South- West	275	27.1
Age Category		
Below 20	6	0.6
20-25	341	33.7
26-30	666	65.7
Gender Category		
Female	324	32
Male	665	65.6
Prefer not to say	24	2.4
Course Category		
Agric-related Course	106	10.5
Non-Agric-Related Course	907	89.5

Tribe		
Hausa	192	19
Igbo	217	21.4
Others	357	35.2
Yoruba	247	24.4
Family Income Category		
Poor	63	6.2
Low Income	308	30.4
Middle Income	414	40.9
Upper Income	228	22.5

Source: Field Survey (2021)

6.2.1.2 Analysis of Youth Agripreneurship Perception in Nigeria

The study analysed the perception of the youth about agripreneurship by examining whether the participants view agripreneurship as a business for the poor and uneducated, or whether they see entrepreneurship in agriculture as stressful, risky, highly capital intensive, or a lucrative venture. From the empirical result, it was established that about 75.80% of the youth dispelled the notion that agripreneurship is for the poor. This implies that most of the youth perceive agripreneurship as a venture that can be embraced by individuals irrespective of their prevailing socioeconomic status.

In similar spirit, the result reveals that about 77% of the participants clearly rejected the idea that agripreneurship is only meant for students who are intellectually deficient. The implication of this finding is that, the youth have come to realise that agripreneurship is a huge prospect not only for those with poor academic standing, but also to people who are intellectually sound and have the desire to venture into the agripreneurship space. Given the level of their mental alertness, these young Nigerians have the potential to drive the nation's economy through agripreneurship involvement. Thus, whether they emerged as the overall best students in their departments, faculties or in their schools, having this positive perception about agripreneurship can be seen as a step toward active involvement in agripreneurship.

Another finding from the survey is the fact that about 74.90% of the participants were in utter disagreement with the notion that agripreneurship is only suitable for people with no or low educational background. The result suggests that most of the youth investigated during the survey are likely to consider agripreneurship as a viable option, citing their level of education and the entrepreneurship skills they have acquired during and after their tertiary education. Aside from other conversion factors, their prompt exposure to the entrepreneurship terrain and the knowledge they have acquired during their undergraduate years may have shaped this perception.

It is also fascinating to note that about 57% of the youth who participated in the survey were of the view that agripreneurship is lucrative. This finding validates similar findings of previous studies who have emerged with similar revelations (Asiribo, 2009; Sharah, 2013; Osarenren & Ojor, 2014; Onyekuru, Ihemezie & Chima, 2019; Nabay, Koroma, Johnson & Kassoh, 2020). It is well established that the ultimate goal of a business is to make profit (Okpo, 2013; Vranceanu, 2014; Vítková, Chovancová & Veselý, 2017; Owusu-Mensah, Quaye & Brako, 2021).

When this goal is defined, there is a high propensity that such a business will negate the “going concern” tenet (Szymanski, 2017), implying that any business that cannot generate returns to meet the varying needs of its stakeholders will become insolvent and may eventually fold in the long run (Ho, 2009; Ucbasaran, Shepherd, Lockett & Lyon, 2013; Olujobi, 2021). Thus, citing this youth’ positive agripreneurship perception in Nigeria, the country, *ceteris paribus*, is more likely to witness a massive active youth participation in agripreneurship in the succeeding years.

Likewise, it was reported that about 67.10% of the youth perceived Nigeria as a safe country for active youth participation in agripreneurship. It is however worthy to note that as long as the opinions of these young Nigerians are respected and appreciated, it will be a cheap decision to quickly rule out the recent dynamics of insecurity, especially in the northern part of the country. For instance, there have been reported cases of farmers-herders crisis leading to the killing of thousands of farmers and utter destruction of crops running into millions of dollars in places like Buene, Nassarawa, Kogi, *inter alia* (Okeke, 2014; Peace, 2017; Abada, Okafor & Oforbuike, 2018; Abba, 2018; Gever & Essien, 2019; Nwangwu & Enyiazu, 2019; Sule, 2020; Tade & Yikwabs, 2020; Ogbuehi, 2020; Aver & Gwambeka, 2020; Ademola, 2020; Buba, 2021; Ugbudu, 2021). This phenomenon has provoked rising spate of food insecurity in

the country (Nwankwo, 2018; Abada, Okafor & Oforbuike, 2018; Aver & Gwambeka, 2020; Taiwo, 2021).

Another notable finding from the survey analysis borders on the notion that agripreneurship is exclusively for the aged. Explicitly, the result showed that about 73.30% of the participants refuted the idea that agripreneurship is for old people. This positive agripreneurship perception originating from the Nigerian youth is a direct pointer to the fact that these young Nigerians also have a vested interest in exploring the agripreneurship space in the country.

In the context of youth agripreneurship perception in Nigeria, there are other appreciable empirical findings in this study that merit policy attention. For instance, results showed that about 70.50% of the participants did not see entrepreneurship as a stressful endeavour, while about 75.40% of the youth dispelled the idea that agripreneurship is risky. This is notwithstanding the occasional shocks originating from adverse weather conditions and other constraints which will be discussed in the later chapters of the study (Idowu, Ayoola, Opele & Ikenweibe, 2011; Tambo & Abdoulaye, 2012; Donye & Ani, 2012; Nnadi, Chikaire, Echetama, Ihenacho, Umunnakwe & Utazi, 2013; Mgbenka, Onwubuya & Ezeano, 2015; Olowe, 2021; Raheem, Dayoub, Birech, & Nakiyemba, 2021; Osuji, Eze, Tim-Ashama, Njoku, Odor & Obi-Nwandikom, 2021; Adeagbo, Ojo & Adetoro, 2021).

Also, about 78.80% of the respondents didn't perceive agripreneurship to be highly capital intensive. This implies that these young, promising entrepreneurs have pictured the all-inclusive opportunities in agripreneurship, especially the lower-entry barriers such as capital requirement. This positive perception demonstrates the fact that even with little start-up capital, an individual can establish and manage an agripreneurship venture, subject to expansion as more opportunities prevail. The result further indicates that about 59.10% of the participants perceived agriculture entrepreneurship to be admirable.

In summary, from the overall findings of this study, it can be established that, subject to the sample size and the period this survey was conducted, the Nigerian youth display a good disposition about agripreneurship. This overall finding on positive youth agripreneurship perception in Nigeria further corroborates earlier findings of Olaniyi, Adebayo and Akintola (2011); Adesina and Favour (2016) who found that youth agripreneurship perception has been positive in recent time due to the perceived opportunities associated with the Agric sector. The finding also contradicts the outcomes of previous studies such as Fabiyi, Obaniyi, Olukosi and

Oyawoye (2015) as well as Saliu, Onuche and Abubakar (2016) who found negative perception about agricultural undertakings.

The change in perception could be due to a number of reasons. First, several agricultural initiatives and programmes have been put in place by the government and non-state actors to enhance youth participation in agripreneurship. Also, several incentives have been offered through these programmes. Thus, this may have positively influenced the perception of the youth who have now expressed their intention to venture into agripreneurship. This is in line with the response of one of the participants during the interview who offered that:

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

Also, several studies have shown that agriculture accounts for a sizable share of employment in both developed and emerging economies (Mitullah & Odek, 2010; Dries & Ciaian, 2012; Nyanga, 2013; Dinh & Monga, 2013; Aryeetey & Baah-Boateng, 2015; Davijani, Banihabib, Anvar & Hashemi, 2016; Note, 2018; Brooks, 2018; Assaad, AlSharawy & Salemi, 2019; Ali, Agyekum & Adadi, 2021). Thus, given the increasing rate of unemployment in Nigeria, the youth see Agriculture as a viable platform for job creation (Ajaegbu, 2012; Bassey & Atan, 2012; Kayode, Arome & Silas, 2014; Adekola, Allen, Olawole-Isaac, Akanbi & Adewumi, 2016; Okolie & Igbini, 2020; Akanle & Omotayo, 2020; Onwuka, Ugwu & Chukwuma, 2020; Fakh, Haimoun & Kassem, 2020; Owenvbiugie & Egbri, 2020).

In the course of the survey, the participants perceived that agriculture is a viable tool for employment generation for the youth and this drives their intention and active participation in agripreneurship. This may have contributed to the recent change in youth agripreneurship perception in the country. For instance, one of the participants during the interview submitted that:

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.

Generally, the above finding on the increasing level of positive youth agripreneurship perception from the quantitative analysis is analogous to the finding originating from the

qualitative survey. For instance, when the interviewees were asked to share their views of the youth Agricultural space in Nigeria, one of them who is an Agric expert/educator submitted as follows:

My opinion about the space is that it has provided employment for a lot of people who otherwise will have been unemployed. Yes, because most graduates in Nigeria come out and they have no jobs. And also, for young people who do not have formal tertiary education, the promotion of agriculture as the future of entrepreneurship and work in Nigeria has encouraged them to venture into the agriculture space whereas before now, such people who do not have tertiary education would have been feeling inadequate or looking for menial jobs. Now, they are looking at opportunities in agribusiness and starting up small ventures based on their knowledge. So, for me I think it is a very good space for creating a lot of employment opportunities for young people. Both those who have formal tertiary education and those who do not.

The second respondent who is also an existing agripreneur submitted as follows:

I think the first thing that got us into Agriculture was its ability to eliminate poverty and put people along a path towards prosperity. 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. I think we also see a demographic challenge when we have an urban population and how unsustainable urban migration has been into our megacities and the resulting slums and difficult environments that have been caused by them. We need to create opportunities outside megacities and Agriculture provides a path to do so.

The response of another participant who is a recent graduate corroborates the findings above:

First, 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. Agriculture has diversity and not just in a particular set. Agriculture is a hallmark of anything you want to do in life, and whatever you want to study,

there is a bit of agriculture inside. Looking at agriculture in Nigeria, it is a welcome idea for me, but no emphasis has been placed on agriculture in the country... And agriculture for Nigeria is a welcome development. I wish the youths can see that it is not just for the poor people, or the uneducated ones. So, my own perspective is that agriculture is a welcome idea in Nigeria, and it is not for the poor people.

Another recent graduate further validated the view above by airing the following views;

Agric business is okay. I think everyone should do that. That was the practice before the colonial period. It is a business that is okay because food matters most for everybody. Even though you can stay on water for a day, I do not think you can continuously stay on water without eating. I like the Agric business.

To further support the above results, another participant and a recent graduate also submitted as follows;

Basically, I believe it is a great thing to be doing. If we should look at the current state of the country, for me with my degree and still currently running my masters, but I had nothing to do until I engaged in Agric business, I farm and I also buy agricultural goods, store them for about three months and sell back, and make profit. With this little explanation, my involvement and experience, Agric business is a good something.

Table 5: Youth Perception about Agricultural Entrepreneurship

Statements	Agreed	Neutral	Disagree
Agriculture business is for the poor	0	24.20%	75.80%
Entrepreneurship is for dull students		23%	77%
Agriculture business is for the uneducated		25.10%	74.90%
Entrepreneurship in agriculture is lucrative	56.70%	24.50%	18.80%

Nigeria is not safe for agripreneurs	33%	67.10%
Agric profession is for old people	26.70%	73.30%
Entrepreneurship is stressful	29.50%	70.50%
Agric business is risky	24.60%	75.40%
Agric business is highly capital intensive	21.20%	78.80%
Agric profession in Nigeria is admirable	59.10%	20.20% 20.60%

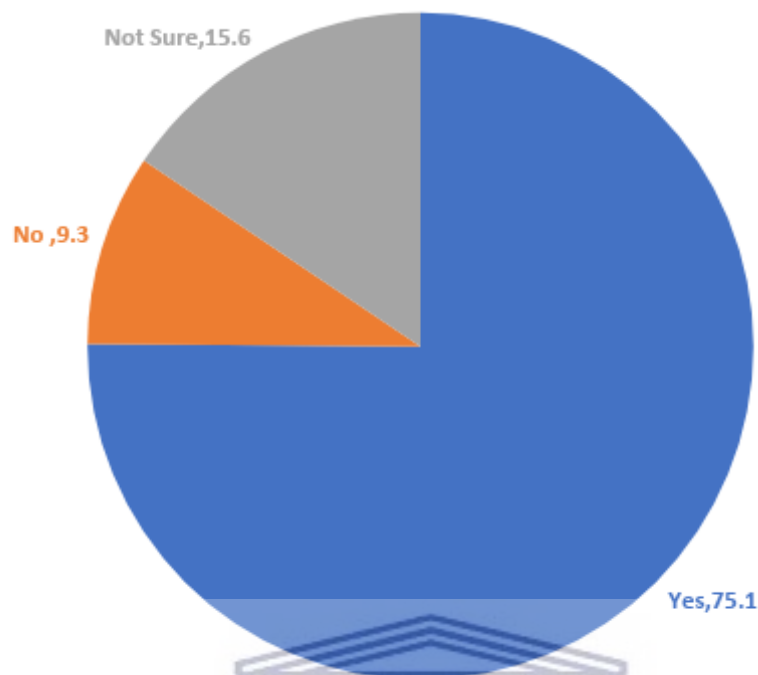
Source: Field Survey (2021)

6.2.1.3 Analysis of Youth Agripreneurship intention in Nigeria

The views of young Nigerians about agripreneurship have implications for their intention to actively participate in agripreneurship. This is because no rational human would want to associate himself/herself with a phenomenon that is largely perceived to be disadvantageous or a decision that has no clear benefit. This is in tandem with the theory of planned behaviour which states that one's beliefs about attitude, control, and norms influence his/her behaviour and are mediated by intentions (Kautonen, Van Gelderen & Fink, 2015). In a nutshell, positive perception leads to positive intention in relation to youth agripreneurship. Thus, when the data were analysed in the context of youth agripreneurship intention in Nigeria, the responses of the youth were in consonance with their perception of agripreneurship.

Specifically, when they were asked about the intention to start an Agric business in the nearest future, the result showed that about 75.1% of the participant were affirmative about commencing a business, while about 9.3% had no interest in setting up such agripreneurship venture in the nearest future. Also, it was established that about 15.6% of the participants were uncertain about taking such a decision.

Figure 4: Percentage Distribution of Youth Intention about Setting up Agribusiness



Source: Field Survey, 2021

6.2.1.4 Youth Agripreneurship intention and socioeconomic characteristics

This section presents and discusses the youth agripreneurship intention on the basis of their socioeconomic characteristics using the cross-tabulation approach. The statistical significance of the association between youth agripreneurship intention and their socio-economic characteristics were evidenced by the associated p-values of the chi-square statistics. The findings are presented in Table 3 through Table 7 below.

6.2.1.4.1 Region-specific analysis of youth agripreneurship intention in Nigeria

As shown in Table 5, the majority of the youth in each of the geopolitical zones in Nigeria have intention of starting an agriculture business in the future, as more than 70% of the participants in each zone affirmed that they will be starting a business. The percentage of those who won't be starting a business in each region also ranged between about 8% and 14%. The percentage of those not sure about starting a business varied between approximately 12% and 17%.

The region-specific analysis of youth agripreneurship intention offered a clearer view of the share of the youth in each geographical region who were positive about taking up an agric venture in the near future. For instance, from the North Central, about 75.70% of the youth declared their intention to venture into agripreneurship, while about 74.60% of the participants

in the Northeast indicated analogous interest. Similarly, about 74.10% of the youth in the Northeast demonstrated their intention to actively participate in agripreneurship, while similar results that originated from the Southeast reveals that about 77.30% of the youth were willing to venture into agripreneurship in the region. Results from the Southsouth were also similar, citing the fact that about 74.80% of the youth in the region established their intention to participate in agripreneurship, while about 75.30% of the participants in the Southwest were accepted to set up an Agric venture in the near future.

In terms of the statistical significance of the association, the association between intention to start an agriculture business and region in which a youth is currently observing his/her National Service appear to be statistically insignificant as the probability value of the chi-square statistic (9.12) was found to be greater than 5%. Table 6 reports the region-specific analysis of youth agripreneurship intention in the context of Nigeria.



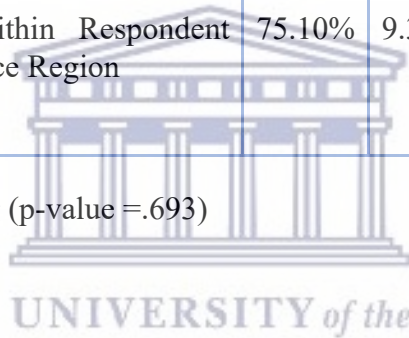
Table 6: Cross-Tabulation of Intention to Start an Agric Business and Region of Service

I will set-up an agriculture business in the nearest future							
Region			Yes	No	Not Sure		
	Northcentral	Count		137	15	29	181
		% within Respondent Service Region		75.70%	8.30%	16.00%	100.00%
	Northeast	Count		129	15	29	173
		% within Respondent Service Region		74.60%	8.70%	16.80%	100.00%
	Northwest	Count		109	21	17	147
		% within Respondent Service Region		74.10%	14.30%	11.60%	100.00%
	Southeast	Count		75	10	12	97
		% within Respondent Service Region		77.30%	10.30%	12.40%	100.00%
	Southsouth	Count		89	10	20	119

		% within Respondent Service Region	74.80%	8.40%	16.80%	100.00%
	Southwest	Count	207	22	46	275
		% within Respondent Service Region	75.30%	8.00%	16.70%	100.00%
	Total	Count	761	94	158	1013
		% within Respondent Service Region	75.10%	9.30%	15.60%	100.00%

Pearson Chi-Square: 9.121, Sig (p-value) = .693

Source: Field Survey (2021)



6.2.1.4.2 Age-specific analysis of youth agripreneurship intention in Nigeria

Table 7 presents the outcomes of the age-specific analysis of youth agripreneurship intention in Nigeria. The results generally depict that the majority of those between the age bracket of 20 to 25 (72.10%) and 26 to 30 (76.90%) are willing to set-up an Agric business soon. Similarly, over 70% of the participants in each of the age groups indicated intention to venture into agripreneurship, while 50% of those who were below the age of 20 showed interest in venturing into agripreneurship.

It was however established that about 33% of those who were below the age of 20 showed no interest in venturing into agripreneurship, while about 16.70% were still faced with uncertainty about their intentions to enter into the agripreneurship space during the survey period. The association between age and intention to venture into agripreneurship was also statistically significant, given that the probability value of the chi-square statistics (10.865) is below 5% . Table 7 below presents the age-specific analysis of youth agripreneurship intention in Nigeria.

Table 7: Cross-tabulation of Intention to Start an Agric Business and Age Category

I will set up an agriculture business in the near future						
Age Category			Yes	No	Not Sure	Total
20-25	Count		246	28	67	341
	% within Age Category		72.10%	8.20%	19.60%	100.00%
26-30	Count		512	64	90	666
	% within Age Category		76.90%	9.60%	13.50%	100.00%
Below 20	Count		3	2	1	6
	% within Age Category		50.00%	33.30%	16.70%	100.00%
Total	Count		761	94	158	1013

		% within Age Category	75.10%	9.30%	15.60%	100.00%
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Pearson Chi-Square: 10.865, Sig (p-value = 0.028)

Source: Field Survey (2021)

6.2.1.4.3 Gender-specific analysis of youth agripreneurship intention in Nigeria

Table 8 reports the result of the gender-specific analysis of youth agripreneurship intention in Nigeria. From the result, it was established that the majority of the male participants were more willing to venture into agripreneurship compared to their female counterparts. Specifically, the result showed that about 79.50% of the male participants expressed interest in venturing into agripreneurship, while the percentage of the female participants willing to start an Agri venture was about 66.70%. The percentage of both male and females who registered no interest in venturing into agripreneurship were about 9.50% and 9.30%, respectively.

Similarly, the result showed that a significant percentage of the female participants (24.10%) were still faced with uncertainty about their intentions to venture into the agripreneurship space during the survey period. Furthermore, about 11% of the male participants were also faced with uncertainty about their intentions to venture into the agripreneurship space during the survey period. However, the association between gender and intention to start an agriculture business was statistically significant given the significant chi-square statistic (32.61). Table 8 reports the result of the gender-specific analysis of youth agripreneurship intention in Nigeria.

Table 8: Cross-tabulation of Gender-specific analysis of youth agripreneurship intention in Nigeria

I will set up an agriculture business in the near future						
Gender Category			Yes	No	Not Sure	Total
Female	Count		216	30	78	324
	% within Gender Category		66.70%	9.30%	24.10%	100.00%
Male	Count		529	63	73	665
	% within Gender Category		79.50%	9.50%	11.00%	100.00%
Prefer not to say	Count		16	1	7	24
	% within Gender Category		66.70%	4.20%	29.20%	100.00%

	Total	Count	761	94	158	1013
		% within Gender Category	75.10%	9.30%	15.60%	100.00%

Pearson Chi-Square: 32.609, (p-value = 0.000)

Source: Field Survey (2021)

6.2.1.4.4 Course-specific analysis of youth agripreneurship intention in Nigeria

Table 9 presents the cross-tabulation in relation to the course-specific analysis of youth agripreneurship intention in Nigeria. The course undertaken by youths in the undergraduate study also plays a significant role in shaping youth perception about agriculture entrepreneurship, although, with only marginal difference, the percentage of youth who undertook agriculture-related courses in their undergraduate years who were also willing to venture into the agripreneurship space during the survey period (85.80%) was higher than those who studied non-agric-related courses in their undergraduate years who were also willing to venture into the agripreneurship space (73.90%).

In a similar vein, the percentage of those who studied agriculture-related courses but unwilling to venture into agripreneurship were about 7.50%, whereas those who did not study agriculture-related courses yet unwilling to venture into agripreneurship were about 9.50%. Similarly, the percentage of those who studied agriculture-related courses but not sure about their intentions to venture into the agripreneurship space during the survey period were about 6.60%, while about 16.60% of youth who studied non-agriculture-related courses were uncertain about their intentions to venture into the agripreneurship space during the survey period. The chi-square statistic (8.33) is also statistically significant at 5% level. Table 9 below presents the cross-tabulation in relation to the course-specific analysis of youth agripreneurship intention in Nigeria below.

Table 9: Cross-tabulation of Intention to Start an Agric Business and Course Studied in School

I will set up an agriculture business in the near future						
Course Category			Yes	No	Not Sure	Total
Agric-Related Course	Count		91	8	7	106
	% within Course Category		85.80%	7.50%	6.60%	100.00%
Non-Agric-Related Course	Count		670	86	151	907
	% within Course Category		73.90%	9.50%	16.60%	100.00%
Total	Count		761	94	158	1013
	% within Course Category		75.10%	9.30%	15.60%	100.00%

Pearson Chi-Square: 8.335, (p-value = 0.015)

Source: Field Survey (2021)

6.2.1.4.5 Tribe-specific analysis of youth agripreneurship intention in Nigeria

Table 10 depicts the tribe-specific analysis of youth agripreneurship intention in Nigeria. From the results, it was established that more than 70% of the participants in each tribe indicated intention to start an agriculture business, whereas the percentage of not having the intention of starting Agric business across the different tribes ranged between 8% and 4%. However, the percentage of those not sure about their intentions ranged between approximately 12% and 20%.

Specifically, among those willing to venture into the agripreneurship space during the survey period, Hausa accounted for about 72.40%, while Igbo accounted for about 77%. Similarly, Yoruba accounted for about 74.50%, while youth with other tribal identities collectively accounted for about 75.90%. On the contrary, among those with no intention to venture into the agripreneurship space during the survey period, Hausa accounted for about 14.10%, while Igbo accounted for about 10.60%. Similarly, Yoruba accounted for about 5.70%, while youth with other tribal identities collectively accounted for about 8.40%.

However, among those who were uncertain about their intention to venture into agripreneurship during the survey period, Hausa accounted for about 13.50%, while Igbo accounted for about 12.40%. Similarly, Yoruba accounted for about 19.80%, while youth with other tribal identities collectively accounted for about 15.70%. The relationship is found to be statistically significant as the reported chi-square statistic (13.99) was found to be statistically significant. Table 10 depicts the tribe-specific analysis of youth agripreneurship intention in Nigeria.

Table 10: Cross Tabulation of Tribe-specific analysis of youth agripreneurship Intention in Nigeria

I will set up an agriculture business in the near future						
Tribes			Yes	No	Not Sure	Total
Hausa	Count		139	27	26	192
	% within Tribes		72.40%	14.10%	13.50%	100.00%
Igbo	Count		167	23	27	217
	% within Tribes		77.00%	10.60%	12.40%	100.00%
Yoruba	Count		184	14	49	247
	% within Tribes		74.50%	5.70%	19.80%	100.00%
Others	Count		271	30	56	357
	% within Tribes		75.90%	8.40%	15.70%	100.00%

	Total	Count	761	94	158	1013
		% within Tribes	75.10%	9.30%	15.60%	100.00%

Pearson Chi-Square: 13.992, (p-value = 0.03)

Source: Field Survey (2021)

6.2.1.4.6 Analysis of youth agripreneurship intention in Nigeria based on Income Category

Table 11 shows the association between family income status and intention to set-up an Agric business among Nigerian youth. From the results, it was established that the majority of the participants from each income category demonstrated interest in setting up an agriculture business. Also, about 80% of participants whose family income category falls in the upper income class have intention of starting an agriculture business in the nearest future, while among the youth whose family income category falls in the low, medium and poor income categories, approximately 78.90%, 70% and 69.8% respectively willing to venture into the agripreneurship space during the survey period.

It was established that participants from poor families (19%) were the most unwilling individuals to venture into the agripreneurship space during the survey period. The percentage of participants for the rest of the income categories, not having intention of setting up Agric business was below 10%. The association between the two is found to be statistically significant as the chosen level of significance.

However, among those who were uncertain about their intention to venture into agripreneurship during the survey period, participants who were in the ‘poor’ category accounted for about 11.10%, while those in the ‘low-income’ category accounted for about 11.40%. Similarly, participants who were in the ‘middle-income’ group accounted for about 21.50%, while those in the ‘upper-income’ category accounted for about 11.80%. Table 11 thus reports the cross tabulation of the analysis of youth agripreneurship intention in Nigeria based on their income category.

Table 11: Cross-tabulation of Intention to Start an Agric Business and Family Income Status

I will set up an agriculture business in the near future							
Income Category			Yes	No	Not Sure	Total	
	Poor	Count		44	12	7	63
		% within Income Category		69.80%	19.00%	11.10%	100.00%
	Low Income	Count		243	30	35	308
		% within Income Category		78.90%	9.70%	11.40%	100.00%
	Middle Income	Count		290	35	89	414
		% within Income Category		70.00%	8.50%	21.50%	100.00%
		Count		184	17	27	228

	Upper Income	% within Income Category	80.70%	7.50%	11.80%	100.00%
	Total	Count	761	94	158	1013
		% within Income Category	75.10%	9.30%	15.60%	100.00%

Pearson Chi-Square: 26.505, (p-value = 0.000)

Source: Field Survey (2021)

Just like the various findings that originated from the quantitative analysis, the outcomes of the qualitative survey offered a similar revelation in relation to youth agripreneurship intention in Nigeria. It is noteworthy that aside from the fact that four (4) of the participants and one Agric expert/educator who took part in the interview have already established their own Agric ventures and are thriving in the agripreneurship space, the responses of the four (4) recent graduates who also participated in the interview process were indeed in alignment. For instance, when they were asked of their intention to actively participate in agripreneurship in the future, one of them is quoted as follows:

Yes, it is something I really have interest in, and I am trying to gather money together and raise capital. If I am not lucky enough to find an affordable place where I can serve (to observe the National Youth Service), the moment I leave here, with the capital gathered, I will venture into it.

Another participant also responded by offering the following:

Yes! I love it. My interest is planting palm trees. This is basically for palm oil production.

The third participant (recent graduate is also quoted as follows:

Yes, of course. But it is only capital that is drawing me back, once I am able to get fund support that I need, I will kick-start it.

6.2.2 Determinants of youth agripreneurship perception

This section presents and discusses the various factors that have the propensity to shape the perception of youth about agripreneurship. Though, perception itself can be a constraint as well as an opportunity in the determination of youth agripreneurship involvement. First, the section discusses the procedure adopted in measuring youth perception of agripreneurship and further presents the analytical procedure adopted in assessing the internal consistency and reliability of the measurement scale.

Essentially, the various determinants of perceptions offered in this study form the crux of the conversion factors enumerated in the preceding chapters. These factors that are instrumental in policy issues are also embedded in the five principal freedoms (such as political freedom, social opportunities, economic facilities, protective security and transparency guarantees) advanced in the study of Sen (2001). These factors can originate from personal, social or environmental circumstances in which the individual finds himself/herself.

Thus, in the context of the study, the identified key intervening factors include government support, institutional and financial support, markets for Agric products, technological infrastructure, agriculture intervention programmes, agriculture entrepreneurship programmes, gender, family income category, tribe and geopolitical zones. These factors will be discussed in subsequent sub-sections.

6.2.2.1 Measuring perception

Ideally, perception is a dynamic concept involving a complex mental process empowered by an individual's mental capacity and the prevailing economic, political, sociocultural and legal circumstances surrounding the individual. Also, perception varies across different individuals and the specific circumstances in which an individual is enclosed. It also varies over time (Durgin, Klein, Spiegel, Strawser & Williams, 2012). Thus, there is no all-encompassing way to derive a universally acceptable statistic that holistically measures perception. What appears appealing to one individual may be unappealing to another (Chater & Vitányi, 2003).

It therefore follows that measuring youth agripreneurship perception can be seen as a subjective measure of awareness (Merikle, Smilek & Eastwood, 2001) of the youth given the prevailing constraints and opportunities associated with agripreneurship. Though, several measures and indices can be employed depending on the context in which the phenomenon is established. For instance, one of the ways to assess the human's complex mental process is the use of self-reported measurement instruments. In this regard, the participants are provided with the option of expressing the view of the phenomenon of interest (e.g. agripreneurship). This measurement instrument has been proven to be efficient by offering good validity and reliability of the responses obtained from the case study. It also reduces the problem of collinearity among different scores (Kock, 2017).

Arising from the foregoing, the study adopted a youth agripreneurship perception score derived from the responses (self-reported perception) of the survey participants in the context of a 5-point Likert measurement scale. Essentially, the agripreneurship score is a composite score of all Likert items measuring perceptions of the engaged youth about agripreneurship. This is in compliance with the methodology advanced by Likert (1932) for analysing Likert-items responses. Specifically, the study combined responses from a series of five questions using a 5-category scale such as Strongly Approve (5), Approve (4), Undecided (3), Disapprove (2) and Strongly Disapprove (1) to obtain a measure of attitudinal scale.

In the study, the perception was measured by examining the extent to which the participant is in agreement with various statements about the agripreneurship. Where a statement is negative, the perception is scored from 1 to 5 depending on the extent to which the respondent is in agreement with the statement and where the statement is positive, the response is scored 1 to 5 depending on the extent of respondent's disagreement. Thus, youth agripreneurship perception was analysed by examining whether these young entrepreneurs see agripreneurship as a business for the poor and uneducated, or whether they see entrepreneurship in agriculture as stressful, risky, highly capital intensive or a lucrative venture.

Furthermore, youth perception about agripreneurship was also ascertained by assessing whether young entrepreneurs see Nigeria as a safe country for agripreneurship, or whether the Agric profession is admirable, or mainly for old people. The responses were processed in the same order of measurement scale [Strongly Approve (5), Approve (4), Undecided (3), Disapprove (2) and Strongly Disapprove (1)]. This reverse scoring approach was adopted in order to lessen acquiescent response bias.

According to Lewis and Sauro (2009), acquiescent response bias depicts a bias that exists in empirical research due to the tendency of respondents to agree with all or almost all statements in a research questionnaire. Qasem and Gul (2014) further averred that the utilisation of an amalgam of positively and negatively worded expressions in surveys helps to lessen acquiescent response bias and also force attentive participants to disagree with some statements. Each item score is then summed to obtain a composite perception score which was employed in the estimation process presented and discussed in subsequent sub-sections of this chapter.

6.2.2.2 Scale Reliability Analysis

The internal consistency of the survey questionnaire adopted in this study bordered on the correlation flanked by the various items relating to the same phenomenon (such as youth agripreneurship perception). The correlation statistic shows the extent of consistency of the result which the different items produce (Ursachi, Horodnic & Zait, 2015). Thus, a strong correlation shows that the scale is consistent and reliable, while a weak correction suggests otherwise. Explicitly, the items that were analysed and absorbed into the perception score include ‘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 ‘Agric profession in Nigeria is admirable’.

To test for the internal consistency of the adopted measure, the cronbach’s alpha test was utilised. Explicitly, the cronbach’s alpha coefficient was used to assess the extent to which the above set of items measured a single unidimensional latent construct of youth agripreneurship perception in Nigeria. In the submission of Ursachi, Horodnic and Zait (2015), “a Cronbach Alpha score between 0.6 and 0.7 indicate acceptable level” of reliability of the construct. The estimated cronbach’s alpha score was 0.639. This value is within the acceptable range of 0.6 to 0.7 (Bonicatto, Dew, Soria & Seghezzeo, 1997; Yusoff, 2015; Kachooei, Ebrahimzadeh, Erfani-Sayyar, Salehi, Salimi & Razi, 2015; Ursachi, Horodnic & Zait, 2015; Chin, Chua, Chu, Mahadi, Wong, Yusoff & Lee, 2018; Ramdan, 2019). This implies that the Agripreneurship perception measurement scale adopted in this study is reliable and satisfactory. The reliability score obtained in the course of analysing the above scales is presented below in Table 12.

Table 12: Testing for Scale Reliability Using the Cronbach's Alpha Approach

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

Source: Computed from the Field Survey (2021)

6.2.2.3 Independent Variables

Several factors were considered in the study as potential determinants of youth perception about agripreneurship. The choice of the core factors is premised on Sen's (2001) capability approach which serves as the theoretical underpinning of this study. As earlier presented, the theory focuses on the available opportunities or freedoms (capabilities) for a person to achieve various beings and doings (functioning) which he/she has reason to value (Sen, 2011). Sen (2001) identifies five main freedoms which are instrumental in policy issues. These five freedoms (namely political freedom, social opportunities, economic facilities, protective security and transparency guarantees), complement one another and all contribute to a person's general capability to live freely (Sen, 2001, p. 38-40).

The study focuses on social opportunities and economic facilities, which can be in the form of government and institutional support, market availability and available infrastructures available to people. However, previous studies have adopted other socio-demographic variables which have significant bearing on this study. Thus, ignoring such variables will amount to variable omission bias. It is in deep recognition of this fact that the modelling framework of the study was extended with the inclusion of these controlling variables such as gender, family income category, tribe and geopolitical zones. The variables are enumerated as follows:

6.2.2.3.1 Government Support

This is measured as the extent to which the youth perceive the existence of lack of Government support for agriculture in the country. The availability of Government support for agriculture to a large extent can influence youth participation in the sector. The support can take different shapes such as provision of equipment for agricultural mechanisation (Adesina & Favour,

2016), provision of grants and interest-free loan to farmers, provision of extension services, subsidies on farm input, tax exemption on product sales (Im & Jeong, 2014).

The extent to which this is perceived to be in existence by the youth determines the extent to which they vest their interest into agripreneurship. This is in consonance with the study of Abdullah and Sulaiman (2013) who assessed the factors that influence youth interest in agripreneurship in the case of Malaysia. Abdullah and Sulaiman (2013) further established that government support and promotion through carnivals and festivals also exert a statistically significant influence on youth agripreneurship participation.

6.2.2.3.2 Institutional Financial Support

Institutional financial support is measured by the extent to which the youth perceive the commitments of the established financial institutions in the country. From Sen's (2001) capability perspective, the availability of credit facility is a fundamental economic opportunity that, if made available, can facilitate a lot of functioning with respect to youth agripreneurship. This functioning may include ease of securing farmland and other necessary inputs needed to run an Agribusiness at varying scale. It also entails the ease of securing machinery and manpower to carry out production in a cost-effective manner. Presently, access to low-interest credit and long-term facility by SMEs is a mirage in Nigeria (Olusanya & Oyebo, 2012). Other studies have also established that the extent to which institutional financial support is perceived to be a problem (especially for agripreneurs) can substantially affect their intention to venture into agripreneurship (Adekunle *et al*, 2009; Akpan, 2010; Lumen, 2020)).

6.2.2.3.3 Markets for Agric Products

Marketing of agricultural products is an integral part of agricultural activity; in fact, it is the foundation upon which every other activity in the agricultural process is based. According to Ghafoor, Badar and Maqbool (n.d), "marketing consists of identifying customer needs and satisfying such needs in a profitable manner, it is a customer-oriented and profit driven process which is based on long-term and mutually beneficial relationships between sellers and customers". This definition states that which product to produce, how to produce, where and when to produce are functions of customers' needs.

Kanan (2012) iterated four reasons and intentions for farming; these include farming exclusively for the market, farming primarily for the market with some home consumption,

farming primarily for the home consumption marketing surplus and farming exclusively for home consumption. Hence, the more or less opportunities/needs are seen in the market or home, the more or less the intention to engage in farming practice.

6.2.2.3.4 Infrastructural Deficiency

Infrastructure facilities play a crucial role in agricultural practice. Infrastructure like roads, drainage system, and electricity, all make agricultural practice seamless and efficient. Kumar (2019) notes that poor infrastructure is one of the biggest challenges facing agro-based firms particularly those that are far from cities where most of these amenities are available. To engage youth in agriculture programmes, understanding the enabling environment where they operate around technology and digital literacy are essential.

In line with the position of Feed the Future (A US Government's Global Hunger and Food Security Initiative), when assessing the determinants of youth participation in the wider agricultural space, a need exists to take cognisance of the various digital tools and services which these youth are already exposed to. Hence to the extent that these technologies or infrastructures are perceived to be unavailable for or unincorporated in agricultural practices the less their engagement in agripreneurship.

In addition, lack of post-harvest infrastructures (such as storage, processing and transport facilities) is another identified challenge bedevilling the Nigeria agricultural sector (Ministry of Agriculture, 2007). Lack of post-harvest infrastructures has eroded the attractiveness and profitability of the Nigeria Agric space (Muhammad-Lawal, Omotosho & Falola, 2009).

6.2.2.3.5 Agriculture Intervention and Entrepreneurship Programmes

According to a Youth and Agriculture report by the Food and Agriculture Organisation of the United Nations (FAO, 2020), the principal challenge limiting youth involvement in agripreneurship is insufficient access to knowledge, information and education. The report emphasises that poor and inadequate education and training are major inhibitors of skills acquisition and productivity. Also, the development of entrepreneurial ventures is greatly hindered by lack of sufficient knowledge and information (Umeh, Nwibo, Nwofoke, Igboji, Ezeh & Mbam, 2020).

In a similar report by Feed the Future (n.d) increasing access to education, technical training and resources was iterated to be a major way of getting young people to see agriculture as a profitable and exciting career path. In this study, participation in youth agriculture intervention programmes and entrepreneurship programmes were examined by asking participants to indicate if they have participated in any of the two programmes before.

6.2.2.3.6 The Role of Gender in Agripreneurship participation

There have been ongoing debates in relation to the role of gender in active agripreneurship involvement. These debates bordering on the absorption of the youth into reasonable and workable employment in agriculture are often divided along the gender line (Wairimu, 2021). Gender difference has often been one of many factors identified by earlier studies to be influencing agripreneurship (Schneider & Gugerty, 2010; Coker, Akogun, Adebayo, Mohammed, Nwojo, Sanusi & Jimoh, 2017; Mukembo, 2017; Addo, 2018; Wairimu, 2021).

Also, the majority of these studies have acknowledged the male gender as having the higher degree of agripreneurship intention and full participation. Compared to their female counterparts, the males are also considered more competent and successful in running agribusiness as a result of some perceived comparative advantages they have over their female counterparts. For instance, Ambrose and Zake (2015) evaluated youth in agribusiness in the context of Ugandan and found that despite the perceived disinterest in agriculture among males and females, females are the most affected due to certain constraints such as the scarcity of arable land, as well as cultural and gender norms.

The above finding is similar to the previous outcome of the study of Schneider and Gugerty (2010), who established that women have been mostly excluded from agricultural business due to their restricted access to land ownership. In compliance with the submission of Coker, Akogun, Adebayo, Mohammed, Nwojo, Sanusi and Jimoh (2017), gender disparities in the area of access, use, and competitiveness of resources in agricultural production have been critical challenges that constantly encumber the actualisation of the goal of food security and inclusive growth in Nigeria, and Africa at large. Hence, this study considers the possibility of gender disparity affecting youth agripreneurship in the context of Nigeria, sequel to the prevailing cultural pre-eminence across the different tribal identities in the country.

6.2.2.3.7 Family Income Background

Few studies have demonstrated that family background among other factors play a significant role in an individual's inclination to Agric and entrepreneurship. D'Silva, Shaffril and Samah (2010) examined the influence of socio-demographic factors on youth attitudes towards contract farming. The study found that whether a family's previous involvement in agriculture do affect inclination to agripreneurship.

Kirkwood (2007) evaluated the role family played in igniting entrepreneurial spirit among the youth. The study argued that youth whose family are already in the line of business or entrepreneurship is more likely to tow the same line than those whose parents were not. Umeh, Nwibo, Nwofoke, Igboji, Ezeh and Mbam (2020) assessed "the effects of socio-economic characteristics of the youths on agripreneurship choice" with empirical testament from Ebonyi State, Nigeria. The study found that among other things, a household's annual income exhibited a statistically significant influence on the agripreneural decisions among the youth. Thus, it is deduced that higher income earners will be in a better position to raise the required capital for agribusiness. It is against this backdrop that the study attempts to evaluate the influence of the income class of the youth's parent on his/her inclination to agripreneurship.

6.2.2.3.4 Results and Interpretation

This section presents and discusses the various estimates obtained from the empirical analysis of this study in relation to youth Agripreneurship Intention in Nigeria. Explicitly, Table 13 presents the findings from the estimation of the linear regression model (Equation 1). As stated in ealier, gender, family income status, tribe, course studied in school, youth agripreneurship participation, Agricultural Interventions and programs, as well as youth participation in Entrepreneurship programmes were treated as nominal variables in the empirical process.

In addition, for gender, "female" was treated as the base or reference category, while for family income status, "upper Income Class" was considered as the reference category. However, in the context of tribal identities, "Yoruba" was treated as the reference category, while in the context of the undergraduate course of study, "Non-Agriculture Course" was treated as the base category. Similarly, for participation in youth agriculture intervention programmes and entrepreneurship programmes, "No" was treated as the base category.

6.2.2.3.5 Determinants of Youth Perception about agripreneurship

Table 13 reports estimates from the linear regression analysis. From the result, it was established that undergraduate course of study, participation in entrepreneurship training programs, family income status, perceived availability of markets for agricultural products as well as availability of infrastructural facilities were the significant determinants of youth agripreneurship perception in the period of assessment. The statistical significance of each of these variables was validated by the resultant ratio and the probability value of the parameter estimated in the modelling framework of this study.

6.2.2.3.5.1 Course of study and youth agripreneurship perception in Nigeria

Specifically, the result showed that positive agripreneurship perception is higher among youth who studied agriculture related courses in school compared to those who studied non-agriculture related courses. Explicitly, the result implies that all other things being equal, positive youth agripreneurship perception is approximately 1.07 units higher on average among youth who studied an agriculture related course than those who had a degree in non-agriculture related score. This is statistically significant at 95% confidence level as revealed by the corresponding t-statistic. It therefore follows that when the number of youths who studied agriculture related courses during their undergraduate programme increases, there will be a corresponding increase in the number of youth who hold a positive view of agripreneurship.

To validate the above empirical finding on the Course of study and youth agripreneurship perception in Nigeria, previous study of Njeru, Gichimu, Lopokoiyit and Mwangi (2015) attributed the negative perception of young people towards agriculture in Kenya to the poor state of Agric education in rural areas, as well as inadequate agricultural training curricula. This implies that when there is a well-organized institutional framework that facilitates the dissemination of quality Agric knowledge in the system whether at the university or vocational training level, those who study agriculture related courses will be more capable in managing Agric ventures. This finding also corroborates the result of earlier study of Mukembo (2017) who established that a project-based learning approach to agripreneurship tends to boost the understanding and internalization of poultry science knowledge and concepts among graduates who have the intention to venture into agribusiness.

Furthermore, the finding is in agreement with Shidiq (2020) who established that attitudes, characteristics as well as perceived behavioural influences of 'agricultural students' significantly predicted their intent to participate in agripreneurship. Mkong, *et al.* (2021) also

disclosed that students' penchant for agricultural entrepreneurship is largely influenced by their current academic progress (level). In a similar vein, Inegbedion and Islam (2021) submitted that most of the undergraduate youths currently taking a course in agriculture are influenced by their perceived own ability/competence to effectively manage an agricultural enterprise as well as perceived impact of agriculture on their long run career progression.

6.2.2.3.5.2 Entrepreneurship programmes and youth agripreneurship perception in Nigeria

Likewise, those who participate in an entrepreneurship program held a more positive view of agripreneurship compare to those who do not. The result clearly revealed that *ceteris paribus*, the perception score among the youth who participate in an entrepreneurship programme will increase by about 2.11 units compared to those who are yet to participate in the program. This is statistically significant at 99% confidence level as revealed by the corresponding t-ratio. This is indicative of the fact that the knowledge and skills acquired in the course of the various entrepreneurship and skills acquisition programmes will help shape the agripreneurship perception of the participants. This could also be attributed to the fact that these young Nigerians might have been exposed to the dynamics of agripreneurship in the course of their Skills Acquisition & Entrepreneurship Development (SAED) programme. Specifically, the NYSC SAED on Agriculture offers such unique opportunities to serving Corps Members during the mandatory National Youth Service period.

To validate the above finding on agriculture intervention and entrepreneurship programs in shaping agripreneurship perception in Nigeria, Adeyanju *et al* (2020) revealed that the agricultural programmes showed a positive impact on youth's likelihood to engage in agribusiness in the future. The study therefore averred that investment in agricultural intervention programs have potential for creating jobs and improving the perception of young people in agriculture. The Food and Agriculture Organization (2020) also emphasized that poor and inadequate education and training are major inhibitors of skills acquisition and productivity. The role of agriculture intervention and entrepreneurship programs in shaping agripreneurship perception was well highlighted in the study of Umeh *et al.* (2020) who also argued that the development of entrepreneurial ventures is greatly hindered by lack of sufficient knowledge and information. Thus, increasing access to education, technical training and resources form a viable platform for getting young people to see agriculture as a profitable and exciting career path.

Adeyanju, Mburu and Mignouna (2021) further revealed *inter alia*, that level of agribusiness training especially in the context of the Fadama Graduate Unemployed Youth and Women Support (GUYS) significantly affects the performance of young Agripreneurs in Nigeria. This suggests that agricultural programmes offer opportunity for youth graduates to develop entrepreneurship skills required to manage an agribusiness. When such skills are developed, the participants of the scheme will have their agripreneurship perception sharpened especially if their initial perception was negative. This is the basis of ‘psychological capital’ which is necessary in driving entrepreneurship in the wider Agric space.

One of the interviewees corroborated the claim that agricultural intervention programs help shape youth agripreneurship perception by noting as follows; “I am aware and know more of Npower - Empowering the youths..... There is NAgro, NTeach. It is a welcome development, and we would like to thank Mr. President for that. He is giving the youth an opportunity to see beyond what we are seeing now”.

The incentives that are offered through the various agricultural intervention programs can be linked to the major drive of positive agripreneurship perception. For instance, a participant in the interview process noted that “many of these intervention programs came when we were in NYSC camp as well, they proposed to give grants to corps members who are willing to go into Agro-allied and farming. There are many people supporting agriculture enterprises, these people are willing to train young Nigerians that are passionate about agriculture”.

Though, agriculture intervention and entrepreneurship programs in Nigeria have been flawed on certain grounds. For instance, one of the participants during the interview bemoaned as follows;

In my area and household, I am the only one having a smartphone and access to the internet. Some of these intervention programs are announced on radio, and many people do not know the process of applying and getting involved. Also, many programs are announced, people get involved in the process of applying but no further implementation after many have gone through the rigorous process of applying. No implementation of many proposed intervention projects. This has discouraged many people to further get involved in subsequent programmes.

This finding is in tandem with the capability approach’s notion that too much focus on primary goods negates the fact that a particular goods or services may affect people differently based on each person’s unique situation (Cohen, 1993). Thus an effective entrepreneurship

programmes should be implemented in such a way that it takes into account the various constraints faced by the beneficiaries.

6.2.2.3.5.3 Household income status and youth agripreneurship perception in Nigeria

The empirical results showed the existence of an inverse relationship between household income and youth agripreneurship perception. This is statistically significant at 99% confidence level as shown by the resultant t-statistic. It was established that youth agripreneurship perception declined with increasing levels of household's income among the youth who participated in the survey. Specifically, those from relatively poor families were associated with higher positive agripreneurship perception scores than those from the low-income, middle-income and wealthy or upper income class.

In the same order, the average perception score of those from the low-income and middle-income families was higher than those from the upper income class. Explicitly, the average perception score for youth from poor-, low- and middle-income families increased by about 4.123 units, 2.95 units and 2.80 units compared to the average perception score among those from the upper-income family, *ceteris paribus*. The inference that can be drawn from this finding is that, youth positive agripreneurship perception tends to wane as the level of household income rises.

However, the inverse relationship between rising household income and positive agripreneurship perception contradicts theoretical apriori expected outcome as well as the finding of Umeh, *et al.* (2020) who assessed “the effects of socio-economic characteristics of the youths on agripreneurship choice” and found that among other things, increasing household's annual income exhibited a statistically significant influence on the agripreneurial decisions among the youth. Nevertheless it is important to note that positive perception may not necessarily translate into positive intention especially where there is a disconnect between perception and the capability. So a student from poor family background may have positive perception towards agricultural entrepreneurship due to his/her family experience but at the same time express lower intention due to the lack of financial capability to start a business.

6.2.2.3.5.4 Market for agricultural products and youth agripreneurship perception in Nigeria

Similarly, the empirical results revealed that the more the youth regard the absence or lack of market for agricultural products the poorer their perception about agripreneurship and vice versa. Specifically, unavailability of a market for agricultural produce tends to plummet

positive agripreneurship perception among the youth. As shown in the table, a significant negative relationship exists between lack of market for Agro-products and youth agripreneurship perception in Nigeria at 99% confidence level. Explicitly, the result depicts that when the perceived lack of Market for farm produce increases by 1 unit, youth positive agripreneurship perception with decline by about 0.679 units. The implication of this finding is that when there is a significant expansion in the marketing for Agro-products, the youth will exhibit a positive agripreneurship perception. However, all other things being equal, the positive youth agripreneurship perception is more likely to die off in the event of a declining spate of Agro-marketing opportunities.

The above finding on the Kanan (2012) reiterated that people venture into agribusiness for major reasons and intentions which include: to produce exclusively for the market and to produce primarily for the market with some home consumption. Hence, the more marketing opportunities are perceived or realised in the country, the more the intention to engage in agripreneurship. The implication is that when more markets are created for the exchange of agricultural produce, both existing and prospective entrepreneurs will be motivated to produce with the assurance that their outputs will not be wasted (Abera, Ibrahim, Forsido & Kuyu, 2020). Their motivation will also rise due to increasing expectation for revenues and profits. Thus, absence of Agro-market tends to inhibit agripreneurship perception and intention (Shiwa, 2014; Abera *et al.*, 2020; Jeil, Abass, & Segbefia, 2020; Jha, Kaechele, Lana, Amjath-Babu & Sieber, 2020).

Through marketing activities, agricultural produce is brought to the end users either for direct consumption or for the production of other goods (Kanan, 2012). Interestingly, the crucial role of agricultural marketing in the wider Agric value chain was also acknowledged by one of the participants in the interview who noted that:

there are people who all they do is logistics, go and look for customers during harvest time and pay the farmers. Some think there is a better way to add value, and they stay in that space. There are some people who all they do is facilitate access to markets. For you to be an Agric entrepreneur you must be adding value in one way or another and also be getting paid for it.

In the context of Nigeria, one of the participants during the interview decried that:

You cannot easily identify ecosystem actors. It is only now that a lot of more traditional agribusiness actors are coming into the field that you now get to see attempts to structure the market. For example, if I want to start a maize processing business today, there is nowhere I will go to get information on the size of market, major suppliers,

varieties available in the market or the regulation guiding processing and export of maize. There is nowhere I can get that information. I have to speak to different people, different organizations in different places and that makes it difficult to get into that space... The market is very unstructured, fragmented and you have to deal with different actors, both state-players and non-state actors for you to play in the sector.

Another interviewee further submitted as follows:

the issue that I think we have in the market is that we don't have the right approach to the difficult market we are in. and so, I think the area where people like you and I, especially those who are not members of the government can do our part is in developing an ability to navigate the market for what it is". In similar lamentation, a participant is quoted as follows; sometimes, there is something called glut (excess production/supply). There is no way to force the birds out of supply glut, and they should not lay eggs today. There is already what we cannot sell. So, sometimes, there is N5000 crates without a single market/sales, and eggs are perishable. What would you do in such a situation?

Another participant further decried that:

there is no accessibility into the market, that is transporting your farm produce to the market... Little things like this are so demoralizing and 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. So, they can actually get what they want. But in Nigeria, you cannot even project. By the time you harvest, you will start looking for buyers, even after seeing buyers, the pricing is not favourable from potential customers. In short, there is a need for a restructured market.

6.2.2.3.5.5 Infrastructure and youth agripreneurship perception in Nigeria

From the empirical result also, the relationship between infrastructural deficiency and youth agripreneurship perception was found to be positive, suggesting the more the youth hold the perception that there is lack of infrastructure for agriculture business the better their perception about agriculture entrepreneurship. This suggests that a significant decline in the level of infrastructure for agribusiness will drive a positive youth agripreneurship perception in the country. This is statistically significant at 99% confidence level as revealed by the corresponding t-ratio. Explicitly, the result depicts that when the perceived infrastructural deficiency increases by 1 unit, youth positive agripreneurship perception will rise by about 0.49 units on average, all other things being equal.

Nevertheless, this result contradicts theoretical apriori expectation since under normal circumstances, a deterioration in the level of infrastructural formation in the country will trigger a negative youth agripreneurship perception. This is sequel to the fact that absence of technological infrastructure will cripple the entire agricultural production process. This will further aggravate the overall cost of agricultural production in the country. Thus, in deep recognition of the declining level of infrastructure in the country, the youth are likely to be less motivated as their agripreneurship perception will return negative.

Infrastructure is critical to the development of a nation. Similarly, the entire agricultural value chain requires access to critical infrastructure and certain Agro-processing technologies to boost productivity in the system. Shiwa (2014) established that youth participation in agricultural activities face setbacks stemming from poor and lack of modern working tools, poor rural and unsupportive infrastructures. Lyocks, Lyocks and Kagbu (2013) as well as Jha *et al* (2020) further bemoaned, that poor infrastructures remain a major constraint to youth agricultural participation.

This is in line with one of the participants who bemoaned that: “ultimately you cannot have a developed country without a developed road network. It just doesn’t exist. Infrastructure adequacy with a specific focus on roads”.

As another respondent noted:

In essence, 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...Long journeys on bad roads, infrastructure is a problem that has affected us significantly. Many of the transporters at this point would increase the fee because they already projected damages to their vehicle on the road”, another participant lamented.

However, the quantitative finding above was supported by one of the participants who advanced that

Ideally the government builds really great roads, and entrepreneurs put the roads to use and make profits. I think we are likely going to do it the other way round. Businesses need to begin to thrive in the absence of infrastructure and use their success cases to advocate to the public authorities that with increased infrastructural development,

much higher could be done. I think we just have to remain at the table with those in government and use results as evidence in making agriculture work. It is going to be more than one president but a commitment and alignment to make this work.

Thus, Nigerian youth seems to have taken their destiny into their hands and whereby identified constraints are converted into opportunities in the entire agricultural value chain.

6.2.2.3.5.6 Other Findings

The factors discussed above were found to exert statistically significant joint influence on youth agripreneurship perception in Nigeria. Nevertheless, the results indicated that government support, institutional and financial support, technological infrastructure, agriculture intervention programs, gender, tribe and geopolitical zones collectively exerted a statistically insignificant influence in youth agripreneurship perception in Nigeria during the period of assessments. This is evidenced from the corresponding probability values of the individual t-statistics reported in Table 13 below.

Table 13: Linear Model Regression Results

Parameter	B	Std. Error	t	Sig.
Intercept	36.120***	0.909	39.738	0.000
Gender				
Male	0.155	0.293	0.529	0.597
Female	0 ^a			
Tribe				
Hausa	-0.182	0.414	-0.439	0.661
Igbo	-0.407	0.396	-1.027	0.305
Others	-0.225	0.354	-0.636	0.525
Yoruba	0 ^a			
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

, **, * implies significance at 10%, 5% and 1% significance level respectively.*

Source: Author's Compilation

6.2.3 Determinants of Youth Agripreneurship Intention in Nigeria

This section presents and discusses the various determinants of youth agripreneurship Intention in Nigeria. Specifically, the youth agripreneurship participation model captured all the factors that also affect youth agripreneurship perception. Recall that the youth agripreneurship perception model encapsulated several explanatory variables such as government support, institutional and financial support, markets for Agric products, technological infrastructure, agriculture intervention programs, agriculture entrepreneurship programs, gender, family income category, tribe and geopolitical zones.

The above sets of variables were further used to measure the dynamics of youth agripreneurship intention/participation in the study. As noted earlier, perception can be a psychological constraint or an opportunity that can exert a significant effect on youth agripreneurship intention/participation. Thus, whatever influences youth agripreneurship perception is more likely to dictate the extent of youth agripreneurship intention/participation. The rationale for selecting these variables therefore applies to the explanations offered under the discussions on youth agripreneurship perception above.

6.2.3.1 Measuring Agripreneurship Intention

Intention to venture into agripreneurship was measured as a nominal variable, while responses of those who have intention to start an agribusiness in the nearest future were coded as 1, the responses of those with no agripreneurship intention were coded as 2. This is consistent with the approach adopted in the study of Buyisle and Chinedza (2020) who evaluated the influence of cognitive processes on participation in agripreneurship.

The study measures the intention of youth to participate in agripreneurship using a dichotomous variable which is denoted as 1 when a youth is willing to take up an agriculture venture in the future and zero if otherwise. Several factors may shape an individual's willingness to participate or not in agripreneurship, these may include the prevailing personal, social and environmental circumstances surrounding such individual at a point in time. These factors were extensively investigated, the empirical findings are presented in Table 14 (See equation 2 for the estimated logistic regression model).

Having examined the impacts of some selected factors on the perception of youth about agripreneurship, it was expedient to also evaluate the influence of the same factors on the willingness of the youth to start an agribusiness in the nearest future. This was achieved in the context of multinomial logistic regression analysis. Specifically, a binary response variable was used to proxy the intention to start an agriculture business, where "Yes" implies that the participant will be starting an agric business in the nearest future and 'No', if otherwise, 'No' was set as the reference category in the estimation.

6.2.3.2 Discussion of findings

The most interesting fact about the outputs of the logistic regression analysis is that most of the findings are analogous to the results obtained in the analysis of the determinants of youth agripreneurship perception. For instance, the result showed that participation in entrepreneurship training programs, availability of market for agriculture products, family income background were found to be significant determinants of youth intention to start an agribusiness at the conventional 5% significance level. In addition, Tribe was likewise found to be a significant determinant of youth intention to start an Agric business in the country.

Just like the participation in Entrepreneurship programs positively influence a youth perception about agripreneurship in the country, it also positively influence their intention to start an Agric business in the nearest future. As shown in Table 11, on average, the likelihood that a youth

who participated in an agriculture entrepreneurship program in school will start an Agric business is higher by 1.33 units than those who did not, all other factors being constant.

Similarly, just like the perception of the youth about agriculture entrepreneurship is negatively influenced by perception about lack of market for Agric products, the intention to start such venture is also negatively influenced by the perception about lack of market, as the perception score of the youth about the unavailability of a market for agro-products increases by 1 unit, the intention to venture into such business decreases by 0.368 units on average and vice versa, *ceteris paribus*.

Meanwhile, while an inverse relationship exists between the family income background of the Nigerian youth and the perception about agripreneurship, the relationship between family income background and intention to start the business is direct, i.e. youth with richer family is more likely to start the business than youth from a poor family. Table 14 reveals that the likelihood that youth will venture into an agric business decreases by 0.971 units if he/she is from a poor family than those from the upper-income family on average, all other things being equal. This further implies that the youth perception about agriculture business does not translate to intention to start the business as far as the family income background is concerned. As stated earlier, a student from poor family background may have positive perception towards agricultural entrepreneurship due to his/her family experience but at the same time express lower intention due to the lack of financial capability to start a business. This is in alignment with Umeh, *et al.* (2020) who found that among other things, increasing a household's annual income exhibited a statistically significant influence on the agripreneural decisions among the youth.

Also, the results presented in Table 14 shows that among all tribes, the youth who are of the Yoruba tribe is most likely to venture into an agric business. The Table shows that the likelihood that youth will venture into an agric business is less by 0.817 and 0.753 units if he/she is from Igbo tribe and Hausa respectively than if from the Yoruba, all other things being equal.

Table 14: Multinomial Logistic Regression Result

Agriculture Entrepreneurship Participation ^a	Variables	B	Std. Error	Wald	Sig.	Exp(B)
Yes	Intercept	2.495***	0.838	8.872	0.003	
	Lack of Government Support	0.091	0.168	0.293	0.588	1.095
	No 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				
	Tribe					
	Hausa	-0.753**	0.373	4.074	0.044	0.471
	Igbo	-0.817**	0.373	4.806	0.028	0.442
	Others	-0.544	0.354	2.364	0.124	0.581
	Yoruba(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				
	Participation in Entrepreneurship Trainig Program					
	Yes	1.330***	0.273	23.672	0.000	3.781
	No(Ref)	0 ^b				

*, **, *** implies significance at 10%, 5% and 1% significance level respectively.

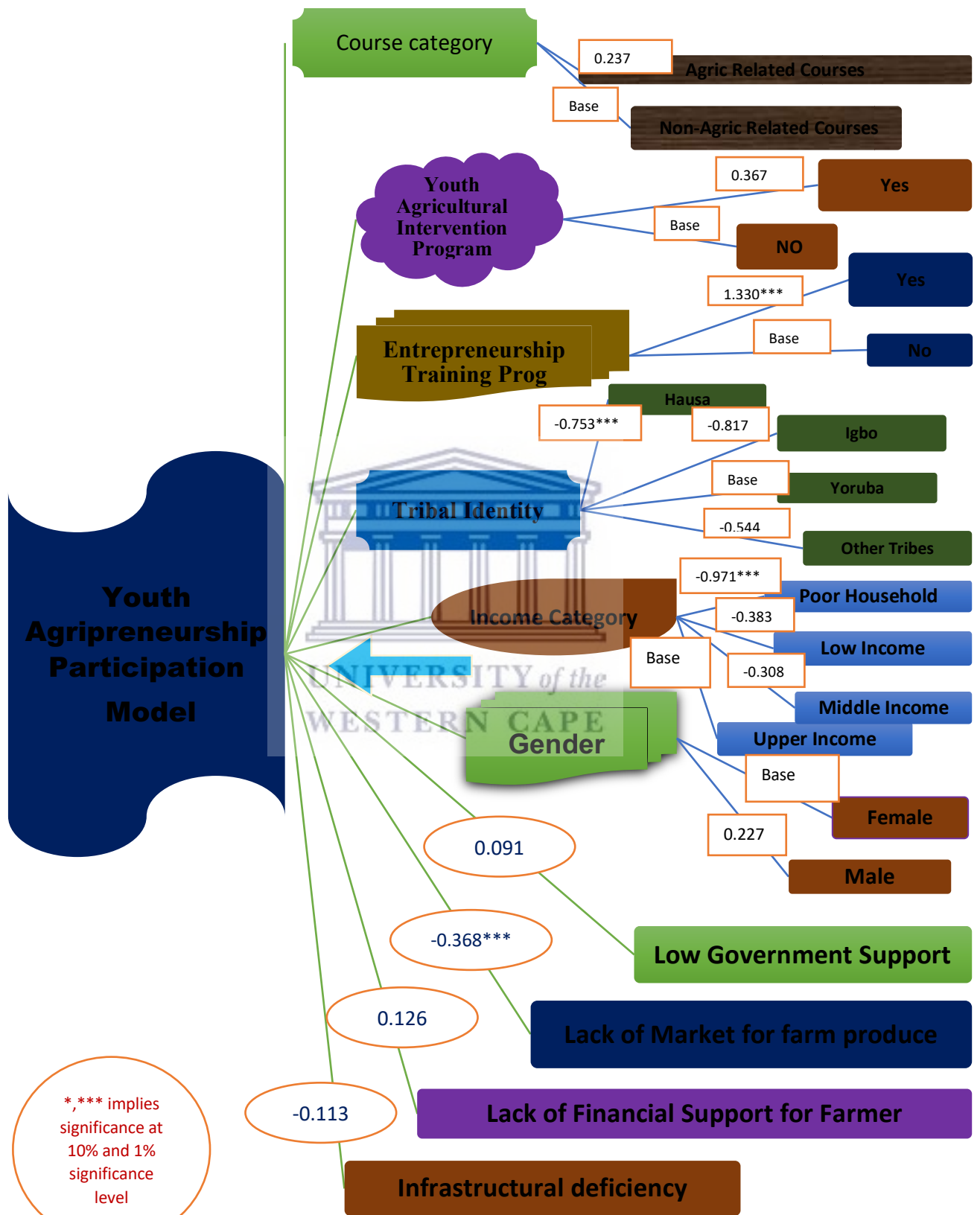
Source: Author's Compilation

6.3 The Model Summary

This section presented the abridged models summarising the various estimates generated from the model estimation process. The individual parameters (coefficients) are also indicated in the model. As noted earlier, *,** and *** indicates that the variable is statistically significant at 10%, 5% and 1% significance level respectively. The specific impact of the variable categories is also presented in the summary models for both agripreneurship perception and participation

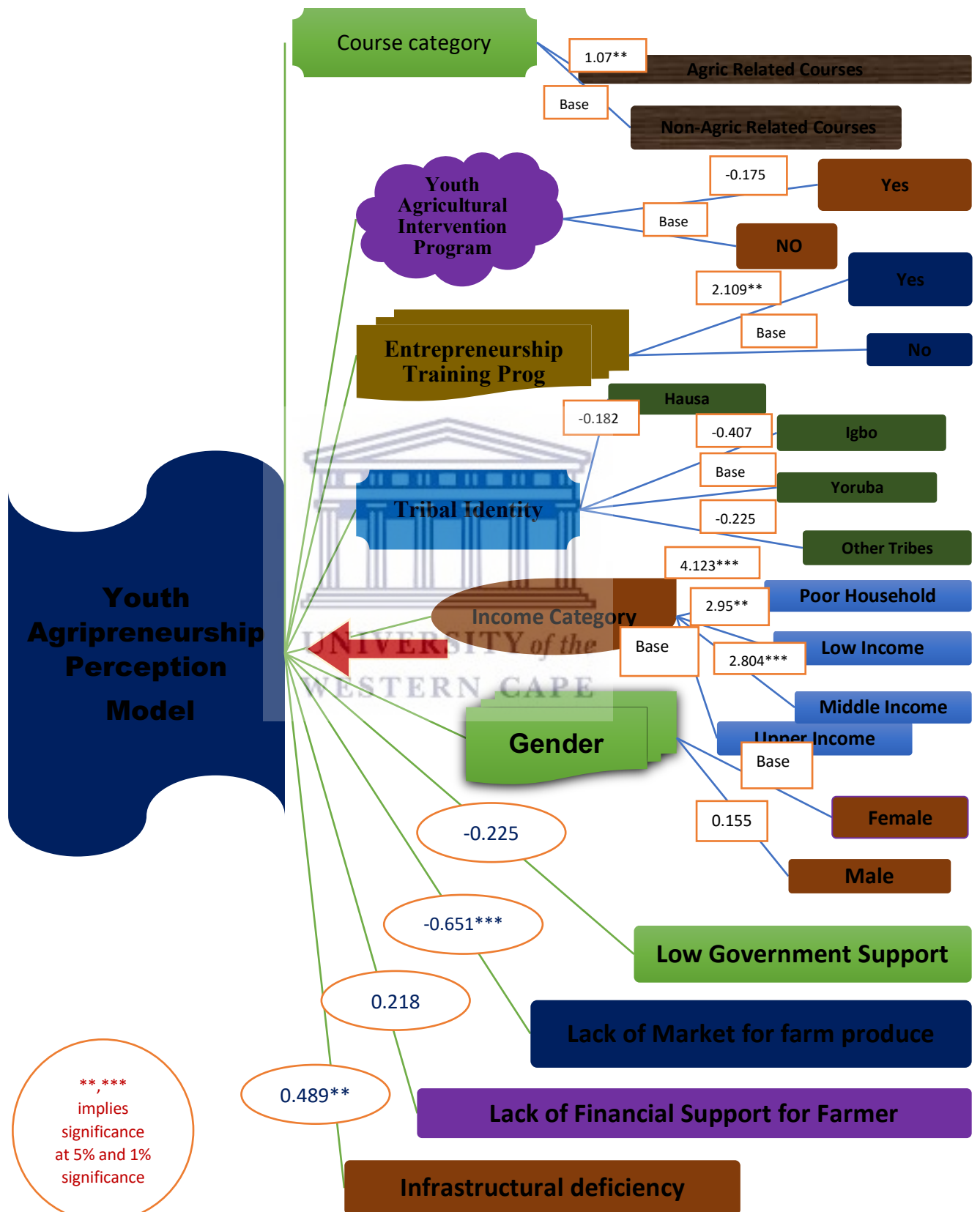


Figure 5: Percentage Distribution of Youth Intention about Setting up Agribusiness



Source: Author's Contribution.

Figure 6: : An abridged layout of the Youth Agripreneurship Perception Model



Source: Author's Compilation.

6.4 Chapter Summary

The chapter covered a detailed analysis and discussion of youth perception of agripreneurship in Nigeria. First, the chapter presented an overview of the various areas covered in the analysis. The descriptive statistics of the socio-demographic characteristics of participants were presented. A similar analysis was conducted to a summary view of the data in the context of responses on youth agripreneurship perception and intention in Nigeria. Other areas captured in the descriptive analysis include youth agripreneurship intention and socioeconomic characteristics, region-specific analysis of youth agripreneurship intention in Nigeria, age-specific analysis of youth agripreneurship intention in Nigeria, gender-specific analysis of youth agripreneurship intention in Nigeria, course-specific analysis of youth agripreneurship intention in Nigeria, tribe-specific analysis of youth agripreneurship intention in Nigeria, and analysis of youth agripreneurship intention in Nigeria based on income category.

The chapter also offered a discussion on the various determinants of youth agripreneurship perception by first revealing the approach adopted in measuring perception and then, issues relating to scale reliability analysis. Specific factors addressed in the chapter include Government support, institutional financial support, infrastructural deficiency, agriculture intervention and entrepreneurship programmes, the role of gender in agripreneurship participation, and family income background.

During results presentation and interpretation, the key areas addressed in the chapter include determinants of youth perception about agripreneurship, course of study and youth agripreneurship perception in Nigeria, entrepreneurship programmes and youth agripreneurship perception in Nigeria, household income status and youth agripreneurship perception in Nigeria, market for agricultural products and youth agripreneurship perception in Nigeria, infrastructure and youth agripreneurship perception in Nigeria and other findings from the model estimations. Other issues addressed during the model estimation and discussion of findings include determinants of youth agripreneurship intention in Nigeria, measuring agripreneurship intention, a discussion of findings as well as a summary of the estimated model.

Chapter 7: Nigeria's Agricultural Ecosystem: A complex intersection of constraints, opportunities and agency

7.1 Introduction

Nigeria is undoubtedly blessed with both human and material resources with agricultural land covering about 74 million hectares (Oriola, 2009; Ivanda, Igbokwe & Olatunji, 2015; Oladiti & Ajogbeje, 2019). The country is also blessed with over 2.5 million hectares of land that is suitable for irrigation activities (Oriola, 2009). Nevertheless, the country is yet to maximised the various opportunities associated with good soil, favourable climatic settings, availability of a large span of agricultural land as well as the ever-growing teeming population to meet and surpass the rising demand for food both in the country and Africa at large. Oriola (2009) bewails that Nigeria has fallen behind in the quest to achieve food security, notwithstanding the fact that many crops thrive well with maximum yield in different ecozones of the country.

The prevalence of the above-mentioned opportunities in Nigeria's agricultural ecosystem, if well explored, can help develop the country through massive employment creation, efficient food production, foreign exchange earnings through agricultural exports, sustainable farmers' income as well as reduction of poverty. The system has the capacity to absorb the large army of unemployed youth who have become objects of social vices and famishing in the face of abject poverty in Nigeria. The solution lies in the ability to turn all identifiable constraints into opportunities that can be holistically harnessed for the benefits of the greater number of young Nigerians with immense potential for agripreneurship.

In the context of Nigeria's agricultural ecosystem, the reviewed literature on youth agripreneurship revealed a pool of multidimensional issues surrounding the country's agricultural space. The chapter discusses the dynamics of opportunities and constraints within the agricultural ecosystem in Nigeria. It also covers a detailed discussion of the various constraints in the agricultural ecosystem in Nigeria with special attention on government policies and unstructured market systems. As noted earlier, overcoming constraints in the

Nigeria Agric space goes beyond living under those constraints. Thus, the need to move from resilience to transilience. Arising from the foregoing, the role of agency in turning constraints into opportunities within the agricultural ecosystem is also discussed.

7.2 Agricultural Entrepreneurship as a Valuable Functioning

The theoretical framework of this study (Sen's capability approach) emphasises the concept of functioning which serves as a principal agriprenurship drive in the context of the present study. As earlier described, functionings are the various valuable doings and beings (Berthet, Dechezelles, Fouin, & Simon, 2009; Lambert & Corteel, 2009; Pelenc, 2010; Siani, 2017). This is something people have reasons to value and appreciate in the course of doing it or when they are associated with it. Conradie (2013) describes functionings as anything that an individual can be or do.

The concept encapsulates a series of activities and circumstances which people consider important in their daily struggle for success. Expanding the opportunity for these doings and beings is the focus of the capability approach. A very good instance of functionings is being able to launch an agribusiness or being an agriprenur. Thus, Sen's capability approach presents the need to assess a person's or a group of people's wellbeing on the basis of their functionings and the freedom to achieve them (capabilities).

In the study, the major emphasis is on the factors that motivate people to venture into agriprenurship. In a nutshell, the study assessed the fundamental variables that make people value agribusiness. In the course of the survey, a number of factors were established as key stimuli for starting agribusiness. These include the need to eradicate poverty/malnutrition, opportunity to express one's passion/interest, freedom/be one's own boss/control your time, among others.

7.2.1 Agricultural Entrepreneurship and the Need for Poverty and Malnutrition Eradication

One of the factors that propel people to venture in agricultural entrepreneurship is the need to eradicate the rising spate of poverty and malnutrition. This implies that people derive value from participating in agriprenurship in the form of economic prosperity and poverty reduction. Interestingly, in the course of the interview, this assertion was validated by some of the

participants. For instance, when the participants were asked to share their motivation for choosing agripreneurship, the fifth respondent submitted as follows:

By 2015, I ventured into the Agric fabrication aspect since I was already doing fabrication for enterprises and SMEs. But I thought of entering into the area of food processing. But due to my poverty exposure, I had a challenge one day that seemed provocative. I had just a 50 Naira Note that I could not buy anything other than garri, and this challenge made me think and ideate a garri that has nutrients. I started the business to eradicate the rate of malnutrition among the 11 million children suffering from this in Nigeria.

Another supporting evidence with significant bearing on the need to eradicate poverty and malnutrition through agripreneurship is found in the response offered by a participant who is cited as follows:

First, I came from a poverty background, and growing up I realised and understand that there is a need to produce foods at a cheap level. Secondly, I also observed that there is 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 into that field. Another one is the need for food security. No one can stay actually without food.

Specifically, the second respondent who was also an existing agripreneur submitted as follows:

I think the first thing that got us into Agriculture was its ability to eliminate poverty and put people along a path towards prosperity. 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.

The need to tackle the scourge of food insecurity through agripreneurship was iterated by one of the participants who offered that:

There are many opportunities. First of all, you need to eat to survive. Food is needed for survival. You cannot work without eating. Therefore, Agriculture is the bedrock of human beings. It is what everyone would love to look at. Imagine if you are working and not feeding on something, you will not be able to survive. Therefore, I would say Nigerians should open their eyes and see that there are several opportunities in agriculture.

This particular respondent further provided different avenues through which the problem of food insecurity can be solved by noting that:

You can actually venture into farming, or better still venture into other segments of agriculture. Something like piggery, fishery, and poultry. There are many opportunities therein.

The above findings and discussion is in consonance with the position of an previous studies who argued that people venture into agripreneurship to address the challenges of poverty and malnutrition in the country where they live. For instance, Bairwa et al. (2014) argue that people venture into agripreneurship with the aim of eradicating poverty since they will be able to provide food and generate income to meet their daily necessities. Also, Vinoth and Paramasivam (2016) found that people venture into agripreneurship in order to address the impediments of rising unemployment and poverty in rural areas in India, while Uche and Familusi (2018) aver that “agripreneurship can contribute to social and economic development in the areas of reduction in poverty index”.

According to Dash (2018), agripreneurship is an effective mechanism through which a nation can achieve poverty reduction as well as economic transformation. Another study that validated the above finding is the study of Igwe (2020) who avers that choosing employment in the rural agripreneurship activities help in the reduction of income inequality and poverty rates in Nigeria. The finding was also substantiated by an earlier study of Omodanisi, Egwakhe and Ajike (2020) who assert that smart agripreneurship remains a viable solution to the challenge of food insecurity with specific testament from Nigeria. In a similar view, a recent study of Wairimu (2021) also described youth involvement in agripreneurship as a sustainable avenue for eradicating “vicious cycles of poverty and unemployment among rural youths in Kenya ”.

7.2.2 Agricultural Entrepreneurship as an Opportunity to Express one’s Passion/Interest

Aside from the need to crowd out the menace of poverty and malnutrition, agricultural entrepreneurship also serves as an opportunity to express one's passion/interest. For instance, one may develop a strong passion for a specific area of agriculture. Thus, an individual with significant interest in agriculture can venture into beekeeping (apiculture), fish farming (aquaculture), livestock production, pig farming, poultry farming, rearing of pigs. The individual can also consider the option of crop production. It is also worthy to note that crop production is a highly dynamic aspect of agriculture. For instance, an individual may have specific interest in areas of crop production such as cereals and pulses (like garden peas) and perennial crops (such as sugarcane, tea, coffee), and field crops (such as tea and sugarcane farming).

Another lucrative aspect of agriculture is horticulture (growing of fruits, vegetables, tomatoes, cabbages, French beans, and floriculture such as carnation, rose and tuberose businesses). In fact, agripreneurship is so wide that anyone who does not want to venture into the above areas can specialise in the supply, usage and maintenance of farm tools and machinery. An individual can also embrace the option of specialising in the marketing of agricultural produce, while establishing and maintaining a cordial and sustainable relationship with farmers.

The role of financial intermediaries in agriculture cannot be undermined in the discussion of agripreneurship as a value functioning. For instance, the problem of lack of finance can be solved if there are committed, resilient and dependable individuals who work to bridge the gap between financial scarcity (farmers) and the surplus sector (those who want to invest in micro Agric funds with little interest). The list is in no way exhaustive. Thus, agricultural entrepreneurship serves as an opportunity for individuals to express their passion/interest in any of the above areas of agricultural production.

To support the role of passion/interest in fulfilling one's agripreneurship dream, one of the respondents offered a useful testimony:

When I started, I could say I stumbled into my passion a few years ago, I think 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. So, I gave it a try. Therefore, if it fit my business, then I would not have to work for anyone. Basically, that is how I started my farming business. I moved to different countries, I needed a job, I needed something that would give me time and farming popped up. At the time, I

didn't even expect it. I thought it was just to do the establishment. It was later I knew I had to sit with it, give proper care including medication to the animals, it was a learning process for me. I am passionate about Agric business, I have learnt a lot, but I would not totally agree I am enjoying it. But I am passionate about it.

The above testament is evident that some of these agripreneurs may not find the business as lucrative as expected, yet they keep moving even in the face of difficulties and uncertainties as a result of the passion they have developed for the business. It is in the same spirit that a participant submitted:

I started just to have my time for myself and family, and I continued when I realised, I had passion for it. I started with just about three to four plots of land, now I have about 14 to 15 acres of land. I have scaled up from where I started. And it is because I am really passionate about it. So, I developed so much time into something I am really passionate about.

Another participant also shared similar experience:

It was something I really love. Despite my degrees and certifications in two Master's degrees, one MBA and Professional Certificate from Lagos Business School, what I have learnt in farming is so exciting. I have learnt a lot beyond most things taught in classroom settings. Sometimes, there would be emergency exits of staff members. In short, I have learnt tenacity a lot, thriving in the place of pressure, I just have to stick to it, find a solution to problems. There are a lot of people involved in the business, including customers, partners, and stakeholders. I have learnt people management and customer relations. These are experiences not taught in school.

There are previous studies who are in agreement with this finding. For instance, Aregu (2014) found that “Agro-market actors are increasingly participating in dynamic local and global markets that involve complex and flexible activities”. The rise in Agro-market participation was linked to the increasing level of passion these individuals have developed for Agro-marketing in the context of Uganda. The finding was also validated following the submission of one Agro-dealer who participated in the survey conducted by the study of Kabwe, Machina and Kinkese (2018). This particular participant acknowledged the role of passion in driving youths into the agripreneurship space in Zambia. Kabwe, Machina and Kinkese (2018) thus asserted that:

In addition to the self-driven to become financially independent, passion was also another factor that motivated these entrepreneurs to start their businesses. For example, passion made aquaculture entrepreneurs persevere in their enterprises despite facing challenges.

7.2.3 Agricultural Entrepreneurship as an opportunity to express one's Freedom

Another notable fact about Agricultural Entrepreneurship as a value functioning is that it offers a unique opportunity for individuals to express their freedom (Benzing, Chu & Kara, 2009; Zimmerman & Chu, 2013; Hatammimi & Wulandari, 2014; Fatoki, 2014). For instance, when participating in agripreneurship, people have the privilege of acting as their own boss or manager (Azmi, 2017; López-Meri, Alonso-Muñoz & Casero-Ripollés, 2021; Duan & Sandhu, 2021; Sithas & Surangi, 2021; Baycan, 2021; Qing, Li, Chan & Deng, 2021).

Also, agricultural entrepreneurship offers a unique opportunity for individuals to control their time and design a personalised style of work. They are not under the influence of any superior as in the case of employees in an organisation. Nobody will compel them to resume work at a certain time. They decide when to resume activities in a day, the number of hours to work per day or week, as well as the right time to close for the day. Thus, some people may venture into agripreneurship with the aim of gaining greater independence to implement their own approach to work (Alam, Senik & Jani, 2012).

This privilege also extends to the choice of vacation. These individuals are not subject to the traditional annual leave system operated by formal organisations. Agripreneurs can choose when and where to go on vacation. They have the ability to decide the length of their vacation depending on the prevailing business circumstances. Thus, they have the privilege of regulating their time without having to act under compulsion as imposed by higher authority from time to time.

The form of freedom enjoyed as agripreneurs, most of who are sole proprietors, also cover resource control. These individuals decide how the resources of the business will be obtained, allocated and effectively managed without any form of unwarranted interference by a higher authority (Minarcine & Shaw, 2016). They make choices relating to how profits will be generated and used, the percentage that will be ploughed back into the business for expansion, and the share that will be earmarked for the owner's direct compensation (Eniola, 2021).

In the course of the interview, one of the respondents supported this claim by articulating the following:

My husband's job was very intense, and I knew I could not do some jobs because I stay on the mainland and most of the jobs are inland. 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. Later on, I saw an advert relating to farming - poultry farming precisely. I believe then that it would be a lot of fun. So, I gave it a try. Therefore, if it fit my business, then I would not have to work for anyone. So, I would design my business. Basically, that is how I started my farming business. I moved to different countries, I needed a job, I needed something that would give me time and farming popped up. At the time, I didn't even expect it. I thought it was just to do the establishment. Primarily, I wanted to have my own time and have time for my family, that's why I quit 9-5 jobs and went into business.

7.3 Employment Prospect for the Nigerian Youth

Recent statistics have shown that Nigeria has been maintaining an unfavourable position with an increasing rate of unemployment. Specifically, statistics from the World Bank, (2019) indicate that while some sectors have witnessed some measures of productivity growth in recent years, employment generation remains weak and inadequate to offset the job deficiency associated with the fast-growing labour force, leading to a high rate of unemployment of 23% and underemployment rate of 20%.

Recent statistics from the NBS (2020) indicate that Nigeria's high unemployment rate increased from 11.70% in 2019 to 17.50% in 2020. When compared with her peers like Egypt, Ghana, Ivory Coast, Kenya, Libya, Mauritius, Senegal, Tanzania, Togo, Uganda, Zambia, and Zimbabwe in the Africa region, the country maintains a rather displeasing unemployment position. For instance, a similar report from NBS (2020) reveals that as of 2020, Nigeria only trailed behind Libya whose unemployment rate rose from 18.56% in 2019 to about 18.63% in 2020.

Specifically, among other African countries who trailed behind Nigeria in 2020, Egypt had a record of 7.20%, while Ghana recorded an unemployment rate of about 6.80%. Similarly, Ivory Coast had a record of 2.40% unemployment, while that of Kenya was about 7.20%. Also, the unemployment rate in 2020 in Mauritius was 10.90%, while that of Senegal was about 17%.

Furthermore, the report indicates that Tanzania had an unemployment record of 9.60%, while that of Togo was as low as 1.70%. In the case of Uganda, the rate of unemployment was as low as 1.80%, while Zambia had an unemployment record of 13.20% in that same year. Another African country with a relatively low unemployment rate in 2020 is Zimbabwe whose figure stood at 4.90%. Figure 7 below depicts the comparative trends of unemployment in Africa between 2019 and 2020.

Figure 7: Comparative trends of unemployment in Africa (2019 - 2020)

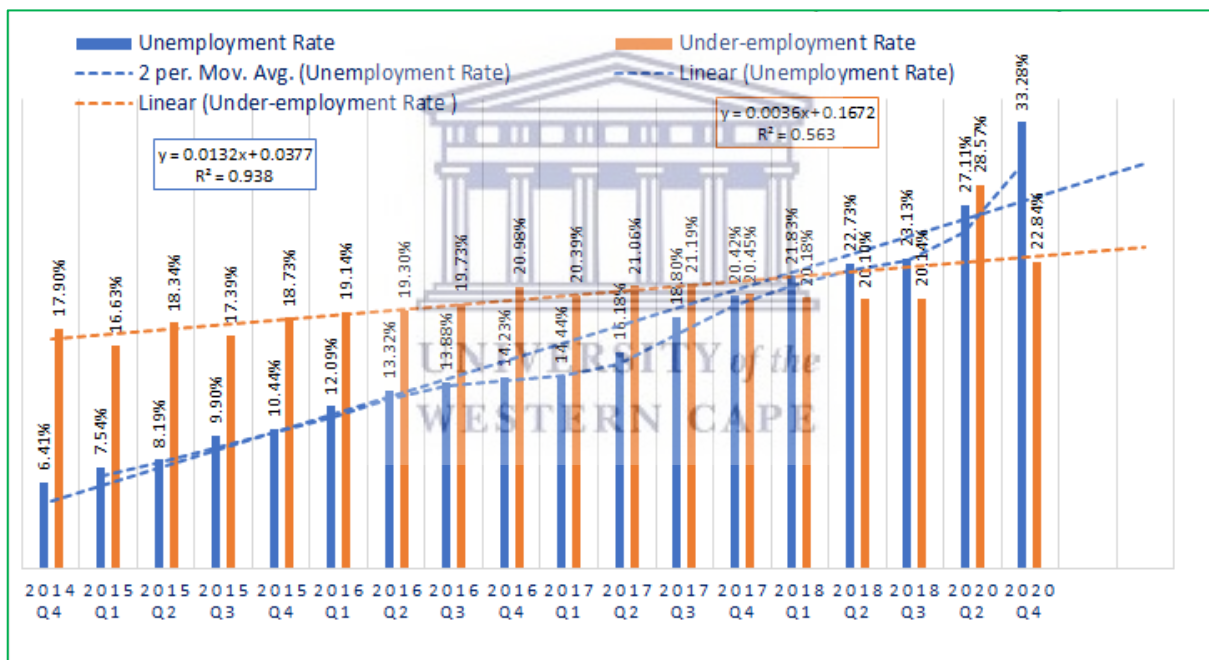


Source: Computed from the underlying data from Nigeria's National Bureau of Statistics (2020)

Nevertheless, Nigeria's National Bureau of Statistics (2020) categorises the above statistics as international figures. In its recently released statistics on Labour Force Statistics (NEW Nigeria), the Bureau of Statistics stated that as of 2014 Q4, Nigeria's unemployment rate stood at 6.41%, while the underemployment rate was 17.90%. The report further notes that as of 2015 Q1, Nigeria's unemployment rate has increased to 7.54%, while the underemployment rate declined to about 16.63%. Nigeria's unemployment rate rose from 7.54% in 2015 Q1 to 14.23% in 2016 Q4, while underemployment increased from 16.63% in 2015 Q1 to about 20.98% in 2016 Q4. As of 2017 Q4, Nigeria's unemployment rate had snowballed to about 20.42%, while the underemployment rate also rose to about 20.45% in that same period.

The trend continued that as of 2018 Q1, Nigeria’s unemployment rate had soared to about 21.83%, while the underemployment rate also declined to about 20.18%. However, it was further reported that as of 2018 Q3, while Nigeria's unemployment rate had climbed to about 23.13%, the underemployment rate dropped slightly to about 20.14% in that same period. The recent experiences are certainly not pleasing for a country with the largest economy by GDP in Africa. For instance, Nigeria’s unemployment rate rose from 27.11% in 2020 Q2 to its peak of about 33.28% in 2020 Q4, while the associated underemployment rate rose from 28.57% in 2020 Q2 to its peak of about 22.84% in 2020 Q4 (NBS, 2020). Figure 7 above also reported a 2-year forecast of both unemployment and underemployment in the country. Figure 8 below tells the full story.

Figure 8: Labour Force Statistics (NEW Nigeria) (2014Q4 - 2020Q4)



Source: Computed from the underlying data from Nigeria’s National Bureau of Statistics (2020)

Aside from the rise in aggregate unemployment and underemployment in Nigeria, the state of youth unemployment/underemployment is also appalling. In the 3rd quarter of 2018, the unemployment rate for young Nigerians (15-35 years) was 29.7%, while the underemployment rate within the same period was 25.7% (NBS, 2018). However, by the fourth quarter of 2020, the youth (15-34 years) unemployment and underemployment rates have increased to 42.5% and 21%, respectively (NBS, 2020). Thus, as of the fourth quarter of 2020, 63.5% of Nigeria's youth were either unemployed or underemployed.

Trailing behind the economic impact of the COVID-19 pandemic, the likely rise in the spate of youth unemployment/underemployment in the country could also be triggered by the surge in annual outputs (graduates) from tertiary institutions that add to the army of unemployed youth in Nigeria. To validate this claim, Babalobi (2019) reported that as of October 2019, “Nigeria’s 308 degree awarding institutions (134 polytechnics and 174 universities) have an enrolment population of about 2 million and produce about 600,000 graduates yearly”.

The graduate-employment ratio is extremely frustrating since in the wake of 2018, the ex-Chairman of Federal Inland Revenue Service (FIRS), Mr Tunde Fowler, revealed that no less than an overwhelming 700,000 graduates submitted an application for the advertised positions that could only absorb 500 people in that agency. This represents an absorbing capacity rate of 0.071% in the organisation. It was further established that among the overwhelming 700,000 graduates who submitted an application for the advertised positions, 2,000 were holders of first-class degrees! (Babalobi, 2019). The report further detailed that “in September 2018, the Federal Road Safety Corps (FRSC) announced it received 324,000 applications to fill 4,000 advertised vacancies for officer cadre, inspectorate, and road marshal assistants” (Babalobi, 2019).

It is thus suggestive that given the increasing rate of enrolment in tertiary institutions, the increasing number of annual graduates, and the declining development indicators in Nigeria, there is no respite for the country’s teeming population. For instance, as of 2001, it was noted that Nigeria received only about 50,000 graduates per annum (Dabaleni, Oni & Adekola, 2001), while “the total graduate unemployment rate increased from 25.6 percent in the year 2003 to 40.3 percent as at March, 2009” (Akinyemi, Ofem & Ikuenomore, 2012).

As noted earlier, following the Labour Force Survey report by the National Bureau of Statistics, the country’s youth unemployment/underemployment rate had snowballed to a staggering figure of 63.5% in 2020 Q4, a monstrous 8.5 percentage points higher than the 55% published in 2018. It is clear that the recurring incidences of youth unemployment nightmares in Nigeria are signs of ‘not yet Uhuru’ for the Nigerian graduates unless urgent measures are taken to cushion the unpalatable socioeconomic circumstances in the country.

The rising spate of youth unemployment in Nigeria has great implications for the wellbeing of the youth and the nation as a whole. For instance, the rise in poverty and social vices in the African region in recent years have been attributed to the surge in youth unemployment. To

support the above claim, the World Bank (2011) notes that about 40% of people who join insurgent groups are inspired principally by lack of economic opportunity. Furthermore, the African Development Bank (2015) submit that absolute poverty, which is partly the result of a lack of economic opportunity, is among the most significant predictors of political violence in Sub-Saharan Africa. Similarly, the World Bank (2019) notes that high unemployment rate has resulted in growing levels of dissatisfaction and distress among the Nigerian youth. This *ceteris paribus* will force them into all sorts of societal misdemeanours.

7.3.1 Unemployment as a Constraint on Capability

The negative effects of unemployment have been well acknowledged and documented in the literature. There are a number of youths with unique entrepreneurial skills and positive acumen in the agripreneurship space. However, the scourge of unemployment has rendered them financially and psychologically disabled, thus making it difficult for them to internalise their agripreneurship plans and vision. The constraining effect of youth unemployment on their agripreneurship pursuits can be explained from the perspective of poverty and unfulfilled entrepreneurial dreams.

7.3.1.1 Unemployment as a Poverty Trigger

Unemployment can increase the level of poverty by rendering individuals financially disadvantaged. Individuals with no means of livelihood will always find it difficult to meet their daily needs. When the rate of unemployment increases, those who cannot afford the minimum means of daily sustenance will tend to increase. It also follows that when people who are able and willing to work cannot find any legitimate work to do, their positive correlation with economic hardship will wax stronger until the situation is reversed. As the level of poverty among the youth increases, their ability to pursue their agripreneurship vision will be encumbered. This is due to their inability to likely raise the required capital for a start-up.

To further ascertain how unemployment constrains capabilities through poverty, one of the respondents in the interview offered the following testimony:

It all started 12 years ago, when I was still a student. Basically, I had a very humble beginning, and I know a lot about poverty. There was no bank savings nor capital to start... By 2015, I ventured into the Agric fabrication aspect since I was already doing fabrication for enterprises and SMEs. But I thought of entering into the area of food

processing. But due to my poverty exposure, I had a challenge one day that seemed provocative. I had just a 50 Naira Note with me that I could not buy anything other than garri

Essentially, a number of earlier studies have testified that unemployment situation constraints capabilities by exhibiting positive linkage with poverty. For instance, Wahyuningsih, Yunaningsih, Priadana, Darma and Purwadi (2020) found that unemployment exerted a direct influence on poverty in Borneo Island, Indonesia. The study thus argued that unemployment leads to poverty, which, in turn, inhibits individuals' ability to "meet the level of economic prosperity which is considered as a minimum requirement of a certain standard of living". This also means that an unemployed individual will lack the necessary resources for survival (Wahyuningsih *et al.*, 2020).

Though in the context of a non-linear autoregressive distributed lags modeling, Meo *et al.* (2020) established that "poverty responds asymmetrically due to positive or negative shocks in unemployment". Specifically, the asymmetry relationship between poverty and unemployment established in the study of Meo *et al.* (2020) implies that a rise in unemployment can either trigger a corresponding rise or a decline in the level of poverty. This finding is therefore misleading since it does not clearly show whether the increase (decrease) in unemployment will guarantee a corresponding increase (decrease) in the level of poverty in the context of Pakistan.

Among the studies that found a clear positive nexus between unemployment and poverty, Feriyanto, Aiyubbi and Nurdany (2020) maintained that unemployment exerted a statistically significant positive influence on poverty with evidence from Indonesia. A similar finding was captured in the recent study of Danson, Galloway and Sherif, (2021) who argue that when there is a policy shift from unemployment to self-employment, there will be a corresponding push from the socioeconomic burden on the state and employers to the self-employed persons who will now have the least capacity to handle their financial burdens.

7.3.1.2 Unemployment as an Entrepreneurship Dream Inhibitor

To dream of becoming an entrepreneur is good. However, dreams do not automatically translate into reality. They can only be converted into reality when dreams meet with capability. Unemployment plays a mediating (constraining) role between agriprenneurship financing and capability. Thus, with the increasing spate of youth unemployment, so many dreams are buried

in transit. Unemployment has both economic and psychological impact on individuals in a society. Apart from the challenge of lack of income, the psychological effects of youth unemployment on entrepreneurship success are substantial.

In fact, as the level of youth unemployment rises, there are a number of youths who will stop dreaming. This could be as a result of frustration emanating from their inability to find a job. For instance, many of these youths have the intention to venture into agripreneurship after working for a short while. They have the thought of raising capital on their own when they find something to do. Unfortunately for them, if the job does not materialise, their agripreneurship dreams wear out to the point that such dreams eventually die down.

On the other hand, some of these youth may be underemployed, a situation whereby their skills are sub-optimally utilised, thus leading to poor rewards and utter dissatisfaction in the end. Those who are underemployed may only be able to cater for their daily dietary requirements, yet, they will become incapacitated in their quest to pursue greater dreams during their life struggle. For instance, these youth may earn a small wage that can only keep the body and soul together, but cannot achieve anything meaningful when it comes to business investments.

One of the effects of underemployment is the inability of the underemployed individual to save for a rainy day. Also, those who are fortunate enough to get a pensionable job will end up retiring and then depend solely on their pension for survival. The implication is that, the long-term dreams and plans may never find their way out of the concrete box where they are meticulously preserved, while awaiting the opportunity to materialise. In the long run, these sets of youth live in lamentation as a result of their inability to secure the needed job to raise capital for their dream business. It thus follows that youth unemployment leads to unfulfilled dreams among the youth who are constrained from translating their agripreneurship ideas into reality.

7.3.2 Employment Prospect for a Nigerian Youth

This segment covers an exposition of agriculture entrepreneurship and employment prospects among the youth Nigerian graduates, using a descriptive analytical approach. The focus here is to unravel the prospects of young Nigerian graduates with regard to employment. Specifically, this section analyses and discusses the empirical findings on how the respondents view their chances of getting employment after graduation. The aim was to ascertain those who are abreast with the current socioeconomic realities in the country and are also forward-looking

in terms of carving the niche for themselves through entrepreneurship endeavours rather than relying on the growing uncertainties in the Nigerian labour market.

7.3.2.1 Results and discussion

Essentially, Figure 6 reports the results of the entrepreneurship and employment prospects among the youth Nigerian graduates. From the result, it was ascertained that about 37% of the participants were optimistic about getting a job once they are done with their National Youth Service, while about 16% of them reported that they already had a job waiting for them. The sustainability of this claim lies heavily on the current socioeconomic realities in Nigeria.

Similarly, those who intend to start a business immediately after their National Youth Service were about 27% of the total number of participants, while about 13% of the respondents indicated that they already have a business of their own. It is suggestive that these sets of youths have already deployed avenues to defile the looming socioeconomic crisis in the country. It was further ascertained that about 6.7% of the participants noted that they had no hope of securing a job or a business to do whatsoever after their National Youth Service. However, Figure 6 below presents the percentage distribution of employment prospects among the surveyed participants.

Figure 9: Percentage Distribution of Employment Prospect of the Participants



Source: Field Survey (2021)

The above results are pretty insightful. It is evident that the current youth unemployment situation in Nigeria has great implications for the 37% of the youths who were reportedly

optimistic about getting a job once they are done with their National Youth Service. Same applies to the 16% of them who reportedly claimed that they already had a job waiting for them. Again, about 6.7% of the participants noted that they had no hope of securing a job or a business to do whatsoever after their National Youth Service. These sets of youths may have envisaged what lies ahead of them in the job market, yet are unable to visualise the prevailing agripreneurship opportunities in the country.

It is clear that while most of the young Nigerian graduates believe they will get a job, the socioeconomic reality on the ground (unemployment rate) depicts the contrary. The perception of these youths about getting a job may have been motivated by the fact that they haven't faced the challenge of seeking a job yet. There is a likelihood that some of them have been promised prosperity (which may never materialise) after graduation. Some of them may also have the strong belief that their graduation or holding a degree is an automatic visa unto employment and the good life.

The above position of the youth about having a smooth sailing after their National Youth Service further points to a failed educational system which fails to implant entrepreneurship spirit among these youth. In most cases, classroom experiences do not go beyond the four walls of the university. Most of these graduates were never cautioned of the need to think outside the box. With an educational curricular that is largely theoretical, as established earlier, graduates might not have had ample opportunities to interact with the realities of contemporary labour market.

The prevailing youth unemployment/underemployment rate of about 63.1% (as of the second quarter of 2020) in Nigeria undoubtedly runs contrary to the expectations of many of the survey participants.

The job situation was validated by some of the interviewees. For instance, one of the participants asserted that:

The President of the nation said a few days ago that there are no white-collar jobs. This indirectly means we are going for entrepreneurship... The process of employment is drastically going down. I just made a reference to the statement of Mr President some days ago about white-collar jobs. That would not be enough for us. The youths should know that there are no more jobs for one to fully depend on. There are no jobs to be honest. So, if the youths open up their minds and eyes to see far beyond the white-collar

job, office jobs, it will go a long way. Right now, youths should start working and planning for their future.

Another respondent also corroborated this claim by noting that:

Yes... the current Nigeria state has no room for government employment. It is important therefore to engage in something.

7.4 Exploring Employment Opportunities within the Agricultural Ecosystem in Nigeria

As enumerated earlier, the Nigeria Agric space presents several opportunities for both prospective and existing agripreneurs to thrive. The various opportunities in the Agric sector include Nigeria's vast arable land, agricultural exports, several parts of the value chain that are underexploited, among others. The country is blessed with enormous agricultural land covering about 74 million hectares (Ivanda, Igbokwe & Olatunji, 2015; Oladiti & Ajogbeje, 2019). The country is also blessed with over 2.5 million hectares of land that is suitable for irrigation activities (Oriola, 2009).

Nigeria is endowed with one of the most promising Agro-ecology best suitable for the cultivation of an assortment of crops. There is no doubt that the country's agricultural ecosystem is brandished with Agric-enhancing mineral-rich soil. The unfortunate fact is that the country has not been able to explore the diverse opportunities associated with good soil, and the availability of a large span of agricultural land available for agricultural purposes. Oriola (2009) bewails that Nigeria has fallen behind in the quest to achieve food security, notwithstanding "the fact that a variety of crops thrive well with maximum yield in different ecozones of the country".

Adebile and Amusan (2011) lament that, before the eruption of the Nigerian Civil war (1967 to 1970), the country was able to produce far beyond the volume of food that was demanded for domestic consumption. However, the country now relies heavily on food importation (Amao, Antwi, Oduniyi, Oni & Rubhara, 2021; Olowe, 2021). Nigeria is therefore unable to meet the local food demand thus necessitating the reliance on food importation. In 2008, for example, Nigeria produced about 2 million metric tons of milled rice and imported roughly 3 million metric tons in order to meet the 5 million tons needed to feed the country (FOA, 2020).

In fact, Nigeria is the second importer of rice in Africa (Cadoni & Angelucci, 2019) and one of the largest importers of food in the world (Akinbile, 2007; Osabuohien, Okorie & Osabohien, 2018). Okoye and Adamade (2016) assert that Nigeria's agricultural outputs are categorised into two major sets; food crops which are essentially for domestic consumption, and a small percentage which is produced/processed for exports. The country also produces cash crops which majorly serve as sources of raw materials for the production of other commodities (Akanni, Akinleye & Oyebanjo, 2009; Nwachuku, Agwu, Nwaru & Imonikhe, 2010; Adeleke & Babalola, 2020). These are opportunities awaiting prospective agripreneurs who are willing to take advantage of them.

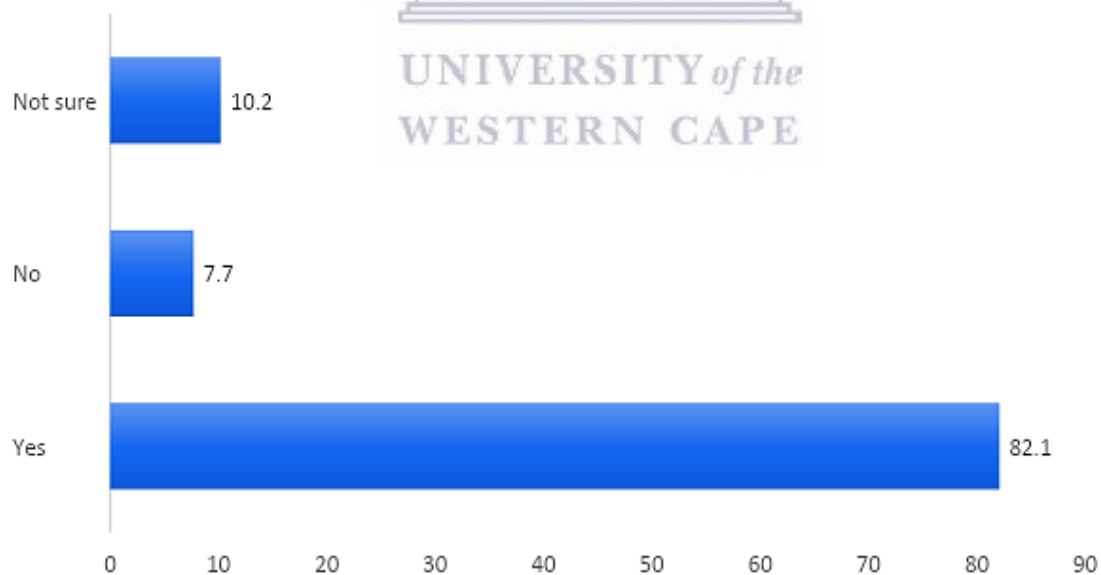
For instance, according to (FOA, 2020), Nigeria loses 10 billion dollars in the annual export opportunity from palm oil, groundnut, cocoa and cotton alone as a result of continuous decline in the production of those commodities. It is important to highlight that before the relegation of agriculture, in 1960, Nigeria was noted for exports of major crops which accounted for over 70% of total exports (Odetola & Etumnu, 2013). This means with the proper prioritisation and investment, Nigeria's Agric sector can be a major force of economic diversification through agricultural exports.

Agriculture value chain comprises several actors and channels that facilitate the entire process of agricultural productivity. According to Guritno (2018), "Agriculture value chain manages the flow of products and information along the supply chain by capturing the value added in each stage". There are a large number of actors functioning in the expanded value chain with the goal of adding value to the production process at every phase. It all ranges from ideas facilitators, consultants, as well as other chain players who in point of fact engage in the transaction in a specific product as it flows through the various stages of the value chain (Oyejide Ogunkola & Bankole, 2019). These chain actors include Agro-processors, dealers/marketers, farmers, financiers, input suppliers, retailers, transporters, wholesalers, final consumers etc. (Hellin & Meijer, 2006; Higgins, Miller, Archer, Ton, Fletcher & McAllister, 2010; Trienekens, 2011; Dalipagic & Elepu, 2014; Schouten & Bitzer, 2015; Guritno, 2018; Oyejide, Ogunkola & Bankole, 2019). It should be noted that an Agripreneur is able to function in any of the underexploited areas of the value chain.

7.4.1 Results and Discussion

As noted earlier the questionnaire utilised for the survey was designed with both predetermined (closed-ended) questions and open-ended questions to allow the participants to express their well-valued views and opinions in certain aspects of youth agripreneurship. For instance, a section of the questionnaire captures the opinions and views of the youth about employment prospects in entrepreneurship. First, when the respondents were asked to render their opinions in relation to agriculture entrepreneurship and youth unemployment in Nigeria, the results returned that 82.1% were optimistic that agriculture entrepreneurship can solve the problem of youth unemployment in Nigeria, while about 10.2% were still not certain or could not ascertain such possibility. However, the result also revealed that about 7.7% of the participants invalidated the claim that agriculture entrepreneurship is the panacea for youth unemployment in the country. The result is presented in the figure below;

Figure 10: Percentage Distribution of Participants Opinion about Whether Agriculture Entrepreneurship Can Solve problem of Youth Unemployment in Nigeria



Source: Field Survey (2021)

The second part of the question asked them how agriculture can help with unemployment. Interestingly, a pool of opinions emerged from the 82.1% of the youth who were optimistic that agriculture entrepreneurship can solve the problem of youth unemployment in Nigeria. Due to the diversity of the views expressed by the sets of youths, the study further conducted

a thematic analysis of open-ended questions with a view to creating specific areas of opportunities using emerging themes from the opinions set. The thematic analysis of open-ended questions was conducted using ATLAS.ti 9. In the course of the qualitative data analysis, some insightful themes were created as code which the computer program used to identify the pool of similar opinions that emerged during the survey.

Interestingly, the qualitative analysis results revealed that most of the prominent employment prospects for the youth aspiring to venture into the wider Agric space include, “absorption capacity”, “value chain expansion”, “Agric is lucrative”, “end poverty and joblessness”, “reduce hunger and food inflation”, “increase in income flow”, “financial independence”, “create more market”, “little or no risk of competition”, “lower entry barrier”, “opportunity to diversify sources of income”, “personal development”, “prospect for food security”, “reduces social vices”, “self reliant/self-employed”, “good soil”, and “source of empowerment”.

7.4.1.1 Lower Entry Barriers

From the information above, it was established that one of the enablers of agripreneurship involvement is lower entry barrier. For instance, unlike other sectors like banking and insurance, consulting, health and social care, among others, agripreneurship does not necessarily require a high level of formal education. It can accommodate both skilled and unskilled labour. Thus, a basic knowledge of agribusiness management is sufficient for an individual to venture into the Agric space. This makes the sector more promising and easier to penetrate. Below are a few selected quotes from the survey participants:

Yes Agric can employ the skilled and unskilled youths

Being the biggest sector with low skill requirement Agric entrepreneurship can solve Nigeria problem of employment.

Agric employs all class of youths.

Agric can give job due to its verse and simplicity.

Agriculture is the only sector that employs skilled, semi-skilled and unskilled youths.

Agriculture is the only sector that employs both educated and uneducated youths.

Agric can employ all the youths irrespective of their qualification.

Another revealed fact is that agripreneurship does not require heavy capital for a start-up. This claim has been discussed in the preceding chapter. The participants were of the view that agripreneurship can address the ravaging scourge of youth unemployment in the country due to the fact that anyone with little capital can venture in the Agric space. This therefore makes the sector less competitive (as noted by one of the respondents) notwithstanding the pool of opportunities it offers. Just as one of the respondents noted:

It gives them the opportunity to venture into Agric activities with low or no capital.

This position was also validated by one of the interviewees who submitted as follows;

My opinion about the space is that it has provided employment for a lot of people who otherwise would have been unemployed. Yes, because most graduates in Nigeria come out and they have no jobs. And also, for young people who do not have formal tertiary education, the promotion of agriculture as the future of entrepreneurship and work in Nigeria has encouraged them to venture into the agriculture space whereas before now, such people who do not have tertiary education would have been feeling inadequate or looking for menial jobs. Now, they are looking at opportunities in agribusiness and starting up small ventures based on their knowledge. So, for me I think it is a very good space for creating a lot of employment opportunities for young people. Both those who have formal tertiary education and those who do not.

Another participant also corroborated the above position by noting as follows:

If I should have my farm, I would employ graduates who studied the course in the university for planting, pest control, harvesting, marketing and others. The graduates would be the one doing the job. For those that do not have their degree certifications, they will be employed to do the menial jobs in the farm. They will all be paid a salary, for those that would do the Agric processing and production, they would be at the farm and do their work. Everyone will have where they can function, including those who have just O level certificates. With this, everyone is employed. Agriculture is a means for employment.

7.4.1.2 High Absorption Capacity

The above reviewed literature showed evidence that Nigeria has a vast arable land that can accommodate many agripreneurs (Heise, Crisan & Theuvsen, 2015; Ivanda, Igbokwe & Olatunji, 2015; Oladiti & Ajogbeje, 2019). The availability of a large agric market (Dipeolu, Philip, Aiyelaagbe, Akinbode, & Adedokun, 2009; Ajuwon & Ogwumike, 2013) and the need to promote food security in the country offers an opportunity for any intending agripreneur. Also, it was earlier noted that Agric has a diverse chain of activities that are highly rewarding but yet unexploited. For instance, crop production alone can absorb as many as thousands of youths who are willing to venture into Agripreneurship with interest in the production of specific crops (such as cassava, yam, cocoa, maize, etc.), or a collection of different crops.

Agric processing, marketing and exportation are among other channels through which agripreneurship opportunities can be harnessed among the youths. The sector thus has the capacity to absorb all the employed youth in the country. In consonance with the above presentation, some of the responses of the survey participants are presented as follows:

Agric has the capacity to employ all Nigerian youths.

Agric have the capacity to employ skilled and unskilled.

Agric have the capacity to employ all class of youths.

Agriculture can employ all Nigerians if invested well in it.

One of the participants in the interview also offered the same view by noting as follows;

Yes, absolutely, we have a lot of courses of study like crop production, animal science, and many others. Agriculture is wide, it has a great potential for employment. For instance, if I go into palm tree plantation, and I am using up to 10 acres of land for growing it, if I employed a university graduate, my business would grow further ... Agric will increase employment opportunities significantly for youths and graduates.

Another participant also offered as follows;

Yes, for instance, the current Nigeria state has no room for government employment. It is important therefore to engage in something. One can farm, plant and rear....

7.4.1.3 Large Market for Agricultural Produce

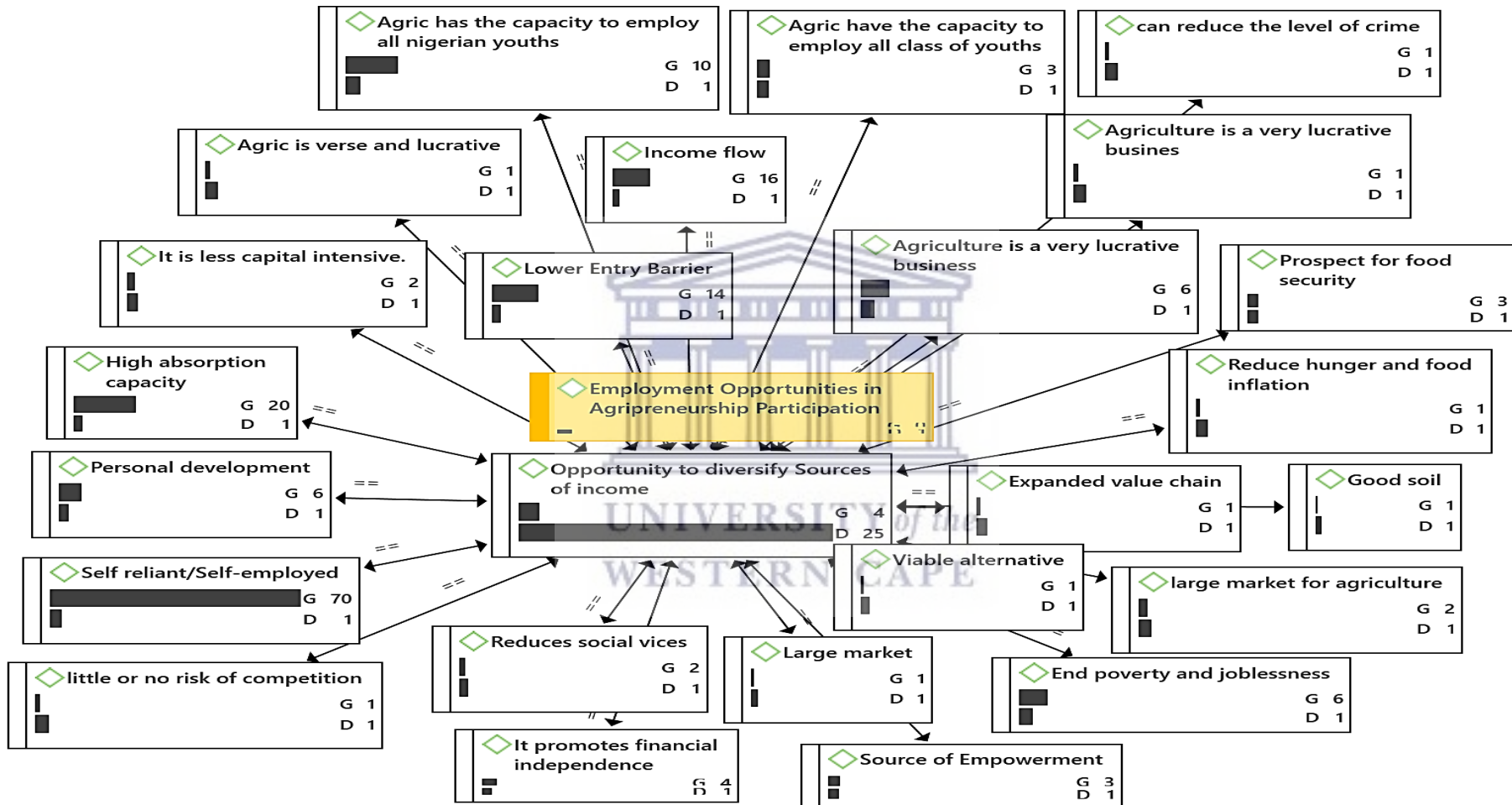
Nigeria's Agric space does not only offer avenues for individuals to engage in agricultural production, but also ensures that every actor in the extended value chain has a fair share of the benefits of agripreneurship involvement. For instance, there are opportunities for the marketing of agricultural produce both within the domestic economy and through external trade flows. The country has been a principal importer of food and other agricultural produce that can be produced locally. The demand for agricultural produce has been on the rise, following the incidence of agripreneurship apathy which is largely provoked by the inordinate craving for white-collar jobs even among the youth with a degree in Agriculture. This implies that those who are willing to produce will have the market to sell their outputs.

To support this position, one of the respondents offered the following opinion:

Agric entrepreneurship is what is mostly needed. It should not be underrated at all since none of us can do without food consumption. This clearly indicates that there is always high demand for agricultural products. When a reasonable number of youth venture into crop farming, livestock rearing, as well as processing and marketing of agricultural produce, then you will discover that the rate of independence and unemployment rate will be reduced as this will equally pave the way for other job opportunities.

Figure 8 below reports the output from qualitative analysis.

Figure 11: Employment Opportunities within the Agricultural Ecosystem in Nigeria



Source: Output from qualitative analysis using ATLAS.ti 9

7.5 Investigating Constraints in the Agricultural Ecosystem in Nigeria

Despite the set of opportunities/enablers that are associated with Nigeria's agricultural ecosystem, the sector is also laden with diverse constraints which impede the actualisation of agripreneurship dreams, especially among the youth. For instance, the country's inability to meet its local food demand is consequent upon productivity challenges arising from largely inefficient farming practices. The factors hindering Agric production in Nigeria are inadequate infrastructure, peasant nature of Agric production, low technology adoption, inadequate supply of input resources, price instability of both input materials and final produce, poor quality of available input resources (e.g. feeds for aquaculture, seeds, etc), poor irrigation system, lack of fertiliser application, weak agricultural extension system, food spoilage, weak linkages between the Agric and industrial sector, poor research and development effort, transportation and logistics challenges, ageing farming population and lack of technical know-how (Adeoye *et al.*, 2012; Adesina & Favour, 2016; FOA, 2020; Odetola & Etumnu, 2013; Olukunle, 2013; Titilola, 2008).

Another notable challenge which deals with an inability to meet international standards is also driven by productivity challenges listed above in addition to poor knowledge of target markets and how to produce according to international standards. Inadequate infrastructures like insufficient food-testing facilities also affects the standard of Agric produce obtainable in Nigeria (Olukunle, 2013). Furthermore, it is unfortunate that despite the pivotal role of agriculture in Nigeria's socioeconomic development, the government investment into the sector has been abysmally low.

According to Abutu (2014), Nigeria invests only 2% of its national budget into agriculture, annually, while most Asian countries invest 16% of their national budget into the sector. Nigeria's Agriculture Promotion Policy (2015-2020) identified some constraints encumbering the Agric sector and includes a huge gap in the adoption of agricultural technology in Nigeria, inadequate infrastructures, poor agricultural policy reforms at both the Federal and State levels, poor institutional reform and realignment, and ill-matched policy structure.

7.5.1 Result and Discussion

In the course of the survey, a number of the above-mentioned constraints were also acknowledged by the participants. For instance, the prominent issues raised in the course of the empirical survey that border on the constraints in the Agricultural Ecosystem in Nigeria include security and weak government policies, finance/cost, weak and inadequate infrastructure, lack of human capital, unstructured market systems, inter alia. These constraints are enumerated below.

7.5.1.1 Insecurity and weak government policies

Nigeria, among other African countries, has been bedevilled by occurrences of several forms of insecurity, namely “armed robberies, kidnappings, bombing, and all kinds of atrocities that have become the order of the day for more than 15 years” (Jacob & Andrew, 2015). Most of the recent debates in Nigeria revolve around the issue of security. The country faces haunting insecurity challenges that often originate from ritual killings, religious conflicts, kidnappings, inter-communal clashes, Fulani herdsmen/farmers clashes, extremism and terrorism, election/post-election violence, communal rattles, armed robbery, activities of militant groups, etc. The World Economic Forum assessed the pervasiveness of insecurity in the framework of terrorism and violence as criteria for ranking the world’s most perilous and violent nations. The assessment outcome of the 2020 survey indicated that countries like “Yamen, El Salvador, Colombia, Pakistan and Nigeria” were ranked the most unsafe and violent nations in the world (World Population Review, 2020).

It is unfortunate that despite the millions of dollars spent on the nation’s security (Vanguard, 2015; Central Bank of Nigeria, 2018), the country is still faced with all forms of insecurity. According to *Premium Times* (12 December, 2020), “the Ministry of Defence alone will spend ₦840.56 billion in 2021 having received a staggering sum of ₦878.4 billion in 2020, while the Ministry of Interior and the Ministry of Police Affairs will spend ₦227.02 billion and ₦441.39 billion respectively in the 2021 budgetary allocations. This is the highest ever in the history of Africa’s defence and security spending” (*Premium Times*, 2020).

Notable among the recurring cases of insecurity in Nigeria include farmers-herders crisis leading to the killing of thousands of farmers and utter destruction of crops running into

millions of dollars in places like Buene, Nassarawa, Kogi, *inter alia* (Okeke, 2014; Peace, 2017; Abada, Okafor & Oforbuike, 2018; Abba, 2018; Gevers & Essien, 2019; Nwangwu & Enyiazu, 2019; Sule, 2020; Tade & Yikwabs, 2020; Ogbuehi, 2020; Aver & Gwambeka, 2020; Ademola, 2020; Buba, 2021; Ugbudu, 2021). This phenomenon has provoked a rising spate of food insecurity in the country (Nwankwo, 2018; Abada, Okafor & Oforbuike, 2018; Aver & Gwambeka, 2020; Taiwo, 2021). This is all happening as a result of a weak security system and lack of protection for farmers. The Fulani herdsmen have wreaked unimaginable havoc on the Nigerian economy with no one having to question their gruesome activities, especially in State where agricultural production is prominent.

To substantiate the above submission, the participants in the interview lamented by offering the following evidence:

You have a situation where there is insecurity all over Nigeria and farmers all over Nigeria cannot go to their farms. There is a bigger problem that the government has not solved, that makes nonsense of these intervention programmes.

By the time the lockdown was lifted, we started having restlessness, insecurity, and protests coming out at the end of the lockdown. My warehouse is full of expired products due to these issues in my value chain. And I know a lot of people in my value chain who went through these same issues.

There are many opportunities, but few or few are people utilising them right now because of the insecurity going on. Existed farmers cannot take advantage of the opportunities existing because of the insecurity in the country. I cannot really talk about that because that is the major reason. For instance, it has been a while since I went to my farm, and my neighbouring farmers have reported that kidnapping is continuously happening in the location and around our area. There are many opportunities but it is not something we can take advantage of because of the insecurity.

The only time I feel constrained is I cannot live on my farm. Not because I am a woman but because my husband is not with me on the farm, it would only be me and other staff, and also because of the security issue in our country at this moment. This is the only way I can feel constrained, every other part, I am free and do not have anything holding me down.

As I mentioned, security is the major challenge. We go to the farm every morning trusting God that we will come back home safely due to the kidnapping occurring every day.

7.5.1.2 Increasing Finance and Production Cost

Finance has been a major problem facing agricultural production in Nigeria. This ranges from low access to credit facilities, high interest on loan, stringent conditionalities on loans, as well as rising cost of agricultural inputs. Most of the inputs such as animal feeds and agricultural machinery are imported into the country. Thus, with the unremitting rise in the rate of foreign exchange, the associated costs of import are always bloated. The challenges of agricultural financing and rising production costs further weaken the ability of the domestic agripreneurs to compete with their foreign counterparts for market power and quality outputs.

To validate the above submission, Ndanitsa, Adetunji, Mohammed and Ndako (2021) established that untimely approval of agricultural loans and advances, inadequate amount of loan, lack of sufficient information and equipment, poor funding, unwarranted agricultural loan diversion by government officials, favouritism, fraudulence among lenders, high interest rate, hostile demand for collateral, poor agricultural credit distribution, short repayment period, undue bureaucracy, as well as weak state of infrastructure remain are key constraints militating against agricultural productivity in Nigeria.

Balana, Aghadi and Ogunniyi (2021) also established that the rising cost of agricultural technology (production cost) is one of the major obstacles to the adoption of Agric technology in Nigeria. The increase in import prices hinders the ability of many smallholder farmers to purchase seeds, fertilisers and other Agric inputs (Memudu, & Muhammad-Lawal, 2021). Asogwa, Dongo, Ndubuaka, and Hamed (2021) further submit that “the high cost of production, limited availability of inputs and lack of workable credit affect the productivity of the Nigerian cocoa sector. Tijjani, Audu, MWulet and Ibikunle (2021) opine that the rising interest on agric loans constrains the smooth running of agricultural activities in the country.

The responses of the participants in the empirical survey are also similar. For instance, when the respondents were asked to present their views on the various factors constraining agricultural production in Nigeria, the following responses were gathered:

Another challenge is the ability to compete in the market space, globally. The cost of having quality products comparable to foreign ones is very high. Production cost is high because of infrastructure, logistics and so on.

Also, the last and most of it all is finance. To get finance for your Agric company is a major challenge. The only way most of us have been able to deal with that is throughout funding. Interestingly, the SEC (Security Exchange Commission) in Nigeria has come up with another regulation that kicks out funding for SMEs, and so on. But then, we hope to break them one after the other.

7.5.1.3 Weak and Inadequate Infrastructures

The Nigerian economy as a whole is characterised by poor and inadequate infrastructural facilities such as road network and market infrastructures (Onifade, Abdulraheem & Olarinwa, 2021), telecommunication services (especially in the rural communities), weak transportation system, insufficient food testing facilities (Olukunle, 2013), among others. Ndanitsa, *et al* (2021) note that, among other factors, the weak state of infrastructure remains a key constraint hindering the efficiency of agricultural productivity in Nigeria and it also affects the standard of Agric produce obtainable in Nigeria.

Similarly, the empirical survey assisted in establishing the following views from the participants:

The second major challenge is logistics. This is even one of the largest challenges in Nigeria agriculture space and other. The industry is so poor in the country. For instance, to transport goods from one location to another is difficult and comes with outrageous costs. On the other hand, movement of products from farms to processing companies is a problem. Long journeys on bad roads, infrastructure is a problem that has affected us significantly. Many of the transporters at this point would increase the fee because they already projected damages to their vehicle on the road.

Another one is accessibility. There is no single farm in Nigeria that has a good accessible road(s) that lead to that farm. Even if there is an emergency, to easily get in or out is a big difficulty. All the roads that lead to our farm are so terrible. For instance, I work on 232 acres, 32 in one area, and 200 in another place. So, there is no where you can get that large per cent of land that has a good road...the roads, and

infrastructure... are major challenges. 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.

The quality of roads connecting rural economies to regional cities are really broken and they drastically increase the cost of logistics. There can be times where the cost of logistics is just as high as the price of that commodity. Essentially, you could double your profit margin if you could just eliminate that cost of logistics. When you see those challenges, it is a real opportunity for us to design better roads. Ultimately you cannot have a developed country without a developed road network. It just doesn't exist. Infrastructure adequacy with a specific focus on roads.

7.5.1.4 Poor Human Capital Development

Nigeria has a huge population, being the largest in Africa. As discussed earlier, Babalobi (2019) noted that as of October 2019, “Nigeria's 308-degree awarding institutions (134 polytechnics and 174 universities) have an enrolment population of about 2 million and produce about 600,000 graduates yearly”. The big question one would ask is, if lack of human capital is a major challenge for agribusinesses, why is there a high youth unemployment rate in Nigeria? The answer is not implausible. It is due to a mismatch of skills; failure of the educational system to develop the skills needed by the market. There is a big lacuna between education and industry/work. The major argument here lies in the quality of graduates produced by these institutions in the country.

In recent times, the quality of graduates that proliferate the Nigeria job market has been the subject of hot debates. A number of studies have argued that most of these graduates are not employable due to their intellectual competence (Jacob, Monsurat & Musa, 2021). A number of them only went to the university, crammed and passed exams without acquiring any relevant skill that will enable them to make any meaningful impact on society. The poor quality of graduates produced in the country are as a result of inadequate educational curricula, lack of employability skills (Agboola, 2010; Agnes & Venatus, 2010; Salami, 2013; Durotoye, 2014) weak government (educational) policies and institutional failures (Durotoye, 2014).

It is worth noting that the challenge of adequate human capital development goes beyond access to schools and institutions of higher learning. As important as access is, quality and

relevance of the education provided are also very critical. Salami (2013) observed that most Nigerian graduates lack the relevant skills for employment in today's job market. Similarly, both Durotoye (2014) and Agnes and Venatus (2010) note that the skills possessed by many graduates do not match the needs of the labour market. Little wonder why the number of tertiary institutions in Nigeria has been on the rise, while employment opportunities have been decreasing (Babalobi, 2019). With such low human capital development through education, access to decent job opportunities becomes very difficult.

According to Agnes and Venatus (2010), the education system in Nigeria, with its bias towards liberal disciplines, over-supplies the job market with graduates lacking skills that are in demand in today's world. They also note that many graduates in Nigeria lack entrepreneurial skills to facilitate self-employment. In the same vein, Agboola (2010) observes that the curricula used by the Nigerian tertiary institutions are obsolete when viewed from the perspective of the modern global labour market. Stuck in their ancient ways, these tertiary institutions continuously churn out graduates educated in general fields of studies bereft of relevant technological, social and economic skills and knowledge needed for thriving in the current dispensation (Agboola, 2010).

This challenge is also noted by Dabaleni, Oni and Adekola (2001), who assert that, over the past decades, Nigeria's academic standards have fallen significantly to the point that universities no longer equip students with technical and soft skills required by the modern labour market. Thus, the schooling system, inherited from the colonial masters, needs to be changed in order to be able to produce graduates endowed with skills, innovation and drive for the modern labour market (Akhuemonkhan *et al.*, 2013).

In substantiating the above argument, the outcomes of the empirical survey were very insightful. Specifically, the contributions of the participants that touched on the issues of inadequate human capital development are presented as follows:

Also, we do not have labourers. By this, I mean there are no skilled labourers. The ones that are very skilled and professional in what they are doing. ...These are the major challenges.

There is a need for serious learning of practical and not theory that students cram and pass exams while they do not know the name of what they see in the real world. Until

our education is detailed enough, we are not going to get the right skill sets for all of these jobs.

... is lack of human resources, qualified and experienced personnel. One of the major challenges of farmers is the application of wrong medications to birds or something wrong to the birds in the farm. This is due to lack of knowledge. We have people that pretend to have the right knowledge, but they do not know anything. Also, there are people who are negligent of the required responsibilities needed to run a successful farm. All these contributions are detrimental to the running of a farm.

7.5.1.5 Unstructured Market Systems

As discussed in the preceding section, one of the enablers of agripreneurship in Nigeria is the availability of a large market for agricultural produce. Agric outputs are not only demanded within the domestic economy, but also find their way into the international market. The availability of a large market in Nigeria also comes with major constraints that border on the operationalisation of the market. Specifically, the Nigerian Agricultural Ecosystem is characterised by unstructured market systems. Government plays an insignificant role in regulating the prices of Agric inputs and outputs in Nigeria. As a result, the market becomes inefficient and unable to self-equilibrate.

The unstructured nature of the Agric market space has provoked a series of complaints by the farmers and other stakeholders who operate in the marketing wing of the wider Agric ecosystem. These Agric value chain actors often decry the incessant price dynamics and the inability to predict what lies ahead of the next harvest period in terms of price allocation. In fact, most of the farmers rely on the cobweb phenomenon whereby the price of Agric commodities in the present season is often adopted as a motivation to produce for the next season and *vice versa*. Due to the unregulated nature of the market, this strategy always fails, especially in the period of bumper harvest where storage is impaired by lack of technologies and facilities. In this respect, farmers are compelled to sell off their output at any given price.

Another notable constraint originating from the unstructured nature of the Agric market is poor information sharing. There is no system in place to provide the necessary information to prospective agripreneurs in terms of sources of inputs, market size, supply channels, among others. The role of Agricultural Cooperative Societies in influencing the marketing of agricultural produce in Nigeria is also very weak. Among the stakeholders that have bewailed

the constraint originating from unstructured market systems include participants of the interview who are also existing agripreneurs. Below are the responses of the participants with significant bearing on the subject matter:

The number one challenge is that the agribusiness space is largely unstructured in terms of market structure, regulation, funding, and in terms of access to technology. There is a weak structure around it. You cannot easily identify ecosystem actors. It is only now that a lot of more traditional agribusiness actors are coming into the field that you now get to see attempts to structure the market. For example, if I want to start a maize processing business today, there is nowhere I will go to get information on the size market, major suppliers, varieties available in the market or the regulation guiding processing and export of maize. There is nowhere I can get that information. I have to speak to different people, different organisations in different places and that makes it difficult to get into that space.

If I use the Porters-5 forces for example, the industry is very complex. We are dealing with different actors. If I look at the power of the consumer, it is very high, because consumers will decide what to buy, they won't just take what you bring to them. If I look at the power of the seller, because of the fluctuations in prices and the inconsistencies in the markets and insecurity in most of the maize-growing areas, my prices will be fluctuating. The market is very unstructured, fragmented and you have to deal with different actors, both state-players and non-state actors for you to play in the sector. It is a very unstructured industry, just that because of the high level of unemployment, that is why people are playing in it.

The issue that I think we have in the market is that we don't have the right approach to the difficult market we are in. And so, I think the area where people, like you and I, especially those who are not members of the government can do our part is in developing an ability to navigate the market for what it is. Sometimes I call it playing the market... I want to write a paper on what the obstacles in the market are, and what are the issues that prevent the market from working, that is one approach.

There is no unity, no regulations, no regulatory body for the profession. No ethical farming, no sanctions for wrongdoings. If there is a governing body, it will unite the

whole body, and as a body will be able to bring change. Apply ethical conduct to farming business, regulate price and market control even to the global standard.

Also, there is no government incentives or regulatory system. For instance, the prices of some goods have to be controlled, there is inconsistency in the prices of some materials like fertiliser. If I were to buy one pack of fertiliser for ₦13,000 this week, by next week, the price might have jumped to ₦15,000. Fluctuation in the market price without regulatory control. Chemicals are going up because they know we will always need it. Sometimes, you buy some seedlings to plant, and you find out that the seed is no longer viable. Little things like this are so demoralising and 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. So, they can actually get what they want. But in Nigeria, you cannot even project. By the time you harvest, you will start looking for buyers, even after seeing buyers, the pricing is not favourable from potential customers. These are the major challenges. I believe Nigeria needs to have a pricing control system. There is a need to have a regulatory price control body that will absorb anything farmers are bringing to the market. In short, there is a need for a restructured market.

But nowadays, there is no price regulatory body, and everyone comes with their different desired price. There is no uniformity in the price of farm produce across the board (among farmers). ...I think the government should fine-tune the market structure in a way that any farmers who produce a certain quantity of goods who have assurance of a standby customers to buy them. That would encourage me to work more. I would also be able to make my cost planning and ensure efficiency before planting in a year and season. Market price has to be structured per year and season without any inconsistency to allow farmers to make profit and avoid outrageous sales of products from inconsistent or seasonal farmers who really are not into the business.

7.6 The role of agency in turning constraints to opportunities within the Agricultural Ecosystem.

The concept of agency is a fundamental element encapsulated in the capability approach and it hinges on the relevance of active and self-directed choices, and actions which people exert on others with the aim of enhancing their individual and shared welfare. The concern for both self

and others are the core tenets of agency in Sen's capability approach. The idea of self-interest is explained by the need for an individual to improve his/her wellbeing.

Agency refers to the capacity to act on behalf of the things one values, or in line with one's concept of what is good (Alkire, 2009; Sen, 1984). According to Sen (1985a), a person's 'agency freedom' refers to what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important. Thus, a person's agency cannot be assessed without consideration of his/her own conception of good. The good might have an impact beyond the wellbeing of the agent. In this way, an 'agent' is differentiated from a 'patient' whose only concern is his/her own wellbeing (Robeyns, 2000).

Sen also presented the idea of non-self-interested agency, whereby an individual is not only interested in his/her own welfare but places a premium on the wellness of other individuals in the society. In this regard, it is believed that an individual can derive utility (satisfaction) by exhibiting sympathy toward others. For instance, once an individual sees his/her individual suffering, he/she can move to stop such an unpalatable experience in the life of that individual. This forms the normative account of agency in the capability approach (Crocker & Robeyns, 2010).

In differentiating between wellbeing and agency, Sen (1985a) aver that since the transformation of goods into valuable functionings is associated with "achieved wellbeing", a possibility exists that there will always be some interpersonal differentials in people's ability to transform goods into valuable functionings. Also, when an individual has the actual freedom to decide what opportunity (such as participating in agripreneurship) to harness or the particular capability to maximise, it thus implies that a life of happiness and satisfaction is a life built around freedom (Sen, 1985a). In this regard, the role of agency materialises in the individual's capacity and sovereignty to freely choose the most valued option(s) from a pool of capabilities, as well as his/her ability to carry out the activities that are essential for converting those esteemed "goals into actual beings and doings" (Conradie, 2013).

Crocker and Robeyns (2010) also emphasise the role of a "complex ideal of agency" in Sen's capability approach. In this instance, the complex ideal of agency best relates to the notion of empowerment which enables individuals to convert goals into actual beings and doings. The expanded view of Sen's concept of agency is governed by four principal conditions which include "action, reason orientation and deliberation, self-determination, as well as impact on

the world” (Crocker & Robeyns, 2010; Conradie, 2013). For instance, when an individual identifies both constraints and opportunities that are associated with agripreneurship involvement, self-determination will compel such an individual to take action with a view to converting those constraints into opportunities. The basis of participating in agripreneurship is to achieve improvement in wellbeing.

In a nutshell, while agency is the manner in which individuals are freely engaged in their own activities that are more valued, empowerment is the process of equipping individuals with the necessary ability to facilitate the actualisation of their value functioning. According to Drydyk (2008), when individuals are empowered, their agency becomes enhanced towards achieving their desired ‘wellbeing freedom’ that will further sustain their lifetime satisfaction.

Another drive of agency is motivation (Alkire & Deneulin, 2009). For instance, when people see the intrinsic benefits of participating in agripreneurship notwithstanding the prevailing constraints, they will always make efforts to overcome those constraints which they will then convert into opportunities. Such motivation can emanate from the individual’s desire for mastery or the quest for recognition. The autonomy driven by agency can thus serve as a principal enabler (propelled by self-determination) that helps an individual in transforming inhibitors (constraints) into opportunities.

This focus on agency implies that any evaluation methods informed by the capability approach must take into account the aspiration and needs of the affected people. Exploring agency towards agricultural entrepreneurship is one of the focus areas of the study. The consideration of aims, objectives, norms and obligations bring to bear issues of adaptive preferences and restricted agency, thus highlighting the link between a person’s social conditions and his/her preferences (Zheng, 2007). Sen (1984) explains adaptive preference by arguing that ‘the most blatant forms of inequalities and exploitations survive in the world through making allies out of the deprived and the exploited’ persons in situations when ‘people learn to adjust to the existing horrors by the sheer necessity of uneventful survival, the horrors look less terrible in the metric of utilities.

7.6.1 From Resilience to Transilience

Basically, the concept of transilience is derived from two words; ‘transformative resilience,’ and was adopted in the study of Balogun, Obamwonyi and Falade (2021), who presented a literature review on the transition from resilience to transilience from the angle of cross-

examining thoughts on youth agency as well as social innovation with significant testament from Nigeria. The study established that young people are now defying all odds by making tireless and remarkable efforts in taking part in political institutions, private endeavours as well as social systems. According to Balogun, Obamwonyi and Falade (2021), the idea of transilience is born out of the deep recognition that through social innovation, the youth can exhibit the spirit of resilience, and further push beyond structural and functional challenges. These young individuals unflinchingly thrive beyond the prevailing risks by using their sheer determination to innovate policy and culture.

Transilience is also understood to mean an emphasis on the imperatives of collective action in dealing with wicked problems; thereby reinforcing a people centred approach to development. This is such that it allows for ideas and leaders to emerge from the local context to inform the broader vision of society...This thinking creates a condition for sustainability and transformation to truly occur, because it provides the opportunity for young people to own the process of change. Fundamentally, this holds the potential to facilitate the collective ability of young people to rise above the structural issues that perpetuate vulnerability, marginalisation and poverty, rather than trying to survive in midst of risk and adversity (Balogun, Obamwonyi & Falade, 2021).

Thus, the principal focus of this section is basically to ascertain and evaluate how young people are challenging obstacles and turning them into opportunities for social and economic development, through agripreneurship participation. The transition from resilience to transilience is deeply informed by the recognition that entrepreneurship hinges on turning problems into opportunities. This is where the role of agency is well-established. For instance, through agency, one can leverage on a seemingly bad thing (such as poor and inadequate infrastructural facilities, insecurity or weak government policies) to achieve greater good (functioning) which can take the form of self-determination to actively become involve in agripreneurship.

Essentially, the concept of resilience describes the tendency for systems to persevere when unexpected changes occur/reoccur in those systems (Norris, Pfefferbaum & Pfefferbaum, 2008; Sawyer, 2018). This notion is established on the recognition that change is inevitable. Since a series of changes occur in a system, resilience defines how well the system is able to withstand these changes. Also, these changes that occur in a system originate as principal shocks that have the tendency to tip the system off balance. Changes in this esteem represent points of crises, and adversities that are characterised by a period of uncertainties, thus,

distorting the system from functioning in its natural form. Due to the manifestation of these changes, the system has to find viable means of survival and further ensure long-term sustainability.

Thus, resilience helps in understanding the degree to which the system can successfully absorb these unexpected shocks to function effectively in the heart of difficulty and all forms of structural wickedness. In the context of Nigeria's Agricultural Ecosystem, resilience helps in understanding the degree to which Nigerian youth can thrive in the face of the unexpected shocks originating from the scourge of unemployment, poverty and other constraining factors that constantly interact with each other to inhibit individuals from realising their agripreneurship dreams.

In recent times, there have been arguments surrounding the position and behaviour of Nigerian youth in the face of the rising youth unemployment. For instance, taking the lead was the President of Nigeria who in 2019 went on air to declare that "Nigerian youths are lazy", a statement that generated a series of heated controversy in the country, citing the number of young Nigerian entrepreneurs that are thriving exceedingly well both in Nigeria and the diaspora. Specifically, the Nigerian President argued that Nigerian youths are the major contributors to the rising spate of youth unemployment in the country through their alleged laxity which the President claimed they use as a justification for their unemployment (Sanni, 2021).

The study of Sebanwa and Semuhoza (2021) also attacked the Nigerian youth citing that "there is the scourge of internet fraudsters known as YahooYahoo. Interestingly, the teeming youth populations are the major players when it comes to this societal menace". Another notable study that painted young Nigerians as lazy is Iyorza and Enyindah (2021), who accused Nigerian youth of excessively spending "quality time at pubs, drinking and partying" when they ought to utilise such quality time for meaningful activities that will add to their productivity and the growth of the nation in general.

In sharp contrast to the notion and submission that young Nigerians are lazy, Egwu (2021) asserts that Nigerian youths are well-endowed with initiative, determination and courage. Ideally, it is plausible to acknowledge that all the social vices (crimes) associated with some young Nigerians are also predominant in other countries, both developed and emerging (Saqib, Rizvi, Ozair & Rasheed, 2021; Abdusalamovich, 2021; Adyaksantoro, Sudarsono, Budiono &

Madjid, 2021; Davronov, 2021). There is therefore the need to harness the potential of the Nigerian youth as they have demonstrated dogged spirit in entrepreneurship notwithstanding the obstacles surrounding the global business space.

The notion of transilience can be seen as a paradigm shift from “the youth are lazy” to “the youth are creative, innovative and hardworking”. The concept aims to debunk the position of previous studies that have labelled the youth with all manner of negative identifiers. Therefore, the study is another attempt at reversing the ridiculous accounts that antedates imminent doom for the future of young Nigerians. Specifically, the study challenges the extant ignoble narrative about the youth, thereby presenting the reality of youth agency in driving agripreneurship involvement among the Nigerian youth.

The concept of agency enables individuals not only to withstand obstacles, but also to turn those obstacles into opportunities for achieving the need of self-actualisation. This is where the idea of ‘*transilience*’ set in. Thus, in the context of Nigerian Agricultural ecosystem, the study attempts to demonstrate how youth agripreneurship participation materialises even in the face of unemployment, marginalisation, vulnerability, poverty, *inter alia*. Contrary to the narratives that downplay the resilience and transilience efforts of young Nigerians, studies have shown that Nigerian youths are enthusiastically winning in political institutions, private endeavours and social systems with clear evidences that utterly defy the odds originating from the structural wickedness (Ismail, Olonisakin, Picciotto & Wybrow, 2009; Tsekoura, 2016; Balogun, Obamwonyi & Falade, 2021).

The study revealed that indeed, young Nigerians are winning by employing their agency to cope with the prevailing socioeconomic obstacles, while driving in viable, creative and innovative solutions to the existing problem of youth unemployment and poverty in the country through agripreneurship intention, participation and other achieved functionings. The responses of some of the participants who offered insightful contributions in the context of challenging obstacles and turning them into opportunities for social and economic development, are provided below:

If you look at the Industrial Revolution in Europe, it was not an enabled environment. People had to make it work first, and then the system became more inclusive over time. We need to become better at solving the problem. When people learn a new approach

to solving a problem that is probably the best bet you can give them to succeed. Because you might get the money, make a mistake, and not have the money anymore.

I think the federal government has a number of challenges that make road infrastructure difficult...I think we are likely going to do it the other way round. Businesses need to begin to thrive in the absence of infrastructure and use their success cases to advocate to the public authorities that will increase infrastructure development, much higher could be done. I think we just have to remain at the table with those in Government and use results as evidence in making agriculture work. It is going to be more than one president but a commitment and alignment to make this work.

Majority of the challenges I am having, I tried to solve them and turn it to another business. That is what I usually do. One of the major problems of agriculture is marketing and sales. So, when I observed that this is a problem, and we do not have people who can do salesmanship in Nigeria anymore. So, we decided to incorporate sales and distribution in the work of the sales force in one of my existing companies. We are currently working to recruit 100 salesmen to work with us before the end of the year. In short, I started to ideate and implement this because it has been a great challenge for us selling our products. Marketing and sales of Nigeria local products are not taken up as compared to foreign one. It is a challenge. The only way to sell a local product is to have individuals that can sell with word of mouth. So, we devised a way around that for people to sell our product and other products.

First, I came from a poor background, and growing up I realised and understood that there is a need to produce foods at a cheap level. Secondly, I also observed that there is 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 into that field. Another one is the need for food security. No one can stay actually without food.

It therefore follows that, despite the unremitting failure of the Nigerian system to fulfil its promises of creating a good life for its citizenry, the recent findings on youth transiting from resilience to transilience are clear indications that young Nigerians are not slothful actors

(Balogun, Obamwonyi & Falade, 2021), but advocates of social transformation who carve their own niche through entrepreneurship involvement (Abbink, 2005). In all, evidence of young Nigerians transiting from resilience to transilience establishes the implicit notion that these youths are currently cruising in their course to refine the narratives by portraying themselves in a creative, innovative and highly spirited manner, while being socially wary of their current circumstances, and bouncing over such situations that exert significant influence on them in the course of their transformation voyage (Abbink, 2005; Harry, 2013).

7.6.2 Constraints as a Capability

In the context of the conventional theoretical *apriori* expectation, constraints are regarded as capability inhibitors. As valid as this position may be, the study also saw the need to look through an alternative lens whereby constraints are refined into capabilities through the instrumentality of agency. This is in consonance with the discussion on young Nigerians transiting from resilience to transilience. As one of the interviews noted:

I think we are likely going to do it the other way round. Businesses need to begin to thrive in the absence of infrastructure and use their success cases to advocate to the public authorities that will increase infrastructure development, much higher could be done. I think we just have to remain at the table with those in Government and use results as evidence in making agriculture work.

Looking at Nigeria's agricultural ecosystem, the reviewed literature on youth agripreneurship exposed an avalanche of issues characterised by amoebic structure which is currently bedevilling the country's agricultural space. As noted earlier, Nigeria's agricultural ecosystem is a grand amalgam and a composite node of constraints, opportunities and agency. Thus, agency plays a significant role in turning constraints into capabilities (opportunities). For instance, through self-determination, an individual can identify certain constraints as seen from the testimony above, and convert those constraints into capabilities.

Lack of infrastructure is a major constraint inhibiting agricultural production in Nigeria. Yet, business must go on in the face of this challenge. It is the results that will now compel the government to recognise the need to expedite efforts toward infrastructural development for improving agricultural production in the country. In the light of the above submissions, it can be argued that if constraints can be turned into opportunities for functionings, it is thus fair to argue that constraints are capabilities (that is freedom/opportunities to achieve functionings).

However, it is also noteworthy that for constraints to be converted into opportunities for functionings, there are certain conditions that must prevail. First, there is a need to assess the conducive nature of the environment that helps turn constraints into opportunities and functionings through the power of agency. This necessitates a convincing answer to the question bordering on why some people are able to turn their challenges into functionings, even when others are crippled by those challenges.

To add to that, the Sen's conversion factors concepts become apropos. As stated earlier, the capability approach focuses on the effective opportunities which people have to do and to become what they value. As noted by Sen (1999), capabilities connote a combination or a set of both institutional and social opportunities which interacts with agency, or personal engagement. To answer the question of why some people are able to turn their challenges into functionings even when others are crippled by those challenges - there is the need to x-ray the various factors that can impact one's ability to engage in and succeed in agriprenurship. These are called conversion factors in capability approach phraseology.

Also, the three conversion factors reflect the personal, social, and environmental characteristics that can either aid or hamper the achievement of a given functioning (Sen, 1992; Robeyns, 2005). They do not have to work in isolation but are interwoven in their manifestation. For example, the culture of a given society can stimulate or inhibit an individual's agency or sense of ability to undertake agriprenurship (Roomi, Rehman & Henry, 2018).

In terms of personal conversion factors, the question that should lead in this esteem is whether some individuals have the resilience to convert constraints into capabilities while others don't. It is a well-established fact that individuals differ by abilities to get things done or achieve certain aims in life (Abbas, Ekowati & Suhariadi, 2021). Also, the mental ability to process constraints into opportunities necessitates an individual to project into both the direct and secondary benefits that lie ahead of the overall success, and this ability varies across different individuals as well as the specific circumstances in which the individual is enclosed.

Thus, when an individual has a strong self-determination to transform constraints into opportunities, their likelihood of success becomes higher compared to those who are shallow minded. This suggests that personal disposition (personal factor) can serve as both an enabler and inhibitor in an attempt to convert constraints into opportunities. The response of the participant presented above is evident that the respondent in question already saw opportunities

to influence government decisions to build infrastructure despite the constraints originating from inadequate and decayed infrastructures in the country. It is needless to state that others may never see such opportunities in a similar picture.

Aside from personal conversion factors, there are social conversion factors that also play a vital role in influencing an individual's ability to convert constraints into capabilities. One prominent example of social factors is the concept of culture. There are certain cultural practices that are very helpful for turning constraints into capabilities. A notable example of such culture is the 'Igbo Apprenticeship System' which emerged in the aftermath of the Nigerian civil war (Kanu, 2019). The success of Igbo commercial traders is largely attributed to the unpalatable experience of the civil war that lasted from 1967 to 1970 (Iwuagwu, 2012; Doron, 2014; Bawa, 2020; Okwuosa, Nwaoga & Uroko, 2021).

Following the demise of the civil war, the Igbo commercial traders (businessmen/women) developed the culture of '*Ubuntu*' that led to the formation of the 'People's Club of Nigeria' (Wilson, 1987; Uduku, 2002) with the philosophy; '*Onye Aya na Nwanneya*' which is translated as 'do not leave your brother behind'. The Igbo apprenticeship model best explains how culture influences people's ability to turn constraints into opportunities as people are obliged to take on their neighbours and train them in business and settle them to start theirs. This is how a new culture helped Igbos turn the tragedy and constraints of the war into building business empires (functionings).

The Igbo Apprenticeship Model is an indigenous framework driven by three principles that shape the economic prosperity of the Igbo people. These principles include the "Igbo Social Construction of Reality" where it is believed that "a person is a person because of other people, it takes a village to raise a child, behind an able man, there are always other able men", etc. (Kanu, 2019).

Another fundamental principle of the Igbo Apprenticeship System is the philosophy of resilience. To explain this tenet, Kanu (2019) wrote;

"If the Igbo must qualify to live in the world of the ancestors, he needs to achieve personal success, which is economic, social, moral and biological (long life). Failure in any of these implies exclusion from the community of life, both earthly and other worldly. This explains why the Igbo adapt themselves to any condition no matter how difficult it is to achieve their

aim. Thus, the Igbo person sees life as a struggle in which he must put all he has in order to live a successful life. If the Igbo is seen working hard, competing and admiring personal achievement, it is because these have great weight on his eschatological destiny.

The third principle of the Igbo apprenticeship model is the ‘the Igbo Think-Home’ doctrine. According to Kanu (2019):

The Igbo, even before the Nigerian Civil War, have never forgotten home. There is an Igbo saying that goes this way: *aku ruo uno* (which means the wealth must reach home). If a person is known all over the world but not known in his home town then he is not known at all. If a person does not make an effort to return home, he or she is referred to as an *efuru efu* (which means the lost one). However, with the Nigerian Civil War, after which the property and wealth of the Igbo were seized by the Nigerian government, the Igbo were stranded and couldn’t access anything and had to begin all over again, the philosophy of *cheruo uno*, which means “think home” became more popular among the Igbo.

One key variable that features among the environmental conversion factors constraining agripreneurship participation is lack of agricultural financing. For instance, Ndanitsa, Adetunji, Mohammed and Ndako (2021) bewail that untimely approval of agricultural loans and advances, inadequate amount of loan, lack of sufficient information and equipment, poor funding, unwarranted agricultural loan diversion by government officials, favouritism, fraudulence among lenders, high interest rate, hostile demand for collateral, poor agricultural credit distribution, short repayment period, undue bureaucracy, as well as weak state of infrastructure remain the key constraints militating against agricultural productivity in Nigeria.

However, to overcome this challenge, a number of farmers have come together to pool their resources under the umbrella of “agricultural cooperative society’. Today, there are a number of such co-ops who assist their members (farmers) in raising the required funds for agricultural financing, and these associations are thriving in the face of the finance-driven constraints to Agric production in the country. Also, these economic enterprises have achieved meaningful success in boosting the socioeconomic wellbeing of their members by constantly assisting them (farmers) with funds, especially in the periods of economic hardships (FAO, 2021).

Some of the Nigerian Agricultural Co-operatives Societies that are currently in existence include Abejukolo Fadama Agric Co-Operative Society, Ailoje Royal Farms Multipurpose Cooperative Society Ltd, Co-operative Supply Association, De Parach Multipurpose Co-operative Society Limited, Food Defense Corps, Nigeria, GreenLife Multipurpose Cooperative Society Nigeria Limited, Nasara Agricultural Cooperative Society (NACS), New Generation Farmers' Multi-Purpose Co-operative Society, among others (Finelib.com, 2016). Arising from the foregoing, lack of agricultural financing can be seen as an environmental conversion factor that aids transilience in Nigeria's agricultural ecosystem.

7.7 Necessity versus Opportunity Entrepreneurship

Essentially, necessity and opportunity entrepreneurship point to two fundamental factors that influence the birth of entrepreneurship ventures (Fairlie & Fossen, 2018). Necessity entrepreneurship can be described as a business venture that is birthed as a result of the manifestation of constraints that inhibit individuals from exploring other viable (most preferred) livelihood alternatives. Opportunity entrepreneurship is a business enterprise that is born out of identifying opportunities that exist in the industry/sector in which the business operates. These opportunities can be in the form of access to finance, increasing demand or availability of a large market for the products, market penetration/diversification opportunity, human capital endowment, high absorption capacity of the industry/sector of operation, lower entry barriers, Government incentives, access to raw materials, among others.

In the case of necessity entrepreneurship, there are individuals who have career plans, but when they can't get a means to pursue their preferred option, they eventually settle for whatever options that are available to them. This means that these individuals may not derive optimum satisfaction from such undertaking due to loss of deep passion for such endeavour. For example, someone may decide to embark on agric entrepreneurship due to lack of employment opportunities in Nigeria. On the other hand, the effects of unemployment and poverty (constraints) are significantly felt when individuals with beautiful business ideas are inhibited from putting those ideas into reality as a result of their inability to raise the required start up capital. For instance, some of the youth may have the intention to venture into agriprenurship after working for a short while. They have the thought of raising capital on their own when they find something to do.

In this esteem, these individuals (necessity entrepreneurs) emerged as entrepreneurs either as a result of lack of other employment opportunities in the job market or inability to launch their best business ideas due to certain constraints (Reynolds, Bosma, Autio, Hunt, De Bono, Servais & Chin, 2005).

Aside from the menace of unemployment, family pressure can also contribute to the formation of a necessity entrepreneurship. This happens when an individual is compelled by relatives to take up certain business ventures irrespective of the disposition of the necessity entrepreneur. For instance, Giacomini, Janssen, Guyot and Lohest (2011) found that “not all job seekers are necessity entrepreneurs and that new venture creation based on family pressure may convey a necessity dimension” of entrepreneurship.

Apart from poor satisfaction/fulfilment, another downside of the necessity entrepreneurship according to Block, Kohn, Miller and Ullrich (2015), is that “the low motivations to embark upon the entrepreneurship can adversely influence the strategy of a new venture. Because necessity entrepreneurs are pushed into entrepreneurship, they often are in a less favourable position than other entrepreneurs to carefully plan their new initiatives”. This set of entrepreneurs may thus find it difficult to expand their strategic options or strengthen their strategic position in the wider industry.

Block, Kohn, Miller and Ullrich (2015), note that “the strategies of new ventures are shaped vitally by the motivations of their founders and the specific economic situations leading to their decision to launch a venture”. This means that an opportunity entrepreneur will tend to prosper more, compared to a necessity entrepreneur. This is because, the opportunities that motivated the opportunity entrepreneur into the business world will enable the business to effectively compete with its rivals especially those who were birthed on grounds of necessity.

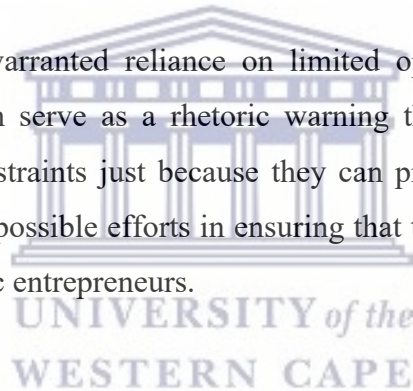
The opportunity entrepreneur will tend to leverage on the prevailing opportunities and explore more business advantages, while the necessity entrepreneur may lack the motivation to dig deep into the business space for sustainable operational strategies that will promote competitive edge. This could be the ability to locate new markets or expand existing ones in the face of economic uncertainties in the domestic economy or existing market (Block, Kohn, Miller & Ullrich, 2013).

For all intents and purposes, the concept of necessity and opportunity entrepreneurship helps us understand that constraints may not help to produce the best of agripreneurship experience.

This is because, when people (necessity agripreneurs) start Agribusiness because they are hungry or have no jobs (constraints), they don't tend to do well like those who started similar Agric ventures as a result of the opportunities they identified (opportunity agripreneurs) in the line of business or in the industry at large.

In fact, according to the Global Entrepreneurship Monitor 2020/2021 Global Report, necessity entrepreneurship is prevalent in developing countries like Nigeria (Niels, Stephen, Aileen, Donna, Maribel & Thomas, 2021). So even though the country's entrepreneurial activity is relatively high, it is mainly entrepreneurship and thus mostly informal businesses with lower capacity to create jobs. On the other hand, opportunity entrepreneurs can easily expand their business scope/operations to absorb more inputs and capture more markets. Hence, they tend to create the kind of big firms that create big jobs, thereby plummeting the incidence of unemployment in the country.

It therefore follows that, unwarranted reliance on limited opportunity of constraints and necessity entrepreneurship can serve as a rhetoric warning that individuals shouldn't just celebrate the existence of constraints just because they can produce functioning. However, there is the dire need to make possible efforts in ensuring that the conditions of life are well-enhanced for the aspiring Agric entrepreneurs.



7.8 Chapter Summary

The chapter covered Nigeria's Agricultural Ecosystem as a complex intersection of constraints, opportunities and agency. First, issues relating to agricultural entrepreneurship as a valuable functioning, agricultural entrepreneurship and the need for poverty and malnutrition eradication, agricultural entrepreneurship as an opportunity to express one's passion/interest as well as agricultural entrepreneurship as an opportunity to express one's freedom were discussed. Thereafter, the chapter evaluated the various employment prospects for the Nigerian youth, unemployment as a constraint on capability and unemployment as a poverty trigger. Other prominent issues addressed in the chapter include investigation of the various constraints in the Agricultural Ecosystem in Nigeria with specific emphasis on insecurity and weak Government policies, increasing finance and production costs, weak and inadequate infrastructure, poor human capital development and unstructured market systems.

The role of agency in turning constraints into opportunities within the Agricultural Ecosystem was further discussed, while making reference to the need to transit from resilience to transilience while presenting constraints as a capability. The concluding section of the chapter offered a discussion of two principal drivers of entrepreneurship intention, namely necessity and opportunity, thus giving birth to necessity entrepreneurship and opportunity entrepreneurship. The distinctions between the two were also discussed, while drawing a logical conclusion based on current realities in the context of the Agricultural Ecosystem in Nigeria.

Chapter 8: Expanding opportunities for successful youth agripreneurship in Nigeria

8.1 Introduction

As discussed earlier in section 2.4 of this thesis, the federal government took a bold step by introducing entrepreneurship education programmes as a way of addressing the scourge of youth unemployment in the country. Specifically, in order to effectively deal with the grave socioeconomic challenges of unemployment in Nigeria, the federal government directed all universities, polytechnics and colleges of education to include entrepreneurship education as part of their curricula, starting from the 2007/2008 academic session (Nwekeaku, 2013).

For the universities, the mandate was to be implemented through the National Universities Commission (NUC), while the National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE) were responsible for the polytechnics and colleges of education, respectively. In light of the foregoing development, all higher education institutions in Nigeria were to run entrepreneurship studies as a compulsory course for all students, irrespective of their fields of study. However, the issue currently lies in the efficacy of these entrepreneurship programme introduced over a decade ago in Nigeria's tertiary education.

Other specific issues that will be addressed in the chapter include the efficacy of youth intervention and Agric programmes in Nigeria earlier discussed in section 2.3, the need to look beyond training and perception by tilting towards a more comprehensive mechanism for boosting youth entrepreneurship engagement, citing the role of culture, education, business climate, as well as gender as capabilities.

8.2 Efficacy of the Entrepreneurships Programme in Nigeria's tertiary education

The implementation of the entrepreneurship programme in Nigeria's tertiary education involved the design of a curriculum that is all-encompassing in developing the spirit and culture of entrepreneurship (Aja-Okorie&Adali, 2013). Nevertheless, in spite of the dogged spirit that motivated this new initiative, Anaele *et al.* (2014) bewail that there was a staggered execution of entrepreneurship education in various segments of education in Nigeria. For instance, Eze and Nwali (2012) decry that prior to the 2011/2012 academic session, only a limited number of universities such as University of Benin, Covenant University and Obafemi Owolowo University were successful in internalising the entrepreneurship education programme in a

practical manner. This suggests that the proposed entrepreneurship programme was already partly dead on arrival.

Also, in spite of its subsequent adoption by several other higher institutions of learning in Nigeria, the principal aim for which the entrepreneurship education programme was originally designed is still far from being realised in the country. This is best explained by the surge of youth unemployment despite the number of youth graduates that have benefited from the entrepreneurship education programme in their undergraduate years. Also, one of the prominent agriprenurship constraints identified in the survey is poor human capital development born out of the utter failure of the educational system to develop the skills needed by the market.

Specifically, there is a big gap between education and industry/work, thus facilitating the major argument that the quality of graduates produced by these institutions in the country is low and this renders them unemployable (Jacob, Monsurat & Musa, 2021). This obviously points to the fact that the programme has not been effective. Having a youth unemployment/underemployment rate of 63.1% as at the second quarter of 2020 (NBS, 2020) when the country reportedly produces about 600,000 graduates yearly (Babalobi, 2019) is evident that the Nigerian educational system leaves much to be desired.

To further validate the ineffectiveness of the entrepreneurship education programme, Nwekeaku (2013) laments that the demand for graduates in the labour market has continued to decline, leading to a mismatch between demand and supply, and consequently a high unemployment rate among university graduates. This institutional impasse was earlier emphasised in the study of Agboola (2010), who bemoans the utter misalliance between the skills and knowledge needed by the Nigerian labour market and those produced by the Nigerian educational system.

The inability of the system to effectively equip students with relevant skills and attributes required by a highly competitive business world is a true definition of the inefficacy of the entrepreneurship programme in Nigeria's tertiary education. This inefficacy has been proven by the rising incidence of tens of thousands of graduates who are annually pumped into the labour market for which they are not prepared (Oyinlola & Abdullahi, 2021; Obim, Nwankwo & Onah, 2021; Baba, Baba & Iwuoha, 2021; Nwankwo, Obinwa & Onwuasoanya, 2021).

8.2.1 Results and discussion

In strong alliance with the existing literature on the efficacy of this entrepreneurship programme introduced over a decade ago in Nigeria's tertiary education, the responses of the survey participants pointed to the fact that the programme has not been effective in addressing the rising spate of youth unemployment in the country. For instance, one of the participants of the interview argued as follows:

Education in Nigeria is about cramming. First, Nigeria schools do not offer all these abstract thinking and aptitude subject matter. So, you see someone who came out with first class in a subject like agronomy and does not know the days it takes maize to mature. Why? Because all they are exposed to is the theoretical concept, nothing practical. Similar thing for someone who claimed to study mechanical engineering and does not know a single bolt in a tractor. Our education needs to go back to the basics. There is a need for serious learning of practical and not theory. Students cram and pass exams while they do not know the name of what they see in the real world. Until our education is detailed enough, we are not going to get the right skill sets for all of these jobs.

Though the responses of the participants collected through questionnaires were mixed. For instance, when the respondents were asked if they took a course in entrepreneurship during their undergraduate programme, the result showed that 84.16% of them took a course in entrepreneurship at tertiary level, while 15.84% failed to do so. But again, when they were asked if they believe the course has adequately equipped them to start a business in the near future, 78.69% were in alliance, while 21.31% declined to such assertion.

On the other hand, some of the interviewees believe that the course had been ineffective:

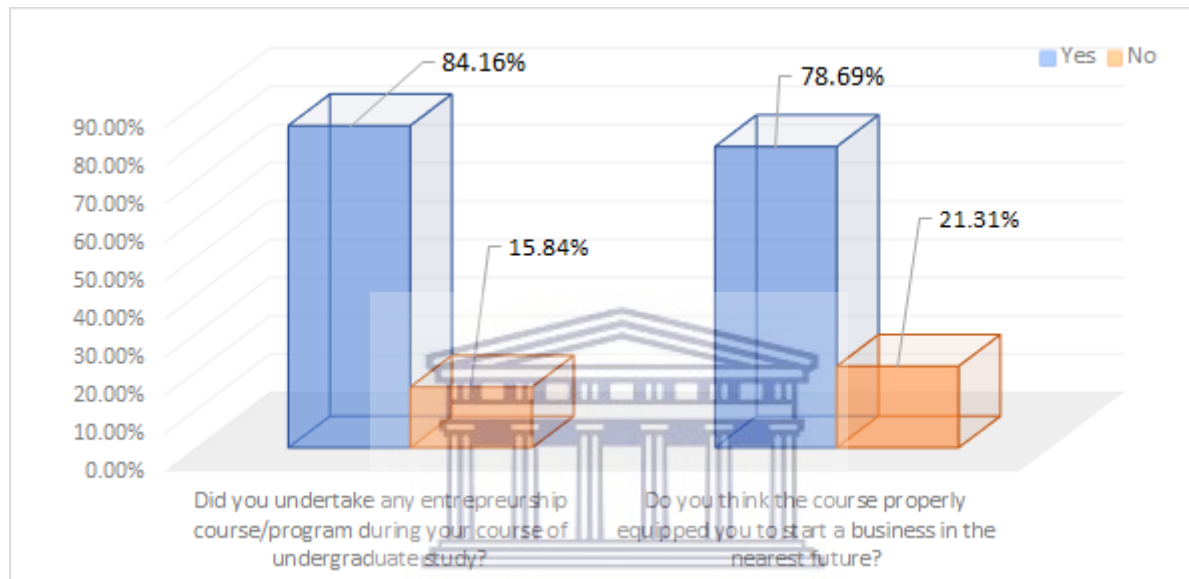
The lecturers don't teach the course passionately. We need successful entrepreneurs taking the course. The lecturers should take up the courses passionately.

There should be more practical than theoretical. In Nigeria we focus mainly on the theoretical aspect which affects the Nigeria society at large... Half-baked graduates everywhere.

What I think the government should improve on is that they should employ those who have adequate knowledge on the entrepreneurship skill, so that they can impact the knowledge to the student.

Worst off is the fact that the lectures do not have any entrepreneurial spirit.

Figure 12: Percentage Distribution of Youth Participation in Entrepreneurship programme in Nigeria



Source: Field Survey (2021)

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8.2.2 Recommended actions for improving Entrepreneurship Education in the Nigerian Tertiary Institutions

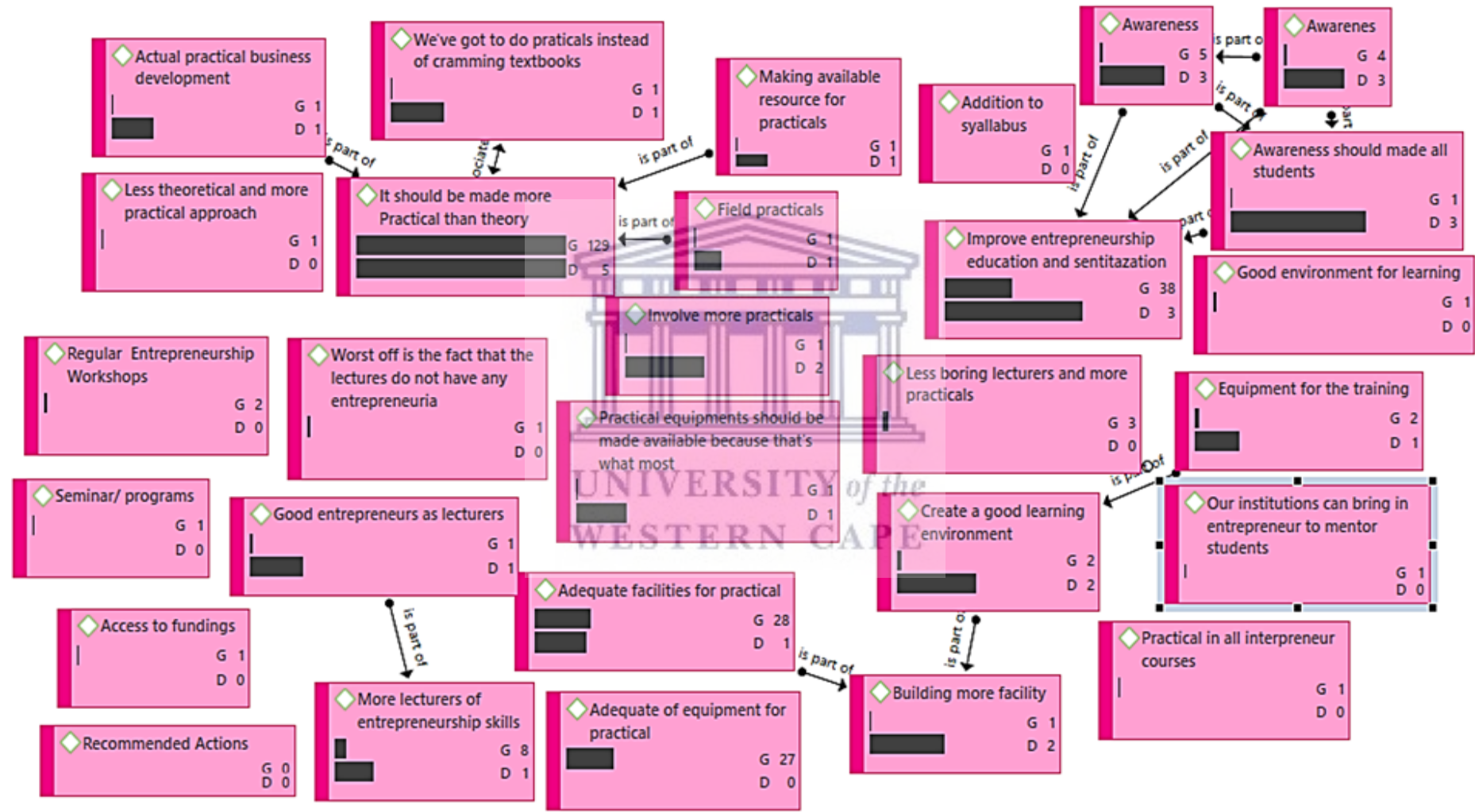
When the participants were asked to suggest possible ways through which entrepreneurship education can be enhanced in the Nigerian tertiary institutions, the qualitative responses were analysed using ATLAS.ti 9. From the analysis, the suggested actions, which were filtered using emerging themes, are indeed impressive. Below is a summary of the recommended actions for improving entrepreneurship education in Nigerian tertiary institutions.

- (1) Actual practical business development is required.
- (2) Addition to syllabus to improve learning.
- (3) Adequate facilities for practical works.
- (4) Adequate equipment for practical activities.

- (5) Awareness to all students through entrepreneurship education and sensitisation programmes.
- (6) Building more facilities for entrepreneurship programmes.
- (7) Create a good learning environment.
- (8) Good entrepreneurs should be recruited as lecturers.
- (9) Entrepreneurship education should be made more practical than theory.
- (10) Less boring lecturers and more practical lectures should be considered.
- (11) Worst is the fact that the lectures do not have the necessary entrepreneurial skills to impact on students. Thus, lecturers need to be trained through entrepreneurship programmes for better academic repositioning.
- (12) Our institutions can bring in external entrepreneurs to mentor students.
- (13) Regular entrepreneurship seminars/workshops are important for improving learning experience among students.



Figure 13: Recommended actions for improving Entrepreneurship Education in the Nigerian Tertiary Institutions



Source: Output from qualitative analysis using ATLAS.ti9

8.3 Efficacy of Youth Intervention and Agric programmes in Nigeria

As discussed earlier in section 2.3, there are a number of entrepreneurship education/interventions programmes which the federal government introduced as a way of addressing the scourge of youth unemployment in the country. These programmes include the National Youth Policy (NYP), National Youth Service Corps (NYSC) Scheme, National Directorate of Unemployment (NDE), and Youth Enterprise with Innovation in Nigeria (YouWin), Subsidy Reinvestment and Empowerment Programme (SURE-P) and N-Power programme. At state level, various governments have established various forms of programmes in their effort to tackle unemployment. The most prominent ones include the Osun Youth Empowerment Scheme (OYES), Youth Agricultural Entrepreneur Programme (YAGEP), and the Skills and Training Entrepreneurship Programme (STEP).

The OYES was established in Osun state in 2010 by the state government to curb the high rate of unemployment ravaging the state. Just like the federal government's N-Power scheme, OYES involves a two-year training programme for the unemployed youth. However, unlike the N-Power scheme, OYES has an exit plan that ensures availability of jobs for the trainees' post completion of the programme. Participants, who have successfully completed their training are deployed in public schools, civil service, agricultural initiatives, etc. The principal focus now lies in the efficacy of these youth intervention and programmes in Nigeria with specific emphasis on Agric programmes.

Notable among the Agric programmes are N-Power Agriculture (N-Agro), Youth Agricultural Entrepreneur Programme (YAGEP), Fadama Graduate Unemployed Youth and Women Agripreneur Support (FADAMA-GUYS), International Institute of Tropical Agriculture (IITA) Youth Agripreneurs, Youth Employment in Agriculture Program (YEAP), CBN Anchor Borrowers' Programme, N-Power Agro, NYSC Skills Acquisition and Entrepreneurship Development (SAED) in Agriculture, among others.

Just like the inefficiencies associated with the entrepreneurship education programme in Nigeria, the various agricultural intervention programmes have failed to adequately actualise their cardinal objectives. For instance, the N-Power programme has been flawed for its inability to cater for the growing needs of the unemployed graduates in the country. Specifically, the initiative provides only training to those unemployed youths with no clear plans to ensure that the youths actually find gainful employment after the training. As a result, the programme is

only creating an influx of supposed skilled workers without actually making any jobs available for them (Lamidi & Igbokwe, 2021). Arising from the above submission, it is appropriate to state that the efficiency of the N-Power programme remains in doubt.

Nwaobi (2019) further submits that there is relatively little evidence on the mechanisms through which the N-Power Agriculture affects the labour market. In June 2020, a report from *Daily Trust Newspaper* further showed that 500,000 beneficiaries in Batch A and Batch B of the N-Power scheme were unfairly disengaged from the scheme without receiving their entitlements (Abdulsalam, 2020), thus adding to the scourge of youth unemployment in the country, which the scheme was originally designed to address. This again questions the efficacy of the N-Power Agriculture in addressing youth unemployment in Nigeria.

The efficacy of the FADAMA-GUYS was also marred by a distasteful delay in the provision of basic agricultural inputs, poor and asymmetrical advisory services, corrupt practices among the programme coordinators, as well as its sheer inability to enhance access to credit (Nwoye and Nwalieji, 2019). A study of Adeyanju, *et al.* (2021) further established that approximately 56% of the beneficiaries bemoaned their inability to actively participate in the agripreneurship and in agripreneurship training sequel to lack of access to finance.

Furthermore, the FADAMA programme is stained by analogous inefficiencies occasioning from lack of mentorship and information asymmetry, which cripple the efficacy of agricultural planning and projects implementation in the country (Adeyanju, *et al.*, 2021). Ogbodo, *et al.* (2021) lament that the efficacy of the FADAMA programme has been weighed down by exorbitant agricultural project costs (cost of adoption), poor extension services, *inter alia*.

In the case of the Youth Employment in Agriculture Program (YEAP), its shortcomings lie strictly in its original design. For instance, notwithstanding the level of unemployment in Nigeria, the programme was designed to last only from 2014 to 2016 (FAO, 2014). It therefore means that the YEAP was not designed in alliance with the sustainable victory over the war against youth unemployment in Nigeria.

This programme was also flawed for its poor youth-coverage ratio. For instance, Gar and Rodgers (2020) lament that only 7 out of the over 461,200 young Nigerians in Alkaleri, Duguri, and Gar rural communities of Bauchi State, Nigeria, were captured as beneficiaries of the programme. This ultimately negated the core objective and hence, the efficacy of the YEAP. In the same way, the programme has been criticised for its lopsided coordination and allocation,

as well as poor monitoring framework, which have led to the significant decline in motivation among the beneficiaries (Gar & Rodgers, 2020).

Given the role of the CBN Anchor Borrowers Programme, the NYSC Skills Acquisition and Entrepreneurship Development (SAED) in Agriculture would have been a viable platform to facilitate youth agripreneurship participation in Nigeria. For instance, the Anchor Borrowers Programme would have facilitated agricultural financing among these young Nigerian graduates intending to venture into agripreneurship. However, the programme is laden with diverse challenges relating to unfavourable rate of interest and collateral which forces many applicants from the participation model (Giroh, Tafida, Morris & Marcus, 2021). Thus, in the light of the despicable rise in youth unemployment in Nigeria, both the CBN Anchor Borrowers Programme and the NYSC Skills Acquisition and Entrepreneurship Development (SAED) in Agriculture are simultaneous cases of programme failure.

8.3.1 Results and discussion

This section presents the distribution of the respondents on the basis of their involvement in the various Youth Agriculture Intervention Programmes. As shown in Figure 11, about 53% of the participants indicated that they took part in one or more Youth Agriculture Intervention programmes. Some of the programmes the youth indicated they are aware of include FADAMA Graduate Unemployment Youth and Women Agripreneur support, Youth Employment in Agriculture Programme, N-Power Agro, IITA Youth Agripreneurs, CBN Anchor Borrowers' Programme, among others.

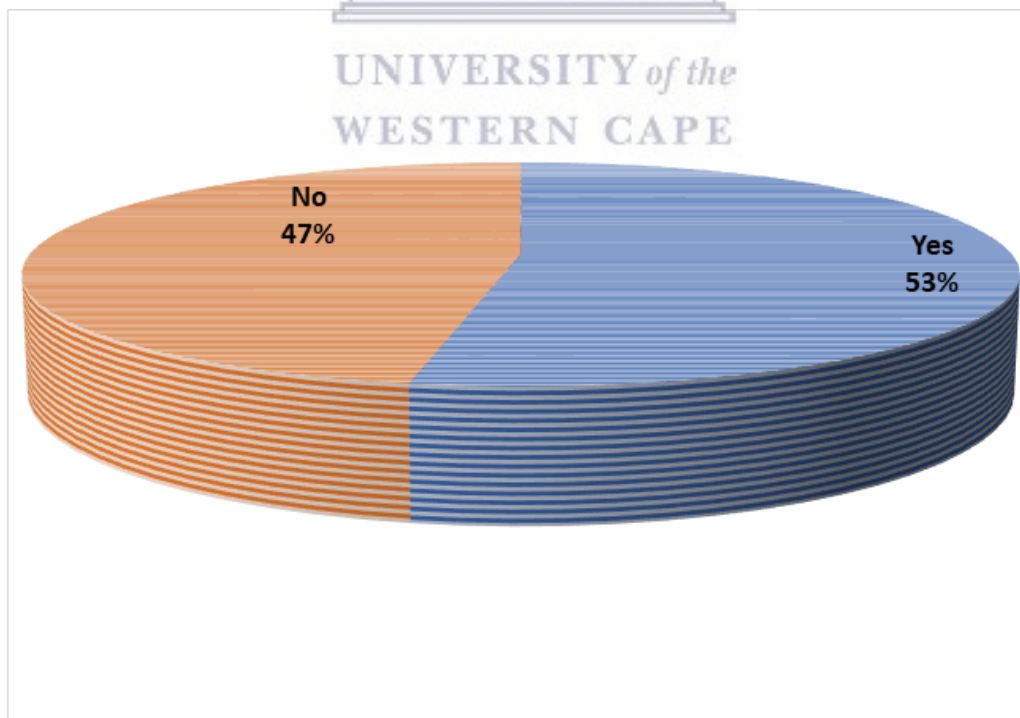
Among the Youth Agriculture Intervention Programmes, the result showed that N-Power Agro is the most popular among the youths, while the International Institute of Tropical Agriculture (IITA) Youth Agripreneurs was the least known to participants, specifically the result revealed that about 29.7% of the youth indicated they were aware of the programme, the percentage of the participants who indicated that they are aware of other specific Youth Agriculture Intervention Programmes are less than 5%, respectively. About 34% of the participants indicated that they are aware of two or more of the aforementioned programmes, while about 7.4% of the participants claim that they were not aware of any of the aforementioned programmes.

Furthermore, about 15% of the respondents also claim that they are aware of other Youth Agriculture Intervention programmes not covered by the study, while FADAMA Graduate

Unemployment Youth and Women Agripreneur support was reportedly known to about 3.4% of the participants. From the result also, about 3.7% of the youth claimed they were aware of the Youth Employment in Agriculture Programme, while the International Institute of Tropical Agriculture (IITA) Youth Agripreneurs was known to 1.7% of the participants. In addition, about 4.3% of the youth claimed they were aware of the CBN Anchor Borrowers' Programme.

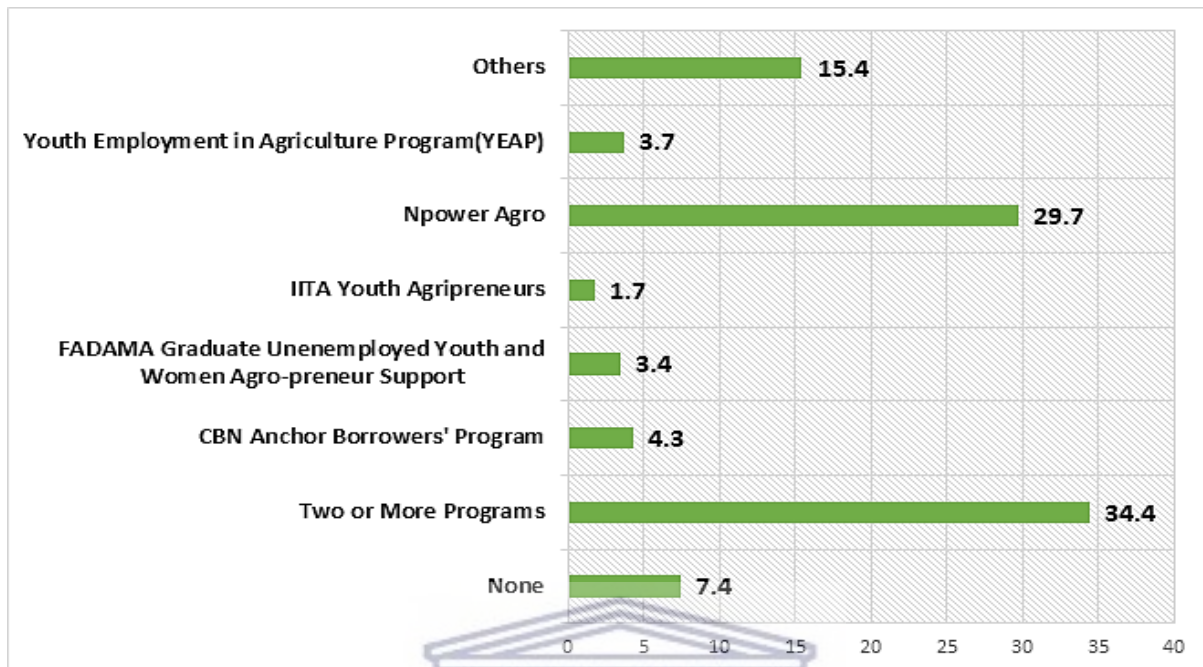
Based on the above findings, it is evident that the awareness of some of the Youth Agriculture Intervention programmes is high. However, the participation rate remains relatively low given the percentage (53%) who indicated that they participated in at least one of the Youth Agriculture Intervention Programmes. This low participation rate validates earlier findings of Adeyanju, *et al.* (2021) in the case of the FADAMA-GUYS, Giroh; Tafida, Morris and Marcus (2021) in the case of the CBN Anchor Borrowers Programme; Gar & Rodgers (2020) in the case of the YEAP, as well as the unwarranted disengagement of 500,000 beneficiaries in Batch A and Batch B of the N-Power scheme (Abdulsalam, 2020), thus, validating the inefficiencies of these programmes.

Figure 14: Percentage Distribution of Participants' Participation in Youth Agriculture Intervention Programme



Source: Field Survey (2021)

Figure 15: Percentage Distribution of Participants' Participation in Youth Agriculture Intervention Programme



Source: Field Survey (2021)

One of the participants in the interview also acknowledged the existence of N-power, but lamented non-inclusion in the programme when he applied. The respondent specifically testified as follows:

I am from the North; I am aware and know more of N-Power - Empowering the youths. Also, there are so many segments. Listed in the segment, there is NAgro, NTeach. Those are the ones I am sure of. It is a welcome development, and we would like to thank Mr. President for that. He is giving the youth an opportunity to see beyond what we are seeing now. I also applied for it recently, but I was not selected. Perhaps, because I was serving. However, I still hope to apply for it after service if the programme still lasts. Yes, I know of N-Power.

The failure of the various Agric interventions was clearly pinpointed by another participant who argued as follows:

First, there is a need to create a platform where loan is accessible easily to youths. For the youths, they do not only want to hear, but see. Therefore, make it a reality for them. For so many people, there are many ideas in their hearts and minds for the youths, and they want to execute it. But because they are not seeing the reality. Also, governments

are not willing to help the youths. Although, I cited N-Power as a way of helping them, but if you size the number of people that are interested, they are more than the accepted ones. So, there are many youths roaming about still looking for ways to create meaning to their lives. So, the government should create more intervention for them, this will go a long way in helping the youths in agriculture in Nigeria”.

A major flaw of the existing Agric interventions that defines their sheer inefficiencies is lack of implementation. This fact was validated by a participant who noted that:

There should be an Agric intervention programme for youths and ensure people get to know about, including those in rural communities and without access to the internet. For instance, in my area and household, I am the only one with a smartphone and access to the internet. Some of these intervention programmes are announced on radio, and many people do not know the process of applying and getting involved. These agencies should provide links for people to apply over the media, even if it is announced on radio. Also, many programmes are announced, people get involved in the process of applying but no further implementation after many have gone through the rigorous process of applying. No implementation of many proposed intervention projects. This has discouraged many people to further get involved in subsequent project.

The level of awareness of youth Agric intervention is indeed high as one of the participants also noted:

Yes... There are quite a number of them like that I do come across, but I cannot totally remember their names. Many of these intervention programmes came when we were in NYSC camp as well. They proposed to give grants to corps members who are willing to go into agro-allied and farming. There are many people supporting agriculture enterprises, these people are willing to train young Nigerians that are passionate about agriculture. I saw one of them on Instagram.

Another respondent explained as follows:

The momentum one is the CBN Agric intervention loan for farmers, SEFAC (Small Enterprises Interest Farmers' Cooperative). Also, as a former N-Power volunteer, I know of the N-Power Inner Group.... and also (discard) Project, H-Miss programme.

While the awareness is massive, accessibility is still a principal barrier. For instance, one of the participants lamented that:

Those who are interested in farming are in the rural communities with no access to Agric intervention programmes. So, there is an accessibility problem.

One of the avenues through which agripreneurship opportunities can be expanded is the creation and implementation of more inclusive youth agriculture interventions initiatives that will extend to potential agripreneurs, especially those living in rural communities. Interestingly, this was the position of one of the respondents who submitted that:

First, several intervention programmes should be created in each and every local government across the country. That would help a lot of people. Also, the government should ensure to recruit extensive agriculture workers. Although, there is an established ministry for this at the federal and state level. But for local governments, it is hard to find professional agriculturists working with the council. Even if you go to a zonal agriculture office, it is difficult to find necessary materials and human resources you need for your farming. There are not even capacity training development programmes and workshops for the selected few available.

8.4 Beyond Training and Perception: Towards a More Comprehensive Mechanism for Boosting Youth Entrepreneurship Engagement

So far, several empirical findings on youth perception and entrepreneurship training have been unravelled in the course of this exploration. Specifically, it was established that the majority of young Nigerian graduates exhibit positive perception about agripreneurship intention and participation. Also, many of these youth have received one form of entrepreneurship training or the other. It is however regrettable that despite this positive disposition, the level of youth unemployment is still on the increase. It is against this backdrop that this segment of the chapter presents the need to look beyond training and perception, by creating a more comprehensive mechanism for boosting youth entrepreneurship engagement in Nigeria.

Explicitly, it was earlier noted that when the young Nigerian graduates were asked if they believe that the entrepreneurship course has adequately equipped them to start a business in the near future, 78.69% responded in affirmation, while 21.31% declined to such assertion. The big question is, what happens after training? It is clear that training and good perception do not

automatically translate all the expectations into reality. Many of these young Nigerians learnt entrepreneurship in school but haven't been able to apply the entrepreneurial skills they have acquired after school.

Also, many of the respondents had a positive perception towards agriculture. The findings on the increasing level of positive youth agripreneurship perception from both the quantitative and qualitative analysis are impressive. For example, in the course of the survey, the participants perceived that agriculture is a viable tool for employment generation for the youths and this drives their intention and active participation in agripreneurship. It therefore follows that, with the rising incidence of youth unemployment in the country, neither training nor perception is sufficient to drive agripreneurship interests in Nigeria.

8.4.1 Culture as a capability

In the submission of Rao (2004), “culture is concerned with identity, aspiration, symbolic exchange, coordination, and structures and practices that serve relational ends, such as ethnicity, ritual, heritage, norms, meanings, and beliefs”. In other words, culture is a unique lifestyle of a group of individuals who share similar ideas, views, beliefs, opinions, perceptions or ideologies. Essentially, culture plays an influential and a transformative role at both individual and societal levels.

One of the participants bemoaned saying:

I have seen young people not receiving the required effort and attention to the effort of the government, because they are not willing to go into agriculture since it is not to a 'get-rich-quick' scheme.

Thus, at an individual level, culture can be seen as a potent force that can completely alter the perception, attitudinal disposition and inherent behavioural tendencies of people. For instance, through cultural shift, the prevailing youth unemployment in the country can be minimised if not eliminated completely, by changing the way young Nigerian graduates respond to their agripreneurship aspirations using the instrumentality of the entrepreneurial skill acquired in the course of their undergraduate journey.

One of the participants noted that:

People still show little interest in getting involved in such an Agric business model because it takes time, at least minimum of six months, while some a year and two years. It has come to the point that the oil and gas sector in this country has blindfolded many in seeing the potential of agricultural business.

Also, at the society level, a collective shift in culture can usher in a new wave of development that can exert a significant influence on the wellbeing of the society at large (Onyemechalu & Ugwuanyi, 2021). The collective shift in the perception, attitude and behavioural proclivity of individuals that make up the society can lead to a discovery of a new way economic activities are carried out in the wider society.

In the case of Nigeria, the country can develop a policy that will encourage every household to invest or divest a significant fraction of their interest into agriculture. This policy will make agriculture a lifestyle practised by all and not just a few selected farmers who cannot guarantee the country's food security and agricultural sustainability objective. It thus follows that a collective cultural shift will drive the process that will provoke inclusive and sustainable agricultural practices in Nigeria.

In the context of the capability approach which forms the theoretical underpinning of the study, a need exists to leverage on culture as a capability to drive agripreneurship in sharp response to the rising spate of youth unemployment in the country. A cultural shift will help mediate the role of economic and other social factors that constantly interact with culture to asymmetrically distribute relevant access to a good and promising life in the society (Rao, 2004). The inclusive orchestration of cultural shifts will serve as a strategic tool for confronting the growing economic difficulties that militate against individuals' valued functionings and the wellbeing of the society at large.

Rao (2004) notes that "culture is part of the set of capabilities that people have". This implies that, given the role of the constraints originating from insecurity, poor financing, framing devices and technologies, which principally influence the manner in which critical economic decisions are conceived, formulated, implemented and coordinated across different actors and sectors, cultural shifts will dictate how these seemingly insurmountable constraints will be swiftly addressed, citing the urgency of the necessity to stir up agripreneurship for speedy and sustainable development of the country.

As earlier acknowledged, culture occupies a prominent place as a social fundamental in the Amartya Sen's capability approach. As Sen (2000) emphasised, individuals and society can optimise their cultural ideologies in order to actualise positive economic and social transformation. According to Rao (2004), this process can be harnessed by individuals and society by leveraging on their "influence on aspirations, the coordination of collective action, and the ways in which power and agency work within a society". It therefore follows that cultural shifts can be used to facilitate public action which in this case will drive inclusive agripreneurship participation in Nigeria. In all, culture can enhance individuals' mental freedom and the capacity to drive their agripreneurship aspirations.

8.4.2 Education as a capability

This section is deeply motivated following the recognition of the obvious fact that, while normal training has not been enough, apprenticeship and experiential learning may offer better and more credible avenues for expanding opportunities for successful youth agripreneurship in Nigeria. Some entrepreneurship scholars opine that entrepreneurship knowledge, skills, and attitudes can only be effectively transferred to students through apprenticeship (Hindle, 2007). In this esteem, individuals are assigned or attached to well trained and experienced entrepreneurs who can mentor, nurture and groom the apprentice with experiential knowledge rather than the usual classroom theoretical feeding routine. Upon successful completion, the apprentice is offered the needed empowerment both financially and mentally.

Unlike the formal schooling system that produces graduates with no clue on how to absorb them into the world of work, once the apprentices complete their training, the trainer will either through own efforts or in collaboration with other well-meaning individuals, pool resources together to assist the trainees to establish their own business. The trainees are also expected to grow and develop the spirit of resilience and transilience to be able to train and empower others in the long run.

It is worthy to note here that the Igbo entrepreneurship model discussed in the preceding chapter is a valid point of reference in this respect. "The Igbo apprenticeship system is the largest business incubator platform in the world where skills are matched to make the best fit with a specific career, trade or entrepreneur" (Fakokunde, 2021). This entrepreneurship apprenticeship model has been proven to be a potent force driving the economy of the

southeastern part of Nigeria (Farayibi, 2021). The surge in economic activities in this part of the country is largely facilitated through entrepreneurship apprenticeships.

This special form of education can therefore be understood as a capability that helps to promote entrepreneurship initiative and doggedness among the self-motivated and highly spirited potential entrepreneurs who are trained to be fully prepared to withstand business pressure in their long running business endeavours (Carvalho, Yamamoto & Viana, 2018; Chukwuemeka, 2019; Ezenwakwelu, Egbosionu & Okwo, 2019; Sofian, & Mukhtar, 2021). Through entrepreneurship apprenticeship, a number of young Nigerians will be able to discover their purpose in life, this capability will reshape the thoughts of the youth and make their dreams come through.

To further this discussion on entrepreneurship apprenticeship, some of the responses of the survey participants in relation to the subject matter are offered below:

The kind of education that you would need includes practical education, apprenticeship, training, internship in the specific field of agriculture that you want to go to. Those are the kinds of education needed. You don't need your university degree; you don't even need your tertiary education. What you need is the ability to read and write which is very important in documentation and record keeping and also in understanding how to manage various operational issues.

This is why we have a franchise apprenticeship model. For instance, in Nutri Choice, we let everyone know that once you have reached a certain number of years, you can establish a branch of this brand, leverage on the name, and we will only have 20 to 30% of profit coming back to the mother company. The remainder of the profit is yours. By leveraging on the name, you have a market opportunity rather than starting afresh.

Through training, for instance, Lagos state organised a programme to train people for about a month or two months, and they paired them with existing farms. So, we need to orientate people more about the benefits of farming. Also, they are encouraged to persevere in it. Also, there is a need for universities affiliation with farms where students who studied it as a degree can have the opportunity to intern and have real-life farming

experience. Yes, like an apprenticeship. It is a good move for the students. Once people are able to learn before getting into real business, they do not mess it up when they get there.

We also have a programme called the Train to Retain Programme. We train young people to retain them. During this process, our trainees learn, and we pick them for expansion of our business instead of searching for a newly recruited workforce team. It helps us to pass our knowledge and skills to young people. This is knowledge passing through the hand-holding process. Yes, more like apprenticeship. I had a lot of failures, and I wish I had a level of apprenticeship first before diving into those things I did. So, this apprenticeship is one of the only things that can help transfer this knowledge. However, training alone does not work, it is important to inject trainees into the practice and process. There is a need for internship and training for young people, and retention afterward.

Yes, I believe so. Whatever field you want to go, it is important to learn from people who are already doing it. This is irrespective of age or gender. Learning from people who are skilled in the business or field, it helps to understand their craft better. In the process, you would learn what needs to be done better and what is going wrong. Therefore, adding to your own knowledge about the business. I have written about this apprenticeship; anyone going into any field to embrace and do apprenticeship. Even doctors do internships. Tribalism aside, people from the Eastern part of the country understand this. If you want to sell common sachet water for instance, you go and work for some in that business for a while. So, when you are selling for yourself, you are better. Apprenticeship ensures you learn the rudiment of the craft well.

8.4.3 Business Environment as a capability

The business environment can be described as a universal set encapsulating an amalgam of opportunities (capabilities) and challenges (constraints) which both have the propensity to promote or debar individuals from realising their entrepreneurship ambitions. The degree of friendliness (also known as the ease of doing business) of the business environment goes a long

way in influencing the survival of a businesses that operates in it. It therefore implies that a favourable business environment can promote good agripreneurship culture in society. This can be explained by acknowledging the role of government policies and programmes designed to facilitate agripreneurship involvement in the country.

With a friendly and sustainable business environment, individuals will be empowered to translate their agripreneurship dreams into realities. The level of business support, business regulation, availability of infrastructural facilities, improved safety and security of lives and properties, opportunities for market expansion, availability of productive inputs all define the friendliness of the business environment and the extent to which entrepreneurship activities can thrive. A favourable and conducive business will promote innovation and creativity among entrepreneurs (Sancho, Ramos-Rodríguez & Vega, 2021; Iizuka & Hane, 2021; Jonek-Kowalska & Wolniak, 2021).

To reinforce the capability of young people to participate in Agric business, the participants bewailed the imbalances in the Nigerian business environment and advanced the following:

Government should provide equipment to make agriculture and farming easier for young men. However, a case study of Ibadan shows that many leases out farmland for interested people at a low cost, also many agricultural companies are now providing a platform for an investment opportunity in farming. In short, these companies farm for people, and give them interest on their capital. They do the rough and back-end work of farming.

I think the government should fine-tune the market structure in a way that any farmers who produce a certain quantity of goods who have assurance of a standby customers to buy them. That would encourage me to work more. I would also be able to make my cost planning and ensure efficiency before planting in a year and season. Market price has to be structured per year and season without any inconsistency to allow farmers to make profit and avoid outrageous sales of products from inconsistent or seasonal farmers who really are not into the business.

More importantly, the government also has a lot to do. Government should work on infrastructure, and funding for start-up companies to expand and scale their business.

First, there is a need to create a platform where loans are accessible easily to youths. For so many people, there are many ideas in their hearts and minds for the youths, and they want to execute it. But because they are not seeing the reality. Also, governments are not willing to help the youths. So, the government should create more intervention for them, this will go a long way in helping the youths in agriculture in Nigeria.

The major challenge is capital to get started. Also, the problem of technical support. That is, how to find skilled labour, expertise, and professional farmers to support in the process. The know-how people who can give and apply their knowledge to the business. The rudiment of agriculture, planting, identification of fertile seeds, seasons to plant certain crops, fertilisers to apply, among others, essential things require the knowledge and expertise of professional farmers. Also, there may be a lack of government support, partnership, and collaboration.

First, several intervention programmes should be created in each and every local government across the country. That would help a lot of people. Also, the government should ensure to recruit extensive agriculture workers. ... But for local governments, it is hard to find professional agriculturists working with the council. There are no even capacity training development programmes and workshops for the selected few available.

Arising from the foregoing, it can be concluded that the creation of an enabling environment for business to thrive is one of the avenues Government can boost the capability of the youth to actively participate in entrepreneurship in the country.

8.5 Summary of the Chapter

The chapter covered issues relating to the need to expand opportunities for successful youth agripreneurship in Nigeria. First, the chapter discussed the efficacy of the extant entrepreneurship programme in Nigeria's tertiary education as well as the efficacy of existing

youth intervention and Agric programmes with specific emphasis on Agric programmes in Nigeria. The regrettable rise in the spate of youth unemployment (despite the positive perception of the youth towards agriculture and the various entrepreneurship programmes from which the youth have benefited) provoked the need to look beyond training and perception, by creating a more comprehensive mechanism for boosting youth entrepreneurship engagement in Nigeria. Such opportunities can be created through cultural shifts (by seeing culture as a capability), apprenticeships (a special form of practical education as a capability), as well as Government policies and programmes (by seeing the business environment as a capability).



Chapter 9: Research Summary, Conclusion and Recommendation

9.1 Aim and objectives of the Research

Recall that the aim of this research was to develop a model for expanding opportunities for youth agripreneurship and employment creation in Nigeria. Also, the specific objectives of the study was to review literature on youth employment; agriculture and entrepreneurship in Nigeria specifically as well as other countries; investigate entrepreneurship education as a capability; investigate the perception of young Nigerian graduates towards a career in agriculture and entrepreneurship; investigate the factors responsible for the perception of young graduates towards agriculture; critically investigate available capabilities (opportunities) for youth agricultural entrepreneurship in Nigeria; investigate the effectiveness and challenges of existing youth agricultural intervention programmes and to examine the role of technology in boosting youth agricultural engagement in Nigeria.

Other specific objectives include: to explore the Igbo apprenticeship system as a mechanism for expanding youth agripreneurial capabilities in Nigeria; to explore the relationship between agency and wellbeing in agricultural entrepreneurship; to explore the role of agency in Agric entrepreneurship and the relationship between agency and the expansion of entrepreneurial capabilities in Nigeria's Agricultural ecosystem; to design a model for expanding real opportunities for successful youth agripreneurship in Nigeria as well as providing recommendation on the application of the designed model for tackling the challenge of youth unemployment in Nigeria and other African countries.

9.2 Summary of the Research Findings

Essentially, the various findings of this study have pinpointed that the decision of a number of the Nigerian youths to venture into agripreneurship is largely shaped by their perception, which is, in turn, influenced by a host of personal, social and environmental factors.

9.2.1 Findings on Youth Perception about agripreneurship in Nigeria

9.2.1.1 Findings on Socio-Demographic Characteristics of Participants

1. From the empirical result, the majority of the participants were currently observing the mandatory National Youth Service or have successfully completed the Youth Service Scheme, while others were awaiting their National Youth Service posting.

2. It was established that the highest number of participants (about 27% of the total) were from the southwestern region of the country, while the remaining five (5) regions accounted for a total of 71% of the participants. In addition, it was found that 21 participants representing about 2% were graduates awaiting National Youth Service posting.
3. The highest number of participants (about 65.7%) were between the ages of 26 and 30, while those between the ages of 20 and 25 were about 33.7%. Nevertheless, about 0.6% were below 20 years.
4. About 65.6% of the participants were male, while the remaining 32% were females. It was however established that the remaining 2.4% were uncomfortable in selecting the option not to reveal their gender identity.
5. About 10.5% of the total sample drawn for the survey indicated agriculture-related programmes as their primary course of study during the survey period, while the remaining 89.5% reportedly studied non-agriculture-related courses during their undergraduate years.
6. The percentage of the youths belonging to either Hausa, Igbo or Yoruba are about 64.8%, while the remaining 35.2% belonged to other tribes.
7. Specifically, Hausas accounted for about 19% of all the youth who took part in the survey, while the Igbos accounted for about 21.4%. Similarly, the Yoruba accounted for about 24.4%, while the remaining 35.2% belonged to other tribes.
8. Lastly, about 70% of the youths were within the low-income and middle-income families, while about 23% came from families whose income fell in the upper class, the remaining 6% were from poor families.

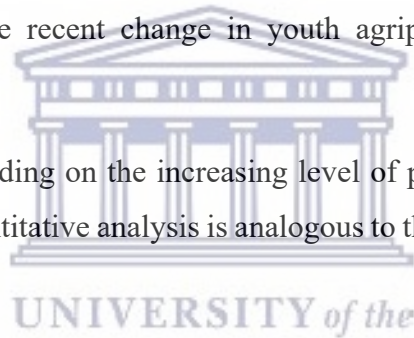
9.2.1.2 Main Findings on Youth Agripreneurship Perception in Nigeria

1. About 75.80% of the youth dispelled the notion that agripreneurship is for the poor. This implies that most of the youth perceive agripreneurship as a venture that can be embraced by individuals irrespective of their prevailing socioeconomic status. This finding corroborates the position of Baishya, Sangtam, Tungoe, Meyase, Tongoe, Deka, and Ray (2021) who maintain that “youth could be the ideal catalyst to change the poor

image of agriculture”. The finding also contradicts the earlier finding of Geza, Ngidi, Ojo, Adetoro, Slotow and Mabhaudhi (2021) who established that “the youth's socioeconomic environment portrays farming mainly as a poor man's occupation”.

2. About 77% of the participants clearly rejected the idea that agripreneurship is only meant for students who are intellectually deficient.
3. About 74.90% of the participants were in total disagreement with the notion that agripreneurship is only suitable for people with no or low educational background.
4. About 57% of the youth were of the view that agripreneurship is lucrative. This is in line with the finding of Inegbedion and Islam (2021) who found that youth venture into agriculture because they see it as a lucrative business to facilitate self-employment.
5. About 67.10% of the youth perceive Nigeria as a safe country for active youth participation in agripreneurship. However, a series of studies have contradicted this finding citing the rising spate of insecurity in places like Buene, Nassarawa, Kogi, *inter alia* (Okeke, 2014; Peace, 2017; Abada, Okafor & Oforbuike, 2018; Abba, 2018; Gever & Essien, 2019; Nwangwu & Enyiazu, 2019; Sule, 2020; Tade & Yikwabs, 2020; Ogbuehi, 2020; Aver & Gwambeka, 2020; Ademola, 2020; Buba, 2021; Ugbudu, 2021). This phenomenon has provoked rising spate of food insecurity in the country (Nwankwo, 2018; Abada, Okafor & Oforbuike, 2018; Aver & Gwambeka, 2020; Taiwo, 2021).
5. About 73.30% of the participants refuted the idea that agripreneurship is for old people.
6. This positive agripreneurship perception originating from the Nigerian youth is a direct pointer to the fact that these young Nigerians also have a vested interest in exploring the agripreneurship space in the country (Geza, Ngidi, Ojo, Adetoro, Slotow, & Mabhaudhi, 2021).
7. About 70.50% of the participants did not view entrepreneurship as a stressful endeavour.
8. About 75.40% of the youth dispelled the idea that agripreneurship is risky. This finding is contrary to the finding of Babu, Franzel, Davis and Srivastava (2021) who found that “in terms of the business environment, youth in Nigeria consider agriculture to be risky”.

9. About 78.80% of the respondents didn't perceive agripreneurship to be highly capital intensive. About 59.10% of the participants perceived agriculture entrepreneurship to be admirable. However, Pazhanisamy (2021) maintained that "the agribusiness industry is typically synonymous with capital-intensive farming". The study of Castro and Barros (2021) also supports the above assertion in the context of in the South and Midwest regions of Brazil.
10. In the course of the survey, the participants perceived that agriculture is a viable tool for employment generation for the youths and this drives their intention and active participation in agripreneurship. This validates earlier findings of Baishya, Sangtam, Tungoe, Meyase, Tongoe, Deka and Ray (2021) and Yusuf, Akhiden, Omoghie, Adetola, Osazuwa and Simpson (2021) who established that many youths now find employment in agriculture, especially in the marketing of Agric products. This may have contributed to the recent change in youth agripreneurship perception in the country.
11. Generally, the above finding on the increasing level of positive youth agripreneurship perception from the quantitative analysis is analogous to the finding originating from the qualitative survey.



9.2.2 Findings on Youth Agripreneurship intention in Nigeria

About 75.1% of the participant were affirmative about commencing the business, while about 9.3% had no interest in setting up such agripreneurship venture in the near future. Also, it was established that about 15.6% of the participants were uncertain about taking such a decision.

9.2.2.1 Findings on Region-specific analysis of youth agripreneurship intention in Nigeria

About 75.70% of the youth from the North Central, 74.60% from the Northeast, 74.10% from the Northwest, 77.30% from the Southeast, 74.80% from the South-South and 75.30% from the Southwest accepted to set up an Agric venture in the near future.

9.2.2.2 Findings on Age-specific analysis of youth agripreneurship Intention in Nigeria

The majority of those between the age bracket of 20 to 25 (72.10%) and 26 to 30 (76.90%) were willing to set up an Agric business soon. Similarly, 50% of those who were below the age of 20 showed interest in venturing into agripreneurship.

9.2.2.3 Findings on Gender-specific analysis of youth agripreneurship Intention in Nigeria

About 79.50% of the male participants expressed interest in venturing into agripreneurship, while the percentage of the female participants willing to start an Agri venture was about 66.70%. The percentage of both male and females who registered no interest in venturing into agripreneurship were about 9.50% and 9.30%, respectively.

9.2.2.4 Findings on Course-specific analysis of youth agripreneurship Intention in Nigeria

About 85.80% of youth who undertook agriculture-related courses in their undergraduate years and 73.90% those who studied non-Agric-related courses in their undergraduate years were willing to venture into the agripreneurship space.

9.2.2.5 Findings on Tribe-specific analysis of youth agripreneurship Intention in Nigeria

Among those during the survey period, about 72.40% of Hausas, 77% of Igbos, 74.50% of Yoruba, and 75.90% of youth with other tribal identities were willing to venture into the agripreneurship space. On the contrary, about 14.10% of Hausas, 10.60% of Igbo, 5.70% of Yoruba and 8.40% of the youth with other tribal identities had no intention to venture into the agripreneurship space.

9.2.2.6 Findings on Analysis of youth agripreneurship Intention in Nigeria based on Income Category

About 80% of participants whose family income category falls in the upper income class, 78.90%, 70% and 69.8% youth whose family income category falls in the low, medium and poor income categories, respectively were willing to venture into the agripreneurship space.

9.2.3 Findings on Determinants of youth agripreneurship perception

9.2.3.1 Findings on Course of study and youth agripreneurship perception in Nigeria

Specifically, in line with the position of Zaremohzzabieh et al. (2021), the result showed that positive agripreneurship perception is higher among youth who studied agriculture-related courses in school compared to those who studied non-agriculture related courses.

9.2.3.2 Findings on Entrepreneurship programmes and youth agripreneurship perception in Nigeria

Likewise, in consonance with the finding of an earlier study of Adeyanju, Mburu, Mignouna, and Akomolafe (2021), those who participate in an entrepreneurship programme held a more positive view of agripreneurship compare to those who do not. The result clearly revealed that *ceteris paribus*, the perception score among the youth who participate in an entrepreneurship programme will increase by about 1.87 units compared to those who are yet to participate in the programme.

9.2.3.3 Findings on Household income status and youth agripreneurship perception in Nigeria

Furthermore, the empirical results showed the existence of an inverse relationship between household income and youth agripreneurship perception. This is statistically significant at 99% confidence level as shown by the resultant t-statistic. It was established that youth agripreneurship perception declined with increasing levels of household's income among the youth who participated in the survey. Specifically, those from relatively poor families were associated with higher positive agripreneurship perception scores than those from the low-income, middle-income and wealthy or upper income class.

9.2.3.4 Findings on Market for agricultural products and youth agripreneurship perception in Nigeria

Unavailability of a market for agricultural produce tends to decrease positive agripreneurship perception among the youth. As shown in the Table 13, a significant negative relationship exists between lack of market for Agro-products and youth agripreneurship perception in Nigeria. Thus, when more markets are created for the exchange of agricultural produce, both existing and prospective investors will be motivated to produce with the assurance that their outputs will not be wasted (Abera, Ibrahim, Forsido & Kuyu, 2020). It therefore suggests that, absence of Agro-market tends to inhibit agripreneurship perception and intention (Jeil, Abass, & Segbefia, 2020; Jha, *et al*, 2020).

9.2.3.5 Findings on Infrastructure and youth agripreneurship perception in Nigeria

From the empirical result, the relationship between infrastructural deficiency and youth agripreneurship perception was found to be positive, suggesting that if the youth continues to hold the perception that a lack of infrastructure for agriculture business exists they will have a better perception about agriculture entrepreneurship. Nevertheless, this result contradicts theoretical *apriori* expectation under normal circumstances. For instance, this finding invalidates the position of a number of earlier studies who maintain that lack of infrastructures has eroded the attractiveness and profitability of the Nigeria Agric space (Muhammad-Lawal, Omotosho & Falola, 2009; Kumar, 2019). Lyocks, Lyocks and Kagbu (2013) as well as Jha *et al* (2020) further lament that poor infrastructures remain a major constraint to youth agricultural participation. According to Adesina and Favour (2016) and FOA (2020), inadequate infrastructure hinder Agric production in Nigeria.

9.2.3.6 Other Findings on Determinants of youth agripreneurship perception

The results indicate that government support, institutional and financial support, technological infrastructure, agriculture intervention programmes, gender, tribe and geopolitical zones collectively exert a statistically insignificant influence on youth agripreneurship perception in Nigeria during the period of assessment.

9.2.4 Findings on Determinants of Youth Agripreneurship Intention in Nigeria

Most of the findings here are analogous to the results obtained in the analysis of the determinants of youth agripreneurship perception. The result showed that participation in entrepreneurship training programs, availability of market for agriculture products, family income background were found to be significant determinants of youth intention to start an agribusiness at the conventional 5% significance level. Similarly, the course studied in school positively influences perception about agripreneurship, and the influence on willingness to start an agribusiness is also positive.

9.2.5 Findings on Agricultural Entrepreneurship as a Valuable Functioning

A number of identified factors that make people value agribusiness include the need to eradicate poverty/malnutrition opportunity to express one's passion/interest, freedom/be one's own boss/control your time, among others (Bairwa, Lakra, Kushwaha, Meena & Kumar, 2014; Vinoth & Paramasivam, 2016; Uche & Familusi, 2018; Dash, 2018; Igwe; 2020; Wairimu, 2021).

9.2.6 Findings on Employment Prospect for Nigerian Youth

1. About 37% of the participants were optimistic about getting a job once they have completed their National Youth Service, while about 16% of them reported that they already had a job waiting for them. The sustainability of this claim lies heavily on the current socioeconomic realities in Nigeria.
2. Similarly, those who intend to start a business immediately after their National Youth Service were about 27% of the total number of participants, while about 13% of the respondents indicated that they already have a business of their own.
3. About 6.7% of the participants noted that they had no hope of securing a job or a business to do whatsoever after their National Youth Service. However, Figure 9 presents the percentage distribution of employment prospects among the surveyed participants.
4. About 82.1% of the respondents were optimistic that agriculture entrepreneurship can solve the problem of youth unemployment in Nigeria, while about 10.2% were still not certain or could not ascertain such possibility.
5. About 7.7% of the participants invalidated the claim that agriculture entrepreneurship is the panacea for youth unemployment in the country.
6. The qualitative analysis results revealed that most of the prominent employment prospects for the youth aspiring to venture into the wider Agric space include, "high absorption capacity", "value chain expansion", "create more market", "little or no risk of competition", "lower entry barrier", "opportunity to diversify sources of income", "personal development", "reduces social vices", "self reliant/self-employed", "good soil", and "source of empowerment".

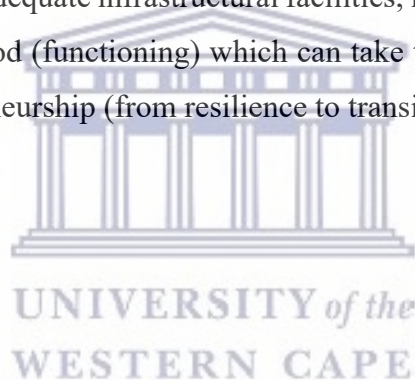
9.2.7 Findings on Constraints in the Agricultural Ecosystem in Nigeria

The identified constraints in the Agricultural Ecosystem in Nigeria include insecurity and weak government policies (Okeke, 2014; Peace, 2017; Abada, Okafor & Oforbuike, 2018; Abba, 2018; Gever & Essien, 2019; Nwangwu & Enyiazu, 2019; Sule, 2020; Tade & Yikwabs, 2020; Ogbuehi, 2020; Aver & Gwambeka, 2020; Ademola, 2020; Buba, 2021; Ugbedu, 2021); increasing finance and production cost (Ndanitsa, Adetunji, Mohammed and Ndako (2021;

Balana, Aghadi and Ogunniyi, 2021; Memudu & Muhammad-Lawal, 2021; Asogwa, Dongo, Ndubuaka, and Hammed; 2021; Tijjani, Audu, MWulet & Ibikunle, 2021); poor human capital development (Akhuemonkhan *et al.*, 2013; Durotoye, 2014; Jacob, Monsurat & Musa, 2021); weak and inadequate infrastructures (Olukunle, 2013; Onifade, Abdulraheem & Olarinwa, 2021; Ndanitsa, *et al.*, 2021), as well as unstructured market systems.

9.2.8 Findings on the role of agency in turning constraints to opportunities within the Agricultural Ecosystem.

It was also established that young people are challenging obstacles and turning them into opportunities for social and economic development, through agripreneurship participation (Harry, 2013; Tsekoura, 2016; Balogun, Obamwonyi & Falade, 2021; Egwu, 2021; Shi & Lin, 2021). Specifically, the study shows that through agency, one could leverage on a seemingly bad thing (such as poor and inadequate infrastructural facilities, insecurity or weak government policies) to achieve greater good (functioning) which can take the form of self-determination to actively involved in agripreneurship (from resilience to transilience).



9.2.9 Findings on Constraints as a Capability (opportunities to achieve functionings)

This was established by one of the respondents who noted that:

Lack of infrastructures is a major constraint inhibiting agricultural production in Nigeria. Yet, business must go on in the face of this challenge. It is the results that will now compel the government to recognise the need to expedite efforts toward infrastructural development for improving agricultural production in the country.

Just like the ‘Igbo Apprenticeship System’ which emerged in the aftermath of the Nigerian Civil War (Kanu, 2019) and its success is largely attributed to the unpalatable experience of the civil war that lasted from 1967 to 1970 (Iwuagwu, 2012; Doron, 2014; Bawa, 2020; Okwuosa, Nwaoga & Uroko, 2021).

9.2.10 Findings on the efficacy of the Entrepreneurships Programme in Nigeria’s Tertiary Education

1. In line with the submissions of Agu, Ugwu and Ejesi (2021), Aigbedion (2021), Okolobasi and Uduji (2021), the Entrepreneurships Programme in Nigeria’s tertiary education has helped prepared the Nigerian youth for self-employment.
2. However, from the interviews, the participants argued that the Entrepreneurships Programme in Nigeria’s tertiary education has not been effective due to the inability of the system to produce quality graduates with the required skills suitable for the labour market.
3. Though the responses of the participants collected through questionnaires were mixed, for instance, when the respondents were asked if they took a course in entrepreneurship during their undergraduate programme, the result shows that 84.16% of them took a course in entrepreneurship at tertiary level, while 15.84% failed to do so.
4. When they were asked if they believe the course has adequately equipped them to start a business in the near future, 78.69% were in agreement, while 21.31% declined to such assertion.

5. Among those who believed the course had not been effective, the following responses were filtered:

The lecturers don't teach the course passionately. We need successful entrepreneurs taking the course. The lecturers should take up the courses passionately.

There should be more practical than theoretical. (Zaremohzzabieh et al., 2021). In Nigeria, we focus mainly on the theoretical aspect which affects the Nigeria society at large...

Worst off is the fact that the lectures do not have any entrepreneurial spirit.

6. There were graduates who benefited from the entrepreneurship programme at tertiary level, and have been equipped with the necessary skills to manage an entrepreneurship venture. However, these youth have a negative entrepreneurship culture, which inhibits their ability to actively participate in agripreneurship.

9.2.11 Findings on the efficacy of youth intervention and Agric programmes in Nigeria

Just like inefficiencies associated with the entrepreneurship education programme in Nigeria, the various agricultural intervention programmes have failed to adequately actualise their cardinal objectives.

1. About 53% of the participants indicated that they took part in one or more Youth Agriculture Intervention programmes. Some of the programmes the youth indicated they are aware of include FADAMA Graduate Unemployment Youth and Women Agripreneur support, Youth Employment in Agriculture Programme, N-Power Agro, IITA Youth Agripreneurs, CBN Anchor Borrowers' Programme, among others.
2. Among the Youth Agriculture Intervention Programmes, the result shows that N-Power Agro is the most popular among the youths, while the International Institute of Tropical Agriculture (IITA) Youth Agripreneurs was the least known to the participants.
3. About 29.7% of the youth indicated they were aware of the programme; the percentage of the participants who indicated that they are aware of other specific Youth Agriculture Intervention Programmes are less than 5% respectively.

4. About 34% of the participants indicated that they are aware of two or more of the aforementioned programmes, while about 7.4% of the participants claim that they were not aware of any of the aforementioned programmes.
5. About 15% of the respondents also claim that they are aware of other Youth Agriculture Intervention programmes not covered by the study, while FADAMA Graduate Unemployment Youth and Women Agripreneur support was reportedly known to about 3.4% of the participants.
6. About 3.7% of the youth claimed they were aware of the Youth Employment in Agriculture Programme, while the International Institute of Tropical Agriculture (IITA) Youth Agripreneurs was known to 1.7% of the participants.
7. About 4.3% of the youth claimed they were aware of the CBN Anchor Borrowers' Programme.

Based on the above findings, it is evident that the awareness of some of the Youth Agriculture Intervention programmes is high. This supports earlier submission of Rogers (2018). However, the participation rate remains relatively low given the percentage (53%) who indicated that they participated in at least one of the Youth Agriculture Intervention Programmes.

A major flaw of the existing Agric interventions that defined their sheer inefficiencies is lack of implementation. Though, Uche (2019) and Ayinde, Otekunrin, Akinbode and Otekunrin (2020) submit that the Agricultural Development Programme (ADP) in most states in Nigeria has been widely successful, the finding of the study reveals that while the awareness is huge, accessibility to most intervention packages like loans and equipment is still a principal barrier.

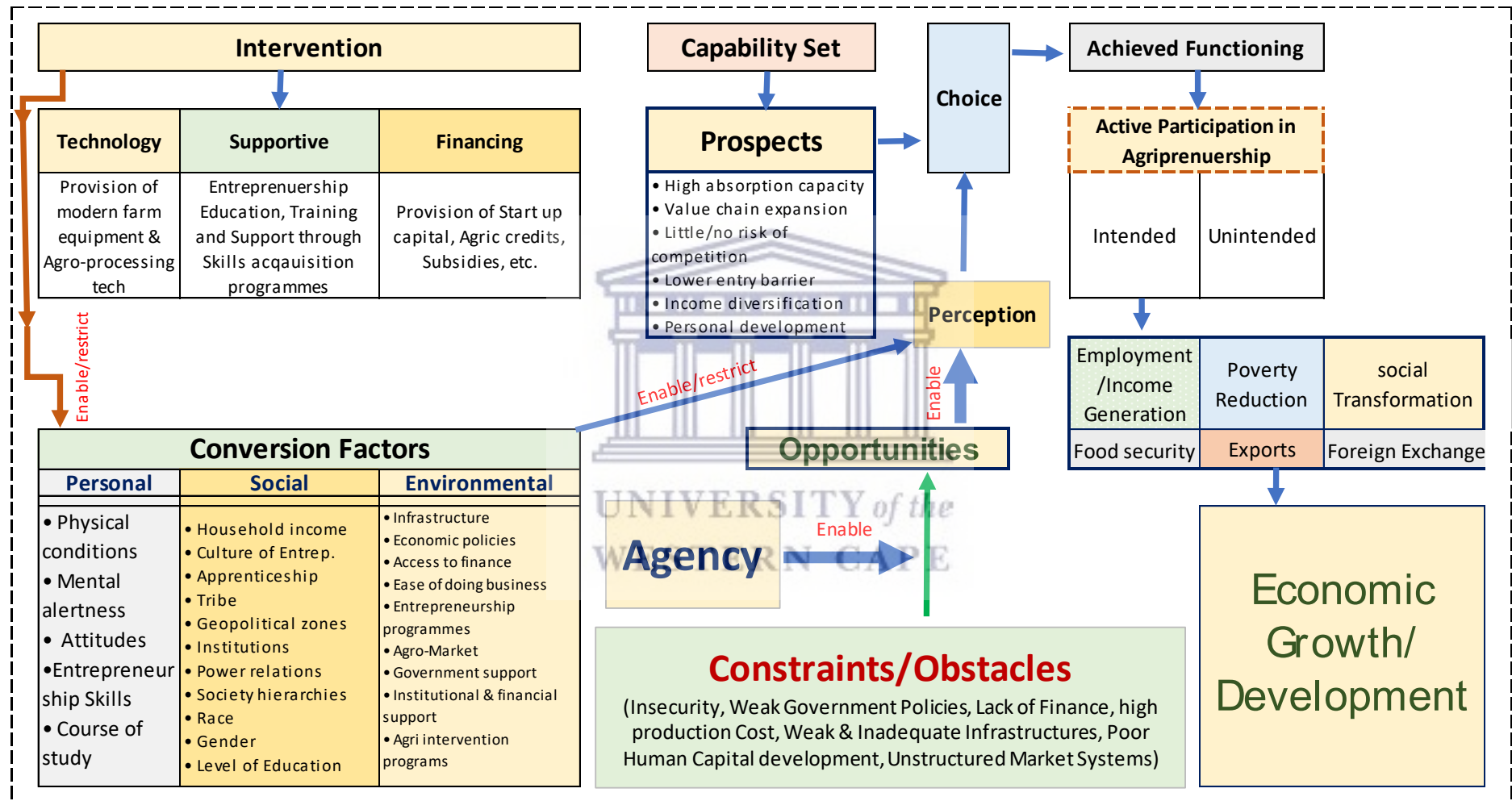
9.3 The expanded model for Agripreneurship Participation

The study has unveiled a number of empirical findings on Agripreneurship perception, intention and participation. This section summarises the principal findings of the study, which have been incorporated into the expanded model for Agripreneurship participation presented below.



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Figure 16: The expanded model for Agripreneurship Participation



9.4 Recommendation

In light of the various findings of this research, the following recommendations are advanced for policy considerations.

9.4.1 Recommended actions for improving entrepreneurship education in Nigerian tertiary institutions

The findings on the efficacy of the entrepreneurship programme in Nigeria's tertiary education are evident that the programme has not been effective due to the inability of the system to produce quality graduates with the required skills for work and/or business (Longe, 2017; Amani, 2017; Aloysius, Ismail, Suandi & Arshad, 2018; Aminu, 2019; Unimna, Essien, Opoh & Unimke, 2021; George & Nwokocha, 2021; Eguabor & Aigbavboa, 2021). This is a sheer violation of the Job Assignment Theory that states that both individual skill profile and job characteristics must align to ensure optimal productivity (Senkrua, 2021). Thus, in line with human capital theory and the Job Assignment Theory, the following are recommendations for improving entrepreneurship education in Nigerian tertiary institutions:

- 1) It was established that most of the tertiary education institutions operating in the country lack the necessary facilities to drive entrepreneurship training. The government and private owners of tertiary education institutions should make provision for adequate facilities for practical work that will enhance entrepreneurship education in tertiary education institutions operating in Nigeria. The provision of relevant facilities for practical entrepreneurship activities will help to produce well rounded graduates who are adequately equipped with both theories and practical skills for business and work. Thus, the government and other stakeholders in the education sector should also ensure that they make adequate provision for equipment and all relevant gadgets required for practical activities during entrepreneurship training programmes.
- 3) It is further recommended that all year students in tertiary education institutions should be exposed to entrepreneurship training rather than wait for them to be exposed in their final or penultimate years when the course is usually introduced to them. Thus, students should be aggressively made aware through entrepreneurship education and sensitisation programmes in the form of fresher orientation courses.

- 4) It was established that some of the tutors who teach entrepreneurship courses at the tertiary education institutions lack in-depth knowledge of the course, thus, are unable to adequately deliver the required entrepreneurship skills to the students. It is recommended that well-informed entrepreneurs should be recruited as lecturers in the various entrepreneurship courses as it could possibly boost the dissemination of relevant entrepreneurial skills by these competent and well-versed tutors. Furthermore, it is hoped that these lecturers will make entrepreneurship lectures more interesting and appealing.
- 5) It was also established that some of the entrepreneurship graduates who teach entrepreneurship courses at tertiary education institutions do not possess the necessary entrepreneurial skills to impact on students. Thus, it is recommended that all entrepreneurship lecturers should be trained by well-equipped instructors through special entrepreneurship programmes as this will boost their entrepreneurship insight for better academic repositioning. To achieve this aim, the various institutions should consult and hire the services of external entrepreneurs to mentor both lecturers and students.
- 6) To boost practical entrepreneurship knowledge among students and lecturers, it is recommended that regular entrepreneurship seminars/workshops should be conducted across all tertiary education institutions. This is hoped to improve the learning experience among students and lecturers across tertiary education institutions in Nigeria.

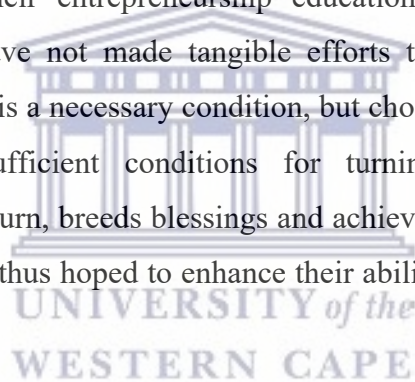
9.4.2 The need for the creation and implementation of more inclusive youth agriculture interventions in Nigeria.

- 7) One of the avenues through which agripreneurship opportunities can be expanded is the creation and implementation of more inclusive youth agriculture interventions initiatives that will extend to potential agripreneurs, especially those living in rural communities (Babu, Franzel, Davis & Srivastava, 2021; Adeyanju, Mburu, Mignouna & Akomolafe, 2021).
- 8) It was established that a major flaw of the existing Agric interventions that defines their sheer inefficiencies is lack of implementation. While the awareness is massive, accessibility to relevant inputs and supports is still a principal barrier. It is therefore recommended that the government should make all possible efforts in ensuring that all Agric intervention programmes are fully implemented for inclusive agripreneurship participation in the country (Zaremohzzabieh, Krauss, D'Silva, Tiraieyari, Ismail &

Dahalan, 2021). To further enhance the efficacy of these programmes, the government should set up a monitoring and evaluation team comprising representatives of both public and private sector actors in the wider Agric ecosystem in Nigeria with the aim of conducting regular inspections on the speed and quality of delivery of these programmes.

9.4.3 The need for cultural shift

- 9) Fostering an entrepreneurial culture is required to achieve active agripreneurship participation in the face of current socioeconomic realities. Thus, one of the ways to expand opportunities for successful youth agripreneurship in Nigeria is through cultural shift, which Anabaraonye, Ewa, Anukwonke, Eni and Anthony (2021) refer to as “a radically new way of thinking”. The various empirical findings of this research point to the fact that Nigerian youth lack the culture of agripreneurship. This is well explained by the fact that despite their entrepreneurship education and positive perception of agripreneurship, they have not made tangible efforts toward active agripreneurship involvement. Perception is a necessary condition, but choice and convincing actions are both necessary and sufficient conditions for turning constraints/obstacles into opportunities, which, in turn, breeds blessings and achieves function in the wider Agric space. A cultural shift is thus hoped to enhance their ability to act on their lofty dreams and agripreneurship.
- 10) Also, at a society level, there is a need for a collective shift in agripreneurship culture to facilitate a new wave of agripreneurship spirit. The collective shift in the perception, attitude and behavioural proclivity of individuals that make up the society manifested through transilient actions can lead to a discovery of a new way that economic activities are facilitated through agripreneurship participation. The country should thus develop policies that will encourage every household to invest or divest a significant fraction of their interest into agriculture. These policies will make agriculture a lifestyle practised by all and not just a few selected farmers who cannot guarantee the country’s food security and agricultural sustainability objective. It thus follows that a collective cultural shift will drive the process that will provoke inclusive and sustainable agricultural practices in Nigeria.
- 11) Again, while individuals have a role to play in the quest for cultural shift through mental adjustment and action-driven agripreneurship plans, the role of the traditional institutions



in providing relevant guidance is key. Thus, cultural shifts can also be bolstered by the various religious organisations as well as traditional heads of various communities in Nigeria. This collective shift in agripreneurship culture through the efforts of community heads and religious formations can be achieved by institutionalising agriculture across every community in Nigeria. A cultural shift will help mediate the role of economic and other social factors that constantly interact with culture to asymmetrically distribute relevant access to a good and promising life in the society. The inclusive instrumentation of cultural shifts through traditional heads and religious bodies will serve as a strategic tool for confronting the growing economic difficulties that militate against individuals' valued functionings and the wellbeing of the society at large.

9.4.4 The Need to Institutionalise Agripreneurship Apprenticeship in Nigeria

- 12) The findings of the research have demonstrated that apprenticeship can help create numerous opportunities for entrepreneurship in the country. This supports the position of Food and Agriculture Organisation of the United Nations, Technical Centre for Agricultural and Rural Cooperation, & International Fund for Agricultural Development. (2014) who explored the challenges and prospects for youth participation in Agriculture. Thus, it recommends that apprenticeships should be institutionalised in Nigeria as this is hoped to engage more youth who will be assigned or attached to well-trained and qualified Agripreneurs who can mentor, nurture and groom the apprentice (prospective agripreneurs) with experiential knowledge rather than the usual classroom theoretical feeding routine. Upon successful completion, the apprentice should be offered the needed empowerment both financially and mentally. Once the apprentices have completed their training, the trainer/sponsors (government or well-meaning individuals) should provide the required resources to assist them in establishing their own Agribusiness. In this esteem, the agripreneurship apprenticeship programmes should be properly captured in the existing social investment programmes and other funding channels such as the CBN Agripreneurship Apprenticeship Fund (CBNAAF, as hereby proposed).

9.4.5 Improving the Agribusiness Environment for inclusive youth agripreneurship participation in Nigeria

- 14) Arising from the findings of this research, it can be inferred that the creation of an enabling environment for business to thrive is one of the avenues the government can boost the capability of the to actively participate in agripreneurship in the country. To achieve this, the following actions are recommended youth (Ngenoh, 2021; Ozuzu & Isukul, 2021; Olaore, Adejare & Udofia, 2021).
- 15) Government should provide relevant farm equipment and Agro-processing technologies to make farming and Agro-processing easier for young Nigerians. The provision of modern Agro-processing technologies will help enhance the processing of agricultural outputs into a more usable and value-added form. This will help in promoting smart farming for a sustainable agri-food system (Musa & Basir, 2021). Most of the wastes that are caused by high degree of perishability will be drastically minimised if these modern Agro-processing technologies are available to farmers.
- 16) Given the significant role of infrastructure in the development of a nation (Schindler & Kanai, 2021; Azolibe, 2021; Enwereuzor, Umo & Charles-Akalonu, 2021; Okere, 2021; Ugwoke & Onyenama, 2021; Olatunji, Yoade & Adeyemi, 2021), it is recommended that the government should work on the existing deficient infrastructure, while making a sizable but realistic budgetary allocation for the development of new and sustainable infrastructures for agricultural activities to thrive in Nigeria. More roads should therefore be constructed in rural communities where access to farmlands and markets is limited. Also, communication infrastructures should be created and enhanced to enable agripreneurs establish smooth communication with input suppliers, marketers, loan providers, agricultural extension officers and other stakeholders in the wider agricultural value chain.
- 17) Also, the poor agricultural funding in Nigeria needs urgent attention of both Government and private sector actors in the provision of sustainable avenues for funding agricultural activities in the country (Umeaku, Nnedum & Nweke, 2021; Eniola, 2021; Adeyanju, Mburu, Mignouna & Akomolafe, 2021; Alhnaity, 2021; Iwara & Netshandama, 2021; Ratinho & Mitsopoulos, 2021). For the government, there is a need to create an all-inclusive platform where loans will be accessible easily to all prospective and existing

young Agripreneurs in Nigeria. From the individual angle, there is a need for the formation of more resilient and fully operational agricultural cooperatives that will help create opportunities for members to gain easy access to Agric financing. These cooperatives can team up in partnerships and collaborations to finance the acquisition of agricultural inputs and processing technologies to boost massive agricultural production in the country.

- 18) To facilitate inclusiveness of agricultural training and support across all the rural communities in Nigeria, several intervention programmes should be created in each of the 774 local government councils in the country. This initiative is hoped to help drive even and equitable agripreneurship capacity training through development programmes and regular workshops for both existing and prospective youth agripreneurs in the country.
- 19) The market for agricultural produce has been flawed for its largely unstructured nature. The study therefore recommends that the Nigerian Agro-market should be restructured to accommodate the growing dynamics of agricultural demand and supply in Nigeria. Findings reveal that the market is currently influenced by the prevalence of a cobweb phenomenon which encourages unwarranted speculations rather than confidence in the prediction of market prices of Agric produce in the country. The market price of various Agric produce should therefore be subject to periodic review by the Federal Ministry of Agriculture in collaboration with other stakeholders in the Agric Ecosystem in Nigeria to ensure price consistency as this is hoped to facilitate farmers' ability to make profit, while mitigating incidences of outrageous sales of Agric produce among seasonal farmers who are regular victims of ridiculous Agric pricing in Nigeria. It is hoped that when the government fine-tunes the prevailing market structure in a way that any farmers who produce a certain quantity of goods has the assurance of standby customers to buy them at fair prices, both existing and prospective youth agripreneurs will receive the mental boost thus, increasing their momentum to participate in the Nigerian Agric ecosystem.

9.5 Areas of Future Research Attention

The study has attempted to explore the dynamics of youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria. Specifically, the study has identified opportunities

and constraints inherent in youth agricultural entrepreneurship in Nigeria. There is the need to expand research of this nature to other countries in ECOWAS countries, Sub-Saharan Africa or Africa as a whole. Other areas that may merit further research attention is the impact of agricultural apprenticeship on young people's agripreneurship participation. The big question here is that if young people are taken through the agricultural apprenticeship programme after their university programme, whether it will enhance their agripreneurship participation. And boost their chances of success in such ventures. The study only argues this point from a theoretical perspective without empirically investigating the same proposition. Other research questions that can be addressed in further research include converting constraints into opportunities: Since young people are able to turn infrastructural challenges into business opportunities, should the role of the government be overlooked in providing an enabling environment for agripreneurship? Other areas include the role of Agricultural Cooperative Societies in influencing the marketing of agricultural produce in Nigeria. Furthermore, since lack of structure has been identified as a major cog in the wheel of the Nigeria's Agric ecosystem, there is a need to undertake further research on effective strategies to structure the market.

9.6 Contributions of the Thesis

Theoretically, the study expanded the Sen's capability approach by incorporating several new variables that have significant bearing on agripreneurship participation. The expanded model for Agripreneurship participation thus serves as an inclusive model worthy to be adopted by subsequent research. Also, the empirical outcomes of this research are insightful and unique contributions to the body of knowledge. These empirical revelations is useful in predicting the dynamics of youth Agripreneurship perception, intention and participation.

Given the role of Agriculture in national development and the potentials of the youth to drive the country's economic development through agripreneurship, the findings of this research are imperative for urgent policy attention both in Nigeria and Africa at large. The emerging themes from the qualitative analysis are unique and insightful in addressing issues relating to youth agripreneurship participation and unemployment reduction.

9.7 Concluding Remarks

In light of the various findings of the research, it is clear that Agriculture plays a principal role in alleviating the scourge of unemployment and poverty in Nigeria (Uche & Familusi, 2018;

Igwe; 2020). Also, judging from the vast arable land and other opportunities in the country (Oriola, 2009; Ivanda, Igbokwe & Olatunji, 2015; Oladiti & Ajogbeje, 2019), there is a need for further harness opportunities in agriculture. Nevertheless, lack of manpower to drive key activities in the nation's Agric sector has occasioned a significant decline in agricultural production and a rise in youth unemployment and poverty in the country (Akhueomonkhan *et al.*, 2013; Durotoye, 2014; Jacob, Monsurat & Musa, 2021). This is obvious when citing the occurrences of food insecurity in the country (Akhigbodemhe & Apopo, 2018). Given the large population of youth who are trapped by unemployment, especially after the successful completion of their tertiary education (Babalobi, 2019; World Bank, 2019; NBS, 2020), the Agric sector would be a viable avenue to absorb these young Nigerians with promising agripreneurship skills (Akanni, Akinleye & Oyebanjo, 2009; Nwachuku, Agwu, Nwaru & Imonikhe, 2010; Adeleke & Babalola, 2020).

It is worth noting that Nigeria is indisputably blessed with both human and material resources with agricultural land covering about 74 million hectares (Ivanda, Igbokwe & Olatunji, 2015; Oladiti & Ajogbeje, 2019). Just as noted by Oriola (2009), Nigeria is well-endowed with over 2.5 million hectares of land suitable for irrigation activities. Nevertheless, the country is yet to explore the various opportunities associated with good soil, favourable climatic settings, availability of a large span of agricultural land as well as an ever-growing teeming population that has the dynamic capability to meet and surpass the rising demand for food both in the country and Africa at large.

In view of the snowballing population coupled with the occurrence of demographic transition in Africa (Amare, Abay, Arndt & Shiferaw, 2021; Yaya, Yeboah, & Udenigwe, 2021), the speedy creation of jobs for young people thus becomes a priority in Nigeria (Cieslik, Barford & Vira, 2021; Lamidi & Igbokwe, 2021; Babajide, Osabuohien, Tunji-Olayeni, Falola, Amodu, Olokoyo & Ehikioya, 2021; Babu, Franzel, Davis & Srivastava, 2021; Adewumi & Akinnuga, 2021). Then again, the various findings of the research have clearly established that Agriculture is one of the most strategic sectors to be exploited in creating employment for young people. The sector indeed has so much potential that, if well exploited, it could help Nigeria actualise its long-term development goals, in the same way, agripreneurship has emerged as a potent force for socioeconomic development, of which the youth form the pivot (Ogen, 2007; Izuchukwu, 2011; Nchuchuwe & Adejuwon, 2012; Olukunle, 2013; Odetola & Etumnu, 2013; Olukunle, 2013; Abutu, 2014; Osabohien & Bamigbola, 2017). The study is an original

research work built on youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria.

Given the increasing global economic uncertainties (Lyu, Tuo, Wei & Yang, 2021; Adedoyin, Nathaniel & Adeleye, 2021; Mumtaz & Musso, 2021; Ghosh, Sahu & Chattopadhyay, 2021; Youssef, Mokni & Ajmi, 2021; Athari, 2021), the Nigerian economy is presently at a critical point in history (De Pinto & Ulimwengu, 2017). The unremitting rise in the country's population is a matter of policy interest. The number of youths in the country's labour market was reported as 63.1%, present an important development challenge for the Nigerian governments (NBS, 2020). Furthermore, most of the youth live in rural areas and have limited opportunities for gainful employment. However, they have untapped potential to transform the agricultural sector through innovation and entrepreneurship. This therefore necessitates the speedy formulation and implementation of viable policies that will drive youth agripreneurship participation in the context of Nigeria.

Findings of the study have further supported the notion that young people have a critical role to play in transforming Nigeria's agricultural sector. Hence it is important that the youth be empowered to translate their agripreneurship dreams into realities (Babu, *et al*, 2021; Zulu, Djenontin & Grabowski, 2021). The strategic business support, favourable business regulation, sufficient availability of infrastructural facilities, improved safety and security of lives and properties, enhancement of opportunities for market expansion, in addition to availability of productive inputs will enhance the friendliness of the business environment and create more opportunities for agripreneurship activities to thrive in the country (Ngenoh, 2021; Ozuzu & Isukul, 2021; Olaore, Adejare & Udofia, 2021; Timothy, 2021; Olusola, 2021). A conducive agribusiness environment will promote active participation, innovation and creativity among young agripreneurs in Nigeria, and thus help to effectively deal with the perennial challenge of unemployment while boosting food security.

References

- Abada, I. M., Okafor, N. I., & Oforbuike, C. L. (2018). Political economy of cattle colony: Between herders-farmers conflicts and sustainable development in Nigeria. *International Journal of Social Science*, 4(2), 1710-1726. <https://doi.org/10.20319/pijss.2018.42.17101726>.
- Abba, A. B. (2018). The Re-Occurring Farmer/Herder Conflict in Adamawa State: The Absence of Good Governance. *Asian Journal of Multidisciplinary Studies*, 6, 8.
- Abbas, A. M. (2019). Crop Production in Nigeria since 1914: GeoHistorical Analyses of Progress and Retrogress. *Journal of Advanced Research in Agriculture Science and Technology*, 2(2), 15–24. <http://medicaljournalshouse.com/index.php/Journal-AgricultureSciTech/article/view/285/184>
- Abbas, A., Ekowati, D., & Suhariadi, F. (2021). Individual psychological distance: a leadership task to assess and cope with invisible change. *Journal of Management Development*, 40(3), 168-189. Url: <https://doi.org/10.1108/JMD-09-2020-0304>.
- Abbink, J. (2005). Being young in Africa: The politics of despair and renewal. In *Vanguard or vandals* (pp. 1-34). Brill.
- 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.
- Abdulsalam, K. (2020). Nigeria: Why We Disengaged 500,000 N-Power Beneficiaries – Govt. *Daily Trust Newspaper*. Published on 30 June 2020. Retrieved from <https://allafrica.com/stories/202007010029.html>. Accessed 15 June, 2021.
- Abdusalamovich, T. K. (2021). The Role Of Forensic Science In The Investigation And Detection Of Crimes. *Academica Globe: Inderscience Research*, 2(05), 537-540.
- Abera, G., Ibrahim, A. M., Forsido, S. F., & Kuyu, C. G. (2020). Assessment on 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.
- Abiodun, T. F. (2021). Untold Impacts of Nigeria’s Land Borders Closure Policy on Border Communities, Economy, And Security in West African Sub-Region. *International Journal of Research in Education and Sustainable Development* 1(1), 10-30. DOI: 10.46654/IJRES.117125
- Abioye, O., & Ogunniyi, A. (2018). Coldspots and Hotspots of Agriculture in Nigeria; Any Hope for Youth and Women?. *Advanced Journal of Social Science*, 2(1), 1-11.
- Abomaye-Nimenibo, P. D., Samuel, W. A., Usanga, M., Udoffia, S., Ikpe, M., & David, M. (2019). An Empirical Analysis of Agricultural Production: The Sway of Economic Growth in Nigeria. *RA Journal of Applied Research*, 05(01). 2170-2199. <http://www.rajournals.in/index.php/rajar/article/view/464/455>
- Abutu, O. P. (2014). Challenges of agriculture in Nigeria economy: A bane to food security. *IOSR Journal of Agriculture and Veterinary Science*, 7(5), 18-21.

- Aceleanu, M. I., Trașcă, D. L., & Șerban, A. C. (2014). The role of small and medium enterprises in improving employment and in the post-crisis resumption of economic growth in Romania. *Theoretical and Applied Economics*, 21(590), 87-102.
- Achienewhu, S. C. and Opigo, H. (2013). *Diversification of the Nigerian economy: maximizing Nigerian agricultural potentials*. www.babbieslaw.wordpress.com.
- 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
- Adeagbo, O. A., Ojo, T. O., & Adetoro, A. A. (2021). Understanding the determinants of climate change adaptation strategies among smallholder maize farmers in South-west, Nigeria. *Heliyon*, 7(2), e06231.
- Adebayo, B. (2018). *Nigeria overtakes India in extreme poverty ranking*. Available at: <https://edition.cnn.com/2018/06/26/africa/nigeria-overtakes-india-extreme-poverty-intl/index.html>
- Adebayo, S. A. (2016). Determinants Of Value Addition to Cassava in Kwara State, Nigeria. *University Of Mauritius Research Journal*, 22, 246-259.
- Adebile, O. A., & Amusan, A. S. (2011). The non-oil sector and the Nigeria economy a case study of cocoa export since 1960. *International Journal of Asian Social Science*, 1(5), 142-151.
- Adedapo, A. (25 May 2021). Reps To Debate Bill Seeking Scrapping Of NYSC. *Leadership News - Nigeria News, Breaking News, Politics and more*. Retrieved on 26 June 2021 from <https://leadership.ng/reps-to-debate-bill-seeking-scrapping-of-nysc/>.
- Adedoyin, F. F., Nathaniel, S., & Adeleye, N. (2021). An investigation into the anthropogenic nexus among consumption of energy, tourism, and economic growth: do economic policy uncertainties matter?. *Environmental Science and Pollution Research*, 28(3), 2835-2847.
- Adekannbi, J. O., & Makinde, A. O. (2020). Use of Information Communication Technology for Teaching by N-Power Teach Beneficiaries of Public Primary and Secondary Schools in Nigeria. *Asian Journal of Information Science & Technology (AJIST)*, 10(1). DOI:10.51983/ajist-2020.10.1.301 Corpus ID: 238104161**
- Adekola, P. O., ALLEN, A. A., Olawole-Isaac, A., Akanbi, M. A., & ADEWUMI, O. (2016). Unemployment in Nigeria; A Challenge of Demographic Change?. *International Journal of Scientific Research in Multidisciplinary Studies ISROSET*, 2(5), 1-9.
- Adekunle, O. A., Adefalu, L. L., Oladipo, F. O., Adisa, R. S., & Fatoye, A. D. (2009). Constraints to youths' involvement in agricultural production in Kwara State, Nigeria. *Journal of agricultural extension*, 13(1). DOI: 10.4314/jae.v13i1.53885 <https://www.ajol.info/index.php/jae/article/view/53885>
- Adeleke, B. S., & Babalola, O. O. (2020). Oilseed crop sunflower (*Helianthus annuus*) as a source of food: Nutritional and health benefits. *Food Science & Nutrition*, 8(9), 4666-4684.

- Ademola, E. O. (2020). Herder-Farmer Conflicts and RUGA Policy: Why Nigerian Stakeholders are at Loggerheads over Rural Grazing Settlements. *Ethnic Studies Review*, 43(3), 103-121.
- Adeniyi, D. A. S. (2019). *Sustainable irrigation agriculture for food security and poverty reduction among smallholder farmers in Northern Nigeria*, Doctorate Thesis), University of the Western Cape (UWC). https://etd.uwc.ac.za/bitstream/handle/11394/6688/adeniyi_phd_ems_2019.pdf?sequence=1&isAllowed=y
- Adenomom, M. O. (2016). Analysis of agriculture and gross domestic product of Nigeria using first difference regression model. *Journal of the Nigerian Statistical Association* Vol, 28, 79-94.
- Adenomom, M. O., & Oyejola, B. A. (2013). Impact of Agriculture and Industrialization on GDP in Nigeria: Evidence from VAR and SVAR Models. *International journal of Analysis and Applications*, 1(1), 40-78.
- Adeoye, A., Akegbejo-Samsons, Y., Omoniyi, T., & Dipeolu, A. (2012). Challenges and Investment opportunities for large scale aquaculture farmers in Nigeria. IIFET 2012 Tanzania Proceedings. <https://core.ac.uk/download/pdf/10193877.pdf>
- Adeshina, K. F., Tomiwa, O. Y., & Eniola, O. M. (2020). Agricultural Financing and Economic Performance in Nigeria. *Asian Journal of Agricultural Extension, Economics & Sociology*, 38(7), 61-74. <https://doi.org/10.9734/ajaees/2020/v38i730376>.
- Adesina, T. K., & Favour, E. (2016). Determinants of participation in youth-in-agriculture programme in Ondo State, Nigeria. *Journal of Agricultural extension*, 20(2), 104-117.
- Adesoye, B. A., Adelowokan, O. A., Maku, E. O., & Salau, S. O. (2018). Enhancing agricultural value chain for economic diversification in Nigeria. *African Journal of Economic Review*, 6(1), 103-118.
- Adesugba, M. A., & Mavrotas, G. (2016). *Delving deeper into the agricultural transformation and youth employment nexus: The Nigerian case* (Vol. 31). Intl Food Policy Res Inst. Working paper. <https://ebrary.ifpri.org/digital/collection/p15738coll2/id/130281>
- Adewumi, E. F., & Akinnuga, S. O. (2021). Beyond Rail Revolution: Rethinking Nigeria-China Relations for the Next Decade. *KIU Journal of Humanities*, 6(2), 33-39.
- Adeyanju, D. F. (2019). *Impact Of Agricultural Training Programmes on Youth Agripreneurship Performance and Empowerment in Nigeria* (Doctoral dissertation, University of Nairobi). http://erepository.uonbi.ac.ke/bitstream/handle/11295/108201/Adeyanju_Impact%20Of%20Agricultural%20Training%20Programmes%20On%20Youth%20Agripreneurship%20Performance%20And%20Empowerment%20In%20Nigeria.pdf?sequence=1
- Adeyanju, D., Mburu, J., & Mignouna, D. (2021). Youth agricultural entrepreneurship: Assessing the impact of agricultural training programmes on performance. *Sustainability*, 13(4), 1697.

- Adeyanju, D., Mburu, J., Mignouna, D. B. (2020) Impact of Agricultural Programs on youth Engagement in Agribusiness in Nigeria: A Case Study. *Journal of Agricultural Science*, 12(5). 145-154.
- Adeyanju, D., Mburu, J., Mignouna, D., & Akomolafe, K. J. (2021). Determinants of youth participation in agricultural training programs: the case of Fadama program in Nigeria. *International Journal of Training Research*, 19(2), 142-166.
- Adigun, B. (2014). *16 killed in stampedes for jobs in Nigeria*. Available at: https://www.washingtonpost.com/world/africa/16-killed-in-stampedes-for-jobs-in-nigeria/2014/03/16/65263aa2-ad4b-11e3-a49e-76adc9210f19_story.html
- Adyaksantoro, A., Sudarsono, S., Budiono, A. R., & Madjid, A. (2021). Indonesia Regulation Authority of the State's Attorney in Efforts to Restore State Financial Losses Due to Corruption Crimes. *International Journal of Multicultural and Multireligious Understanding*, 8(6), 259-267.
- Africa Commission. 2009. Realising the Potential of Africa's Youth. Report of the Africa Commission. May 2009. <https://www.foresightfordevelopment.org/sobipro/download-file/46-513/54>
- African Development Bank Group. (2015). *Jobs for youth in Africa*. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Brochure_Job_Africa-En.pdf
- African Union (2006). *African youth charter*. Addis Ababa: African Union. https://au.int/sites/default/files/treaties/7789-treaty-0033_-_african_youth_charter_e.pdf
- Afrin, S., Islam, N., & Ahmed, S. (2010). Micro credit and rural women entrepreneurship development in Bangladesh: A multivariate model. *Journal of Business and Management*, 16(1). <https://ssrn.com/abstract=2856217>
- Agaviezor, B. O. (2018). Awareness and utilization of genetically modified foods in Nigeria. In *Genetically Engineered Foods* (pp. 203-219). Academic Press.
- Agbakwuru, J. (13 July 2019). N-Power jobs: In just 5 days, application exceeds the whole of 2016 with 750,000 entries. *Vanguard Newspaper*. Retrieved from <https://www.vanguardngr.com/2019/07/fg-spends-n279-bn-on-n-power>. Last Assessed on 15 June 2021.
- Agboola, B. M., 2010. *Entrepreneurial Education in Nigeria Tertiary Institutions and Sustainable Development*. [online] Available at: <http://files.eric.ed.gov/fulltext/ED512732.pdf>
- Agnes, I. A. I. (2010). Youth unemployment in Nigeria: causes and related issues. *Canadian social science*, 6(4), 231-237.
- Agu, A. N., Ugwu, I., & Ejese, N. S. (2021). Managing Entrepreneurial Education: An Imperative For Sustainable Development Goals In Nigeria. *UNIZIK Journal of Educational Research and Policy Studies*, 6, 14-35.

- Ahaibwe, G., Mbowa, S., & Lwanga, M. M. (2013). Youth engagement in agriculture in Uganda: Challenges and prospects. *Economic Policy Research Centre (EPRC) > Research Series* DOI: 10.22004/ag.econ.159673. <https://ageconsearch.umn.edu/record/159673>
- Ahiwe, E. U., Obikaonu, H. O., Kadurumba, O. E., Iwuji, T. C., Emenalom, O. O., & Etuk, E. B. (2021). Climate change and youth unemployment challenges in Nigeria: The poultry production option. *Nigerian Journal of Animal Production*, 48(4), 107-120.
- Aigbedion, E. (2021). Preparing Nigerian Youth for Self-Employment. *Walden Dissertations and Doctoral Studies*. 10764. <https://scholarworks.waldenu.edu/dissertations/10764>.
- Ajaegbu, O. O. (2012). Rising youth unemployment and violent crime in Nigeria. *American Journal of Social Issues and Humanities*, 2(5), 315-321.
- Aja-Okorie, U., & Adali, O. (2013). Achieving youth empowerment through repositioning entrepreneurial education in Nigerian universities: problems and prospects. *European Scientific Journal*, 9(28). DOI: <https://doi.org/10.19044/esj.2013.v9n28p%25p>
- Ajufo, B. I. (2013). Challenges of youth unemployment in Nigeria: Effective career guidance as a panacea. *African research review*, 7(1), 307-321.
- Ajuwon, O. S., & Ogwumike, F. O. (2013). Uncertainty and foreign direct investment: A case of agriculture in Nigeria. *Mediterranean journal of social sciences*, 4(1), 155-155.
- Akanle, O., & Omotayo, A. (2020). Youth, unemployment and incubation hubs in Southwest Nigeria. *African Journal of Science, Technology, Innovation and Development*, 12(2), 165-172.
- Akanni, K. A., Akinleye, S. O., & Oyebanjo, O. (2009). Free trade policy and the market prices of the Nigerian cash crops. *Journal of Social Sciences*, 18(2), 75-79.
- Ake, C. (1996). *Democracy and Development in Africa*, Brookings Institution. Washington, DC. p. 48. [ISBN 978-0-8157-0220-7](https://www.brookings.edu/books/9780815702207/).
- Åkerblad, L., Seppänen-Järvelä, R., & Haapakoski, K. (2021). Integrative strategies in mixed methods research. *Journal of Mixed Methods Research*, 15(2), 152-170.
- Akhigbodemhe E., J. & Apopo, A. L. (2018). The nexus between food security and infant mortality-further evidence from Nigeria. *Amity Journal of Economics*, 3(1), 1-15.
- Akhuemonkhan, I.A., Raimi, L. and Sofoluwe, A.O., 2013. Entrepreneurship education and employment stimulation in Nigeria. *Journal of Studies in Social Sciences*, 3(1). <https://infinitypress.info/index.php/jsss/article/view/66>
- Akinbile, L. A. (2007, October). Determinants of productivity level among rice farmers in Ogun State, Nigeria. In *African Crop Science Conference Proceedings* (Vol. 8, pp. 1339-1344).
- Akinboade, L. (November 2014). Govt makes entrepreneurship course compulsory in universities. *Vanguard Newspaper*. Published on November 18, 2014. Retrieved on

- Akinyemi, S., Ofem, I. B., & Ikuenomore, S. O. (2012). Graduate turnout and graduate employment in Nigeria. *International Journal of Humanities and Social Science*, 2(14), 257-265.
- Akinyetun, T. S. (2021). Youth Political Participation, Good Governance and Social Inclusion in Nigeria: Evidence from Nairaland. *Canadian Journal of Family and Youth/Le Journal Canadien de Famille et de la Jeunesse*, 13(2), 1-13.
- 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.
- Akpochafo, G. O., & Alike, I. H. (2018). Perceived Impact of Entrepreneurship Education on Career Development among Undergraduates in South-South Universities in Nigeria: Implication for Counselling. *Journal of Education and Learning*, 7(3), 102-108.
- Aladekomo, F. O. (2004). Nigeria educational policy and entrepreneurship. *Journal of social sciences*, 9(2), 75-83.
- 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), 282-297.
- Alawiye, A. (5 March 2020). *NYSC DG to passing out corps members: Set up businesses to save yourselves frustration of searching for scarce jobs*. International Centre for Investigative Reporting. Retrieved 26 June 2021 from <https://www.icirnigeria.org/nysc-dg-corps-members-frustration-scarce-jobs/>.
- Alhnaity, H. (2021). Antecedents of Attitude and Intention towards female entrepreneurs in Jordan. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(11), 2125-2138.
- Ali, E. B., Agyekum, E. B., & Adadi, P. (2021). Agriculture for Sustainable Development: A SWOT-AHP Assessment of Ghana's Planting for Food and Jobs Initiative. *Sustainability*, 13(2), 628.
- Alkire, S. (2002), *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*, Oxford: Oxford University Press.
- Alkire, S. (2009). *The Capability approach and human development*, OPHI. University of Oxford, unpublished.
- Alkire, S., & Deneulin, S. (2009). *Introducing the human development and capability approach. An introduction to the human development and capability approach*. London: Earthscan. pp.22-48
- Alkire, S., (2008). *The capability approach to the quality of life. Background report prepared for the Commission on the Measurement of Economic Performance and Social*

- Allana, S., & Clark, A. (2018). Applying meta-theory to qualitative and mixed-methods research: a discussion of critical realism and heart failure disease management interventions research. *International Journal of Qualitative Methods*, 17(1), 1609406918790042.
- Aloysius, O. I., Ismail, I. A., Suandi, T., & Arshad, M. M. (2018). Enhancing university's and industry's employability-collaboration among Nigeria graduates in the labor market. *International Journal of Academic Research in Business and Social Sciences*, 8(7), 32-48.
- Amadi, U. P. (2012). Agricultural entrepreneurship development for youth empowerment in Nigeria: Constraints and Initiatives for Improvement. *Journal of Educational and Social Research*, 2(10), 107-114.
- Amani, J. (2017). Prevalence of, and factors associated with, unemployment among graduates: Evidence from Tanzania. *Africa Education Review*, 14(3-4), 230-244.
- Amao, O. D., Antwi, M. A., Oduniyi, O. S., Oni, T. O., & Rubhara, T. T. (2021). Performance of Agricultural Export Products on Economic Growth in Nigeria. *Asian Journal of Agriculture and Rural Development*, 11(1), 47-52.
- Amare, M., Abay, K. A., Arndt, C., & Shiferaw, B. (2021). Youth Migration Decisions in Sub-Saharan Africa: Satellite-Based Empirical Evidence from Nigeria. *Population and Development Review*, 47(1), 151-179.
- Aminu, A. (2019). Characterising graduate unemployment in Nigeria as education-job mismatch problem. *African Journal of Economic Review*, 7(2), 113-130.
- Amit, R. and Muller, E., 1995. "Push" and "pull" entrepreneurship. *Journal of Small Business & Entrepreneurship*, 12(4), pp.64-80.
- Anabaraonye, B., Ewa, B. O., Anukwonke, C. C., Eni, M., & Anthony, P. C. (2021). The Role Of Green Entrepreneurship and Opportunities in Agripreneurship For Sustainable Economic Growth in Nigeria. *Covenant Journal of Entrepreneurship*, 5(1). etrieved from <https://journals.covenantuniversity.edu.ng/index.php/cjoe/article/view/2661>
- Annan, K. 2011. [Mr. Kofi Annan, AGRA chair, keynote address to the 34th session of IFAD's Governing Council, Africa's Potential Role in Global Food Security. https://www.ifad.org/en/web/latest/speech/asset/39024009](https://www.ifad.org/en/web/latest/speech/asset/39024009)
- Anyebe, A. A. (2014). Poverty reduction in Nigeria via National Poverty Eradication Programme (NAPEP): Two decades of policy failure. *Journal of Social Science for Policy Implications*, 2(2), 19-35.
- Anyidoho, N. A., Leavy, J., & Asenso-Okyere, K. (2012). Perceptions and aspirations: a case study of young people in Ghana's cocoa sector. *IDS bulletin*, 43(6), 20-32.
- Araba, S. (2014). Entrepreneurial Education: As a Tool for Reducing Unemployment in Nigeria. LAP LAMBERT Academic Publishing.

- Aranda, A. M., Sele, K., Etchanchu, H., Guyt, J. Y., & Vaara, E. (2021). From big data to rich theory: Integrating critical discourse analysis with structural topic modeling. *European Management Review*, 18(3), 197-214.
- Archer, M. S., & Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge university press.
- Archer, M. S., & Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge university press.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, 1609406919874596.
- Aregu, R. (2014). *Market and price decision enhancement services for farmers in Uganda* (Doctoral dissertation, PhD Thesis. University of Groningen).
- Arogundade, B. B. (2011). Entrepreneurship education: An imperative for sustainable development in Nigeria. *Journal of emerging trends in educational research and policy studies*, 2(1), 26-29.
- Arora, R., Pahwa, P., & Bansal, S. (2009, May). Alliance rules for data warehouse cleansing. In *2009 International Conference on Signal Processing Systems* (pp. 743-747). IEEE.
- Aryeetey, E., & Baah-Boateng, W. (2015). *Understanding Ghana's growth success story and job creation challenges* (No. 2015/140). WIDER Working Paper.
- Asiribo, O. E. (2009). An assessment of the roles of irrigation farming in the millennium development goals. *African Journal of Agricultural Research*, 4(5), 445-450.
- Asogwa, E. U., Dongo, L. N., Ndubuaka, T. C., & Hammed, L. A. (2021). The sustainability of Nigerian cocoa sector through good agricultural practices. *African Journal of General Agriculture*, 5(2).
- Asogwa, O. S., & Dim, E. M. (2016). Entrepreneurship development and unemployment reduction in Nigeria. *International Journal of Business and Management Review*, 4(8), 27-43.
- Assaad, R., AlSharawy, A., & Salemi, C. (2019, October). Is the Egyptian economy creating good jobs? Job creation and economic vulnerability from 1998 to 2018. In *Economic Research Forum Working Paper Series (Forthcoming)*.
- Athari, S. A. (2021). Domestic political risk, global economic policy uncertainty, and banks' profitability: evidence from Ukrainian banks. *Post-Communist Economies*, 33(4), 458-483.
- Audretsch, D. B., Keilbach, M. C., & Lehmann, E. E. (2006). *Entrepreneurship and economic growth*. Oxford University Press.
- Auernhammer, J. (2020). Design Research in Innovation Management: a pragmatic and human-centered approach. *R&D Management*, 50(3), 412-428.

- Auta, S. J., Abdullahi, Y. M., & Nasiru, M. (2010). Rural youths' participation in agriculture: prospects, challenges and the implications for policy in Nigeria. *Journal of Agricultural Education and Extension*, 16(3), 297-307.
- Aver, T. T., & Gwambeka, E. J. (2020). The Impact of Cattle Herders and Crop Farmers Conflicts on Socio-Economic Development In Nigeria. *International Journal of Management, Social Sciences, Peace and Conflict Studies*, 3(3).
- Ayinde, I. A., Otekunrin, O. A., Akinbode, S. O., & Otekunrin, O. A. (2020). Food Security in Nigeria: Impetus for Growth and Development. *J. Agric. Econ*, 6, 808-820.
- Ayinde, O.E., Ayinde, K., Memudu, I.J.B. and Ojehomon, V.I., 2008. Empirical analysis of agricultural growth and unemployment in Nigeria (No. 307-2016-4906, pp. 13-15).
- Ayomitunde, A. T., Pereowei, A. B., Abosede, A. A., & Eusebius, A. C. (2020). Agricultural Sector and Employment Generation In Post Sap Era Nigeria: An Empirical Perspective. *International Journal of New Economics and Social Sciences*, 11, 185-196.
- Azmi, I. A. G. (2017). Muslim women entrepreneurs motivation in SMEs: A quantitative study in Asia Pacific countries. *Asian Economic and Financial Review*, 7(1), 27.
- Azolibe, C. B. (2021), Analysis of the two-way causal nexus between macroeconomic factors and infrastructure development: the experience of selected African countries, *Journal of Economic and Administrative Sciences*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEAS-01-2021-0004>.
- Azzahrawi, R. (2021). Engaging in narrative inquiry ethically and honorably. *SN Social Sciences*, 1(4), 1-19.
- Baba, E. I., Baba, D. D., & Iwuoha, C. U. (2021). Assessment of Small Scale Business Skills Acquired by Business Students in the North-Central Polytechnics, Nigeria. *Journal of Good Governance and Sustainable Development in Africa*, 6(3), 41-53.
- Babajide, A., Osabuohien, E., Tunji-Olayeni, P., Falola, H., Amodu, L., Olokoyo, F., ... & Ehikioya, B. (2021). Financial literacy, financial capabilities, and sustainable business model practice among small business owners in Nigeria. *Journal of Sustainable Finance & Investment*, 1-23. <https://doi.org/10.1080/20430795.2021.1962663>
- Babalobi, B. (2019). Nigeria - Why Graduates Are Unemployed and Unemployable. *Vanguard Newspaper*. Published on 17 December 2019. Available at <https://allafrica.com/stories/201912240618.html>.
- Babalola, O. O., & Glick, B. R. (2012). Indigenous African agriculture and plant associated microbes: current practice and future transgenic prospects. *Scientific Research and Essays*, 7(28), 2431-2439.
- Babu, S. C., Franzel, S., Davis, K. E., & Srivastava, N. (2021). *Drivers of youth engagement in agriculture: Insights from Guatemala, Niger, Nigeria, Rwanda, and Uganda* (Vol. 2010). Intl Food Policy Res Inst. DOI : <https://doi.org/10.2499/p15738coll2.134328>

- Badejo, B. T., Agunyai, S. C., & Adeyemi, O. O. (2015). Policy, Youth Recruitment and Empowerment in Nigeria: A Case Study of Osun State Youth Empowerment Scheme (OYES). *Mediterranean Journal of Social Sciences*, 6(1 S1), 384. DOI: 10.5901/mjss.2015.v6n1s1p384
- Bairwa, S. L., Lakra, K., Kushwaha, S., Meena, L. K., & Kumar, P. (2014). Agripreneurship development as a tool to upliftment of agriculture. *International Journal of Scientific and Research Publications*, 4(3), 1-4.
- Baishya, S. K., Sangtam, H. M., Tungoe, M., Meyase, M., Tongoe, Z., Deka, B. C., ... & Ray, S. (2021). Empowering rural tribal youth through agripreneurship—evidence from a case study in North East India. *Current Science*, 120(12), 1854.
- Bakare, A. S. (2011). The determinants of urban unemployment crisis in Nigeria: An econometric analysis. *Journal of emerging trends in economics and management sciences*, 2(3), 184-192.
- Balana, B. B., Aghadi, C. N., & Ogunniyi, A. I. (2021). Improving livelihoods through postharvest loss management: evidence from Nigeria. *Food Security*, 1-17.
- Balestrino, A., 1996. A note on functioning-poverty in affluent societies. *Notizie di Politeia*, 12(43/44), pp.97-106.
- Balogun, A. (2018). We are going to join millions of unemployed graduates. *Modern Africa: Politics, History and Society*, 6(1), 85-106.
- Balogun, F., Obamwonyi, H. & Falade, T. (2021). From Resilience to Transilience: Interrogating Ideas on Youth Agency and Social Innovation in Nigeria- A Literature Review. Available at https://leapafrika.org/wp-content/uploads/1616/50/From-Resilience-to-Transilience-Interrogating-Ideas-on-Youth-Agency-and-Social-Innovation-in-Nigeria_Final.pdf.
- Baptiste, A. E. J., Masresha, B., Wagai, J., Luce, R., Oteri, J., Dieng, B., ... & Hak, E. (2021). Trends in measles incidence and measles vaccination coverage in Nigeria, 2008–2018. *Vaccine*, 39, C89-C95. <https://doi.org/10.1016/j.vaccine.2021.03.095>
- Bassey, G. E., & Atan, J. A. (2012). Labour market distortions and university graduate unemployment in Nigeria: Issues and remedies. *Current research journal of economic theory*, 4(3), 67-76.
- Bawa, A. B. (2020). Igbo Women's Experience in Northern Nigeria during the Nigeria-Biafra War, 1967–1970. *Women and the Nigeria-Biafra War: Reframing Gender and Conflict in Africa*, 241.
- Baycan, T. (2021). Entrepreneurial Interest of University Students in a Multicultural Society. In *A Broad View of Regional Science* (pp. 137-159). Springer, Singapore.
- Benería, L., Berik, G., & Floro, M. S. (2015). *Gender, development, and globalization: Economics as if all people mattered*. Routledge.

- Benzing, C., Chu, H. M., & Kara, O. (2009). Entrepreneurs in Turkey: A factor analysis of motivations, success factors, and problems. *Journal of small business management*, 47(1), 58-91.
- Bernard, H. R. (2002). *Research Methods in Anthropology: Qualitative and quantitative methods*. 3rd edition. AltaMira Press, Walnut Creek, California.
- Berthet, T., Dechezelles, S., Fouin, R., & Simon, V. (2009). Toward a 'capability' analytical model of public policy? Lessons from academic guidance issues. In *9e Congres: Asociacion Espanola de Ciencia Politica: "Repensar la democracia: inclusion diversidad"*, Atelier.
- Bhaskar, R. (2013). *A realist theory of science*. Routledge.
- Bhaskar, R. A. (1975). *Realist Theory of Science*. Brighton, UK: Harvester.
- Bhattacharyya, B., Biswas, R., Sujatha, K., & Chiphang, D. Y. (2021). Linear Regression Model To Study The Effects Of Weather Variables On Crop Yield In Manipur State. *Int. J. Agricult. Stat. Sci.*, 17(1), 317-320.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of management Review*, 13(3), 442-453.
- Bishwakarma, R. (2011). *Spatial inequality in child nutrition in Nepal: implications of regional context and individual/household composition* (Doctoral dissertation).
- Block, J. H., Kohn, K., Miller, D., & Ullrich, K. (2015). Necessity entrepreneurship and competitive strategy. *Small Business Economics*, 44(1), 37-54.
- Block, J. H., Kohn, K., Miller, D., & Ullrich, K. (2015). Necessity entrepreneurship and competitive strategy. *Small Business Economics*, 44(1), 37-54. DOI: 10.1007/s11187-014-9589-x
- Boluk, K. A., & Mottiar, Z. (2014). Motivations of social entrepreneurs: Blurring the social contribution and profits dichotomy. *Social Enterprise Journal*. 10(1), 53-68. <https://doi.org/10.1108/SEJ-01-2013-0001>
- Bonicatto, S., Dew, M. A., Soria, J. J., & Seghezze, M. E. (1997). Validity and reliability of Symptom Checklist'90 (SCL90) in an Argentine population sample. *Social Psychiatry and Psychiatric Epidemiology*, 32(6), 332-338.
- Booth-Jones, L., (2012). *Assessing small business training programme effectiveness in an incubator setting and beyond*. (Masters Dissertation, Nelson Mandela Metropolitan University).
- Kharas, H., Hamel, K., & Hofer, M. (2018). Rethinking global poverty reduction in 2019. *Blog. Future Development at Brookings*, 13. <https://www.brookings.edu/blog/future-development/2018/12/13/rethinking-global-poverty-reduction-in-2019/>
- Brooks, K. (2018). Rising absolutely, declining relatively: agriculture, climate change, and job creation in Africa. *Agrekon*, 57(3-4), 181-197.

- Buari, A. A., Alexander, A. A., Saheed, Z. S., & Alfa, Y. (2020). Impact Of Government Expenditures in Agriculture and Education on Economic Growth in Nigeria: A Disaggregated Analysis. *International Journal of Innovative Finance and Economics Research*, 8(1), 177-188.
- Buba, A. B. (2021). The Farmer-Herder Conflicts in Nigeria's Open Space: Taming the Tide. In *Decolonising Conflicts, Security, Peace, Gender, Environment and Development in the Anthropocene* (pp. 367-383). Springer, Cham.
- Bygrave, W., & Hofer, C., (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16(2), 13-22.
- Cadoni, P., & Angelucci, F. (2019). Analysis of incentives and disincentives for Rice in Nigeria. *Gates Open Res*, 3(643), 643.
- Cameron, R. (2009). A sequential mixed model research design: Design, analytical and display issues. *International journal of multiple research approaches*, 3(2), 140-152.
- Cameron, R. (2011). Mixed methods research: The five Ps framework. *Electronic journal of business research methods*, 9(2), pp96-108.
- Carvalho, L. C., Yamamoto, I., & Viana, A. B. N. (2018). Learning-apprenticeship methodologies: Virtuous relation between international entrepreneurial teaching and entrepreneurial attributes. In *International Enterprise Education* (pp. 162-188). Routledge.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds?. *Currents in Pharmacy Teaching and Learning*, 10(6), 807-815.
- Castro, N. R., & Barros, G. S. A. D. C. (2021). Increasing labor income and real unit labor costs in Brazilian agrobusiness. *Revista de Economia e Sociologia Rural*, 60.
- CBN (2018), Central Bank of Nigeria Statistical Bulletin, Abuja. Dec.
- Central Intelligence Agency, (2020). *The World FactBook*. <https://www.cia.gov/library/publications/the-world-factbook/>
- Chambers, R. (2014). *Rural development: Putting the last first*. Routledge.
- Chater, N., & Vitányi, P. M. (2003). The generalized universal law of generalization. *Journal of Mathematical Psychology*, 47(3), 346-369.
- Chen, M. H., Chang, Y. Y., Wang, H. Y., & Chen, M. H. (2017). Understanding creative entrepreneurs' intention to quit: The role of entrepreneurial motivation, creativity, and opportunity. *Entrepreneurship Research Journal*, 7(3). DOI: 10.1515/erj-2016-0001
- Cheteni, P. (2016). Youth Participation in Agriculture in the Nkonkobe District Municipality, South Africa. *Journal of Human Ecology*, 55(3), 207-213.

- Chidiebere, O. N., Iloanya, K., & Udunze, U. (2014). Youth unemployment and entrepreneurship development: Challenges and prospects in Nigeria. *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 4(4), 20.
- Chin, R. W. A., Chua, Y. Y., Chu, M. N., Mahadi, N. F., Wong, M. S., Yusoff, M. S., & Lee, Y. Y. (2018). Investigating validity evidence of the Malay translation of the Copenhagen Burnout Inventory. *Journal of Taibah University Medical Sciences*, 13(1), 1-9.
- Chinenye, O., & Ngonadi, A. (2017). The Politics of Subsidy Reinvestment and Empowerment Programme (SURE-P) and Youth Employment in Nigeria. *NG-Journal of Social Development*, 417(5443), 1-21.
- Choong, K. Y., Raof, R. A. A., Sudin, S., & Ong, R. J. (2021, May). Time Series Analysis for Vegetable Price Forecasting in E-Commerce Platform: A Review. In *Journal of Physics: Conference Series* (Vol. 1878, No. 1, p. 012071). IOP Publishing.
- Chu, X., Ilyas, I. F., Krishnan, S., & Wang, J. (2016, June). Data cleaning: Overview and emerging challenges. In *Proceedings of the 2016 international conference on management of data* (pp. 2201-2206).
- Chukwuemeka, U. S. (2019). Corporate social responsibility: A case for the Igbo trade apprenticeship system (ITAS) as a sustainable model of a startup incubator for social entrepreneurship in Nigeria, Africa. *Global Journal of Social Sciences Studies*, 6(1), 194-213.
- Churchill, N. C. (1992). Research issues in entrepreneurship. *The state of the art of entrepreneurship*, 579-596.
- Cieslik, K., Barford, A., & Vira, B. (2021). Young people not in Employment, Education or Training (NEET) in Sub-Saharan Africa: Sustainable Development Target 8.6 missed and reset. *Journal of Youth Studies*, 1-22.
- Clark, A. M. (2013). What are the components of complex interventions in healthcare? Theorizing approaches to parts, powers and the whole intervention. *Social Science & Medicine*, 93, 185-193.
- Clark, D. A. (2008). The capability approach: its development, critiques and recent advances. *Development studies*, 2, 105-127.
- Clark, D. A. (2005), *The Capability Approach: Its Development, Critiques and Recent Advances*. [online] Global Poverty Research Group. Available at: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.371.4189&rep=rep1&type=pdf>>
- Clark, D.A. & Qizilbash, M., (2002). *Core poverty and extreme vulnerability in South Africa* (pp. 2002-3). School of Economic and Social Studies, University of East Anglia.
- Cohen, G.A., 1993. Equality of what? On welfare, goods and capabilities. In: M. Nussbaum and A. Sen, Ed., *The Quality of Life*. 1993. Clarendon Press: Oxford.

- 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. *Afr. Dev. Rev.*, 29, 198–212.
- Collier, A. (1994). *Critical Realism: An Introduction to Roy Bhaskar's Philosophy*. London, UK: Verso.
- Conradie, I. (2013). *Aspirations and capabilities: The design and analysis of an action research project in Khayelitsha, Cape Town* (Doctoral dissertation, University of the Western Cape).
- Corbridge, S., (2002). Development as freedom: the spaces of Amartya Sen. *Progress in Development Studies*, 2(3), pp.183-217.
- Corden, A., & Sainsbury, R. (2006). *Using verbatim quotations in reporting qualitative social research: researchers' views* (pp. 11-14). York: University of York.
- Craig, D., & Bigby, C. (2015). Critical realism in social work research: Examining participation of people with intellectual disability. *Australian Social Work*, 68(3), 309-323.
- Cresswell, J. W., & Plano C. V. L. (2011). *Designing and conducting mixed method research*. 2nd Sage. Thousand Oaks, CA, 201.
- Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4thed.). Upper Saddle River, NJ: Pearson Education.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Cristea, A., Bozga, N. A., Tița, V. D., & Munteanu, C. C. (2019, May). Young Romanian farmers' perceptions regarding sustainable agriculture. In *Proceedings of BASIQ International Conference on New Trends in Sustainable Business and Consumption* (pp. 466-479).
- Crocker, D. & Robeyns, I. (2010). *Capability and agency*. In: Morris, C. (ed.) *Philosophers in focus: Amartya Sen*. Cambridge: Cambridge University Press, pp. 60-90.
- Dabalén, A., Oni, B., & Adekola, O. A. (2001). Labor market prospects for university graduates in Nigeria. *Higher Education Policy*, 14(2), 141-159.
- Dai, X., & Gao, Z. (2013). From model, signal to knowledge: A data-driven perspective of fault detection and diagnosis. *IEEE Transactions on Industrial Informatics*, 9(4), 2226-2238.
- Dalipagic, I., & Elepu, G. (2014). Agricultural value chain analysis in Northern Uganda: Maize, rice, groundnuts, sunflower and sesame. *Action Against Hunger, ACF-International*. <https://www.actionagainsthunger.org/publication/2014/03/agricultural-value-chain-analysis-northern-uganda-maize-rice-groundnuts>

- Danson, M., Galloway, L., & Sherif, M. (2021). From unemployment to self-employment: Can enterprise policy intensify the risks of poverty?. *Critical Perspectives on Accounting*, 75, 102164.
- Dash, D. (2018). A Review on Organic Farming as a Potential Sector of Agripreneurship Development among the Tribal Youth of India. *International Journal of Agriculture, Environment and Biotechnology*, 11(5), 761-767.
- Davijani, M. H., Banihabib, M. E., Anvar, A. N., & Hashemi, S. R. (2016). Optimization model for the allocation of water resources based on the maximization of employment in the agriculture and industry sectors. *Journal of Hydrology*, 533, 430-438.
- Davis, D. (2021). Presenting research reflexivity in your PhD thesis. *Nurse Researcher*, 29(2).
- Davronov, A. R. (2021). Formation And Development Of The Prosecutor's Supervision Over The Compliance Of Laws In Investigation Of Crimes In The Sphere Of Information Technologies. *ProAcademy*, 2021(1), 1-15.
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods Research: A Discussion on Its Types, Challenges, and Criticisms. *Online Submission*, 2(2), 25-36.
- Dawson, C. and Henley, A., 2012. "Push" versus "pull" entrepreneurship: an ambiguous distinction. *International Journal of Entrepreneurial Behavior & Research*, 18(6), pp.697-719.
- De, A. (2021). Culture of Resistance The Effect of the 1943 Bengal famine on Bengali Theater, Literature, and Painting. *Topics on Art and Money*, 117.
- Deebom, M. T., & Baridoma, M. P. (2017). The role of entrepreneurial education in the reduction of unemployment among nigerian graduates. *International Journal of Scientific & Engineering Research*, 8(11), 333-345.
- Denscombe, M. (2008). Communities of practice: A research paradigm for the mixed methods approach. *Journal of mixed methods research*, 2(3), 270-283.
- Dinh, H. T., & Monga, C. (2013). *Light manufacturing in Tanzania: A reform agenda for job creation and prosperity*. World Bank Publications.
- Dipeolu, A. O., Philip, B. B., Aiyelaagbe, I. O. O., Akinbode, S. O., & Adedokun, T. A. (2009). Consumer awareness and willingness to pay for organic vegetables in SW Nigeria. *Asian Journal of Food and Agro-Industry*, 10(11), 57-65.
- Dixon, B. S. (2020). Design, Pragmatism and Dewey. In *Dewey and Design* (pp. 1-29). Springer, Cham.
- Dodgson, J. E. (2019). Reflexivity in qualitative research. *Journal of Human Lactation*, 35(2), 220-222.
- Donye, A. O., & Ani, A. O. (2012). Risks and uncertainties in food production and their implications for extension work in Nigeria. *Agriculture and Biology Journal of North America*, 3(9), 345-353.

- Doron, R. (2014). Marketing genocide: Biafran propaganda strategies during the Nigerian civil war, 1967–70. *Journal of Genocide Research*, 16(2-3), 227-246.
- Downs, Y., & Swailes, S. (2013). A capability approach to organizational talent management. *Human Resource Development International*, 16(3), 267-281.
- Downward, P., Finch, J. H., & Ramsay, J. (2002). Critical realism, empirical methods and inference: a critical discussion. *Cambridge journal of economics*, 26(4), 481-500.
- Dries, L., & Ciaian, P. (2012). Job creation and job destruction in EU agriculture. *Food Policy*, 37(6), 600-608.
- Drydyk, J. (2008). How to distinguish empowerment from agency. Human Development and Capability Association (HDCA) conference 2008, New Delhi, India.
- Duan, C., & Sandhu, K. (2021). Immigrant entrepreneurship motivation—scientific production, field development, thematic antecedents, measurement elements and research agenda. *Journal of Enterprising Communities: People and Places in the Global Economy*.
- Dunne, C., Sietou, C., & Wilson, P. (2021). Investigating the economic visibility and contribution of UK women in agriculture through a systematic review of international literature. *Journal of Rural Studies*, 86, 330-345. DOI: 10.1016/j.jrurstud.2021.06.012
- Durgin, F. H., Klein, B., Spiegel, A., Strawser, C. J., & Williams, M. (2012). The social psychology of perception experiments: hills, backpacks, glucose, and the problem of generalizability. *Journal of Experimental Psychology: Human Perception and Performance*, 38(6), 1582.
- Durotoye, A. (2014). The Crisis of Youth Unemployment in the MINT Countries: Causes, Consequences and Corrections. *The Crisis of Youth Unemployment in the MINT Countries: Causes, Consequences and Corrections*, 6(24), 1-14.
- Duruji, M. M., Olanrewaju, F. O., & Duruji-Moses, F. U. (2019). Youth and Nigeria's Internal Security Management. In *Internal Security Management in Nigeria* (pp. 649-665). Palgrave Macmillan, Singapore.
- Eagleton, T. (2004). *After theory*. Penguin UK.
- Economic Times (May 26, 2021), *Nobel Laureate Amartya Sen conferred with Spain's top award in social sciences*. Retrieved from <https://economictimes.indiatimes.com/news/india/nobel-laureate-amartya-sen-conferred-with-spains-top-award-in-social-sciences/articleshow/82975795.cms>.
- Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, 48(2), 174-196.
- Effiom, L., & Ebi, B. O. (2021). Trade Policy, Infrastructural Development and Agricultural Sector Value Added in Nigeria. *Institutions and Economies*, 1-33.

- Effiom, M. E. M., & Efi, A. (2021). Entrepreneurship: An Option For The Mitigation Of Social Upheavals Among Nigerian Youths Social Upheavals Among Nigerian Youths. *International Journal of Management Studies, Business & Entrepreneurship Research* *ss & Entrepreneurship Research* 6(2), <http://www.casirmediapublishing.com>.
- Eguabor, E., & Aigbavboa, C. (2021). Expectations from the Welding Curriculum Based on the Perspective of Engineering Technology Graduates in Nigeria. In *Collaboration and Integration in Construction, Engineering, Management and Technology* (pp. 491-495). Springer, Cham.
- Egwu, G. I. (2021). Youth Empowerment, Wealth Creation and Security as Key to National Development. *UJAH: Unizik Journal of Arts and Humanities*, 21(3), 91-101.
- Elijah, O., Orikumhi, I., Rahman, T. A., Babale, S. A., & Orakwue, S. I. (2017, November). Enabling smart agriculture in Nigeria: Application of IoT and data analytics. In 2017 IEEE 3rd International Conference on Electro-Technology for National Development (NIGERCON) (pp. 762-766). IEEE.
- Eniola, A. A. (2014). The role of SME firm performance in Nigeria. *Oman Chapter of Arabian Journal of Business and Management Review*, 34(2352), 1-15.
- Eniola, A. A. (2021). The Entrepreneur Motivation and Financing Sources. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 25.
- Enisan, G., & Adeyemi, A. G. (2013). Effects of agricultural practices on residential land use in Ipinosa Town, Akure, Nigeria. *International Journal of Education and Research*, 1(7), 1-10.
- Enwereuzor, A. I., Umo, I. S., & Charles-Akalonu, C. L. (2021). The Conditions of Infrastructure and the Development of Rural Communities in Imo State, Nigeria. *Social Sciences*, 10(3), 132-139.
- Ephrem, A. N., Nguetzet, P. M. D., Murimbika, M., Bamba, Z., & Manyong, V. (2021). Perceived Social Norms and Agripreneurial Intention among Youths in Eastern DRC. *Sustainability*, 13(6), 3442.
- European Commission. (2002). Final report: benchmarking of Business Incubators. European Commission Enterprise Directorate General (Vol. 51). Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20657521>
- Ewepu, G. (2020). Back-to-Farm: NALDA set to train NYSC corps members in mechanized farming . Available at: <https://www.vanguardngr.com/2020/07/back-to-farm-nalda-set-to-train-nysc-corps-members-in-mechanized-farming/>
- Eze, J. F., & Nwali, A. C. (2012). Capacity Building for Entrepreneurship Education: The Challenge for the Developing Nations. *American Journal of Business Education*, 5(4), 401-408.
- Ezenwakwelu, C. A., Egbosionu, N. A., & Okwo, H. U. (2019). Apprenticeship Training Effects on Entrepreneurship Development in Developing Economies. *Academy of Entrepreneurship Journal*, 25(1), 1-21.

- 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*.
- Fairlie, R. W., & Fossen, F. M. (2018). Opportunity versus necessity entrepreneurship: Two components of business creation. Discussion Paper Series. <https://ftp.iza.org/dp11258.pdf>
- Fairlie, R. W., & Fossen, F. M. (January 30, 2018). Opportunity Versus Necessity Entrepreneurship: Two Components of Business Creation (January 30, 2018). CESifo Working Paper Series No. 6854, Available at SSRN: <https://ssrn.com/abstract=3140340>
- Fakih, A., Haimoun, N., & Kassem, M. (2020). Youth unemployment, gender and institutions during transition: evidence from the arab spring. *Social Indicators Research, 150*(1), 311-336.
- Fakokunde, M. O. (2021). Counselling and Psychological Strategies for Improved Entrepreneurial Tendencies in the Nigerian Military. In *Global Perspectives on Military Entrepreneurship and Innovation* (pp. 148-168). IGI Global.
- FAO (2014) Youth and agriculture: Key challenges and concrete solutions. Accessed November 20, 2017 <http://www.fao.org/3/a-i3947e.pdf>
- FAO (2021). *Family Farming Knowledge Platform: New Generation Farmers' Cooperative Society*. Retrieved from <http://www.fao.org/family-farming/network/network-detail/en/c/173244/>.
- Farayibi, A. (2021). Innovative Informal Sector Financing: Empirical Evidence from the Capital Sharing Model of Igbo Apprenticeship System in Nigeria. Available at SSRN 3793924.
- Fatoki, O. (2014). Factors motivating young South African women to become entrepreneurs. *Mediterranean Journal of Social Sciences, 5*(16), 184.
- Federal Government of Nigeria (2013). National policy on education. Yaba, Lagos: NERDC Pree
- Federal Ministry of Agriculture & Rural Development. (2008). website
- Federal Ministry of Agriculture and Rural Development. The Agriculture Promotion Policy. 2006. Available at: http://nssp.ifpri.info/files/2017/12/2016-Nigeria-Agric-Sector-Policy-Roadmap_June-15-2016_Final.pdf
- Feed the Future(n.d). Engaging youth in agriculture through information and communication technology. Retrieved from <https://www.usaid.gov/sites/default/files/documents/15396/Feed-the-Future-CaseStudy-Youth-Ag-ICT.pdf>
- Feriyanto, N., Aiyubbi, D. E., & Nurdany, A. (2020). The Impact of Unemployment, Minimum Wage, and Real Gross Regional Domestic Product on Poverty Reduction in Provinces of Indonesia. *Asian Economic and Financial Review, 10*(10), 1088-1099.

- Fertilizer Suppliers' Association of Nigeria (FESAN), Federal Ministry of Agriculture & Rural Development, and Federal Fertilizer Department (FDD) (2014). A study on consumption and fertilizer use by crops in Nigeria, [Africafertilizer.org/International Fertilizer Development Centre \(IFDC\) PMB 284 CT, Accra, Ghana February 2014. p 53](http://Africafertilizer.org/InternationalFertilizerDevelopmentCentre(IFDC)PMB284CT,Accra,GhanaFebruary2014.p53). Retrieved from http://nigeria.countrystat.org/fileadmin/user_upload/countrystat_fenix/congo/docs/FEPSAN%20FDD%20%20report%20fertilizer%20consumption%20and%20FUBC%20in%20Nigeria%2002%202014.pdf.
- Field, S. M., & Derksen, M. (2021). Experimenter as automaton; experimenter as human: exploring the position of the researcher in scientific research. *European Journal for Philosophy of Science*, 11(1), 1-21.
- Finelib.com (2016). *Nigeria Agricultural Co-operatives Societies*. Available at https://www.finelib.com/agriculture/agric-co_operatives.
- Finlay, L. (1998). Reflexivity: an essential component for all research?. *British Journal of Occupational Therapy*, 61(10), 453-456.
- Fjose, S., Grünfeld, L. A., & SQW, C. G. (2010). Identifying SME roles and obstacles to SME growth. MENON-publication no. 14.
- Folarin, E. M., Osabuohien, E. S., Okodua, H., Onabote, A., & Osabohien, R. (2021, March). Male and Female Employment in Agriculture and Agricultural Productivity in Nigeria. In *IOP Conference Series: Earth and Environmental Science* (Vol. 665, No. 1, p. 012066). IOP Publishing.
- Food and Agriculture Organization of the United Nations (n.d). Youth and Agriculture: Key Challenges and Concrete Solutions. Retrieved from <http://www.fao.org/3/i3947e/i3947e.pdf>
- Food and Agriculture Organization of the United Nations, Technical Centre for Agricultural and Rural Cooperation, & International Fund for Agricultural Development. (2014). Youth and agriculture: Key challenges and concrete solutions. *Published by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Technical Centre for Agricultural and Rural Cooperation (CTA) and the International Fund for Agricultural Development (IFAD). Rome.*
- Food and Agriculture Organization of the United Nations. (2016). Nigeria moving forward with ILO-supported Youth Employment in Agriculture Programme. Available at:
- Food and Agriculture Organization of the United Nations. (2018). The future of Africa's Agriculture rests with the youth
- Food and Agriculture Organization of the United Nations. (2020). FOA in Nigeria. Available at: <http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/>
- Fox, L., Wiseman, T., Cahill, D., Fleure, L., Kinsella, J., Curtis, E., ... & Van Hemelrijck, M. (2021). Effect of a brief physical activity-based presentation by a former patient for men treated with radical prostatectomy for prostate cancer: a mixed methods pilot study. *Supportive Care in Cancer*, 29(1), 145-154.

- Gallant, M., Majumdar, S., & Varadarajan, D. (2010). Outlook of female students towards entrepreneurship: An analysis of a selection of business students in Dubai. *Education, Business and Society: Contemporary Middle Eastern Issues*. DOI: 10.1108/17537981011070127
- Galvão, A., Marques, C., & Ferreira, J. J. (2020). The role of entrepreneurship education and training programmes in advancing entrepreneurial skills and new ventures. *European Journal of Training and Development*, 44(6-7) p595-614.
- Gar, R. A., & Rodgers, R. A. (2020). Challenges in Tackling Poverty and Unemployment: Analysis of Youth Employment in Agriculture Program in Alkaleri, Duguri and Gar Rural Communities of Bauchi State, Nigeria. In *The Palgrave Handbook of Agricultural and Rural Development in Africa* (pp. 199-215). Palgrave Macmillan, Cham.
- Garrett, J., 2008. Martha Nussbaum on capabilities and human rights. [online] Available at: www.wku.edu/~jan.garrett/ethics/nussbaum.htm
- Gavrilova, N. G. (2020, August). Impediments to the development of Nigeria's agricultural exports. In *IOP Conference Series: Earth and Environmental Science* (Vol. 548, No. 2, p. 022085). IOP Publishing.
- Gedeon, S. (2010). What is entrepreneurship. *Entrepreneurial practice review*, 1(3), 16-35.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update* (4th ed.). Boston: Allyn & Bacon
- George, O. N., & Nwokocha, E. G. (2021). Bridging the Sustainable Skills Gap in Business Education Curriculum for Post Oil Boom Economy in Nigeria. *International Journal of Vocational Education & Training*, 7(1). 6-13. doi: 10.11648/j.ijvetr.20210701.12
- Georgina, A. A., Ololade, Y. M., Abosede, A. A., & Afolakemi, A. O. (2020). Agricultural Credit, Cocoa Exports and Economic Growth in Nigeria: An Empirical Perspective. *Journal of Academic Research in Economics*, 12(1), 18-30.
- Gever, C. V., & Essien, C. F. (2019). Newspaper coverage of the herdsmen–farmers conflict in central Tiv Land, Benue State, Nigeria. *Media, War & Conflict*, 12(1), 102-120.
- Geza, W., Ngidi, M., Ojo, T., Adetoro, A. A., Slotow, R., & Mabhaudhi, T. (2021). Youth Participation in Agriculture: *A Scoping Review*. *Sustainability* 2021, 13, 9120.
- Ghafoor, A., Badar, H., and Maqbool, A. (n.d). Marketing of Agricultural Products. Institute of Business Management Sciences, University of Agriculture, Faisalabad, Pakistan. Retrieved from; https://www.academia.edu/34995776/Marketing_of_Agricultural_Products
- Ghosh, T., Sahu, S., & Chattopadhyay, S. (2021). Inflation expectations of households in India: Role of oil prices, economic policy uncertainty, and spillover of global financial uncertainty. *Bulletin of Economic Research*, 73(2), 230-251.

- Giaccio, V., Giannelli, A., & Mastronardi, L. (2018). Explaining determinants of agri-tourism income: Evidence from Italy. *Tourism Review*, 73(2), pp. 216-229. <https://doi.org/10.1108/TR-05-2017-0089>
- Giacobbi, P. R., Poczwadowski, A., & Hager, P. (2005). A pragmatic research philosophy for sport and exercise psychology. *The sport psychologist*, 19(1), 18-31.
- Giacomin, O., Janssen, F., Guyot, J. L., & Lohest, O. (2011). Opportunity and/or necessity entrepreneurship? The impact of the socio-economic characteristics of entrepreneurs. MPRA Paper 29506, University Library of Munich, Germany. Handle: RePEc:pra:mprapa:29506 <https://ideas.repec.org/p/pra/mprapa/29506.html>
- Giroh, D. Y., Tafida, A. A., Morris, L., & Marcus, G. K. (2021). Overcoming SmallHolder Farmers' Financial Exclusion Using Anchor Borrowers' programme In Yola North And Yola South Local Government Areas, Adamawa State, Nigeria. *Scientific Papers: Management, Economic Engineering in Agriculture & Rural Development*, 21(1). 345-352
- Greaney, A. M., Sheehy, A., Heffernan, C., Murphy, J., Mhaolrúnaigh, S. N., Heffernan, E., & Brown, G. (2012). Research ethics application: A guide for the novice researcher. *British Journal of Nursing*, 21(1), 38-43.
- Gregorio, V. L. (2019). Farming families in Malaysia and the Philippines: Empirical works and classical debates. *Asia-Pacific Social Science Review*, 19(2), 47-62.
- Gries, T., & Naudé, W. (2011). Entrepreneurship and human development: A capability approach. *Journal of Public Economics*, 95(3-4), 216-224.
- Guritno, A. D. (2018). Agriculture Value Chain as an Alternative to Increase Better Income's Distribution: The Case of Indonesia. *Agricultural Value Chain*, 1. DOI: 10.5772/intechopen.70141. <http://dx.doi.org/10.5772/intechopen.70141>
- Gutterman, A. (2021). Ageism: Where It Comes From and What It Does. *Ageism: Where It Comes From and What It Does (Oakland CA: Ageism Project, 2021)*.
- Hakim, C., 1989. New recruits in self-employment in the 1980's. *Employment Gazette*, 97, pp.286-297.
- Hall, R. (2013). Mixed methods: In search of a paradigm. *Conducting research in a changing and challenging world*, 71-78.
- Hamad, M. M., & Jihad, A. A. (2011, December). An enhanced technique to clean data in the data warehouse. In *2011 Developments in E-systems Engineering* (pp. 306-311). IEEE.
- Hammersley, M. (2015). On ethical principles for social research. *International Journal of Social Research Methodology*, 18(4), 433-449.
- Hammersley, M., & Traianou, A. (2012). *Ethics in qualitative research: Controversies and contexts*. Sage.

- Hammond, M. (2017). *Reflexivity*. Education Studies. Last revised on Mon 9 Oct 2017. Retrieved on 30 June 2021 from <https://warwick.ac.uk/fac/soc/ces/research/current/socialtheory/maps/reflexivity/>.
- Harris, A., Wyn, J., & Younes, S. (2010). Beyond apathetic or activist youth: 'Ordinary' young people and contemporary forms of participation. *Young*, 18(1), 9-32.
- Harris, D. R., & Fuller, D. Q. (2014). Agriculture: definition and overview. Encyclopedia of global archaeology, 104-113. Hussmanns, R. (2007). Measurement of employment, unemployment and underemployment—Current international standards and issues in their application. *Bulletin of Labour Statistics*, 1, 2007-2001.
- Harry Matlay, P., Rae, D. & Ruth Woodier-Harris, N. (2013), "How does enterprise and entrepreneurship education influence postgraduate students' career intentions in the New Era economy?", *Education Training*, 55(8/9), pp. 926-948.
- Harry, N.U. (2013). African Youth, Innovation and the Changing Society, *HuffPost*, November 09. Available at: https://www.huffingtonpost.com/njideka-u-harry/african-youth-innovation-_b_3904408.html.
- Hasan, M. R. (2021). 3. Assessing the effect of farmer's choice of fund for vegetable production in Bangladesh. *Journal of Agriculture, Food and Environment (JAFE)| ISSN (Online Version): 2708-5694*, 2(2), 12-17.
- Hassan, M., Mohamed Shaffril, H. A., & Abu Samah, B. (2012). Factors influencing the perception of youth agro-based entrepreneurs towards the role of ICT in increasing agro-business productivity. *Journal of Agricultural Research (03681157)*, 50(4).
- Hassan, N. U., Khan, F. Z., Bibi, H., Khan, N. T., Nayyar, A., & Bilal, M. (2021). A decision support benchmark for forecasting the consumption of agriculture stocks. *IEEE Consumer Electronics Magazine*, 10(6), 45-52.
- Hatammimi, J., & Wulandari, D. A. (2014). Internal Factors that Motivate College Students to Become ICT-Based Entrepreneur. In *Proceedings of International Conference on Research Methods in Management and Social Sciences (ICRMMS-2014)* (pp. 100-107).
- Heise, H., Crisan, A., & Theuvsen, L. (2015). The poultry market in Nigeria: Market structures and potential for investment in the market. *International Food and Agribusiness Management Review*, 18(1030-2016-83098), 197-222.
- Hellin, J., & Meijer, M. (2006). Guidelines for value chain analysis. *Food and Agriculture Organization of the United Nations (FAO)*, Rome, Italy.
- Henderson, R., & Robertson, M. (2000). Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Career development international*, 5(6), 279-287.
- Herrington, M., Simrie, M., Kew, J. and Turton, N., 2011. Global Entrepreneurship Monitor South Africa. <http://www.bbn.co.za/pdfs/2012GEMSouthAfricaReport.pdf>

- Higgins, A. J., Miller, C. J., Archer, A. A., Ton, T., Fletcher, C. S., & McAllister, R. R. J. (2010). Challenges of operations research practice in agricultural value chains. *Journal of the Operational Research Society*, 61(6), 964-973.
- Hindle, K. (2007). Teaching entrepreneurship at university: from the wrong building to the right philosophy. *Handbook of research in entrepreneurship education*, 1, 104-126.
- Hisrich, R.D. and Brush, C.G. (1985), "Women and minority entrepreneurs: a comparative analysis", in Hornaday, J.A., Shills, E.B., Timmons, J.A. and Vesper, K.H. (Eds), *Frontiers of Entrepreneurship Research*, Proceedings of the Fifth Annual Babson College Entrepreneurship Research Conference, Babson College, Wellesley, MA.
- Ho, K. (2009). *Liquidated*. Duke University Press. <https://www.brookings.edu/blog/future-development/2018/06/19/the-start-of-a-new-poverty-narrative/>
- Ibrahim, N. (2018). Updated: N5.7 billion SURE-P Fund: Court terminates former Katsina govt. officials' trial. *Premium Times*. Published on November 27, 2018. Retrieved from <https://www.premiumtimesng.com/news/top-news/297807-n5-7-billion-sure-p-fund-court-terminates-former-katsina-govt-officials-trial.html>. Last Assessed on 15 June 2021.
- Ibrahim, S., & Audu, B. J. (2020). Youth Development Policies in Nigeria: Promises, Problems, And Possibilities. *Kenneth Dike Journal of African Studies*, 1(1).
- Idowu, A. A., Ayoola, S. O., Opele, A. I., & Ikenweiwe, N. B. (2011). Impact of climate change in Nigeria. *Iranica Journal of Energy & Environment*, 2(2), 145-152.
- Idowu, H. A. (2019). An Appraisal of the Role of Social and Solidarity Economy in Achieving Sustainable Finance in Nigeria. Draft paper submitted to the United Nations Inter-Agency Task Force on Social and Solidarity Economy (UNTFSSSE).
- Ifatimehin, O. O., Isyak, I. O., & Omale, D. (2020). Effect of n-power scheme on youth empowerment in A nyigba, Dekina Local Government Area of Kogi State. *KI U Interdisciplinary Journal of Humanities and Social Sciences*, 1(1), 102-116.
- Iganiga, B. O., & Unemhilin, D. O. (2011). The impact of federal government agricultural expenditure on agricultural output in Nigeria. *Journal of Economics*, 2(2), 81-88.
- Igwe, P. A. (2020). Determinants of Household Income and Employment Choices in the Rural Agripreneurship Economy. *Studies in Agricultural Economics*, 122.
- Igwe, P. A., Rahman, M., Odunukan, K., Ochinanwata, N., Egbo, P. O., & Ochinanwata, C. (2020). Drivers of diversification and pluriactivity among smallholder farmers—evidence from Nigeria. *Green Finance*, 2(3), 263-283.
- Ihuah, P. W., & Eaton, D. (2013). The pragmatic research approach: A framework for sustainable management of public housing estates in Nigeria. *Journal of US-China Public Administration*, 10(10), 933-944.
- Iizuka, M., & Hane, G. (2021). Towards attaining the SDGs: cases of disruptive and inclusive innovations. *Innovation and Development*, 1-22.

- Ikebuaku, K., & Dinbabo, M. (2018). Beyond entrepreneurship education: business incubation and entrepreneurial capabilities. *Journal of Entrepreneurship in Emerging Economies*, 10(3). DOI: 10.1108/JEEE-03-2017-0022
- Ikuemonisan, E. S., & Akinbola, A. E. (2021). Agripreneurship and Agricultural Labour Market: Agripreneurial Intentions among Undergraduate Students in Ondo State, Nigeria. *European Journal of Agriculture and Food Sciences*, 3(3), 76-85.
- 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.
- Imaenyin, N. I. (2015). Agriculture in Nigeria: identifying opportunities for increased commercialization and investment. *Вестник евразийской науки*, 7(1 (26)).
- 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.
- International Labour Organization (1982). *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the Thirteenth International Conference of Labour Statisticians*. Available at : <http://www.ilo.org/public/english/bureau/stat/download/res/ecacpop.pdf>
- International Monetary Fund (IMF, 2012). Nigeria: Staff Report for the 2011 Article IV Consultation.
- International Monetary Fund. (2013). Working Paper on Africa's Employment Prospects.
- Inusa, B. M., Daniel, P. C., Dayagal, D. F., & Nyamdu, S. C. (2018). Nigerian economic growth and recovery: Role of agriculture. *Int J Econ Manag Sci*, 7(512), 2.
- Iosifides, T. (2017). Against 'Migration': Using Critical Realism as a Framework for Conducting Mixed-Method, Migrantization Research. *Journal of Critical Realism*, 16(2), 128-142.
- Isaacs, E., Visser, K., Friedrich, C., & Brijlal, P. (2007). Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African journal of education*, 27(4), 613-630.
- Ismail, A. A., & Kabuga, N. A. (2016). Impact of agricultural output on economic growth in Nigeria using ARDL econometric approach. *Nigerian Journal of Agricultural and Development Economics (NIJADE)*, 6(1), 127-138.
- Ismail, W., Olonisakin, F., Picciotto, B. & Wybrow, D. (2009), Youth Vulnerability and Exclusion (YOVEX) in West Africa: Synthesis Report', *Conflict Security and Development Group Paper*, 21.

- Israel, G.D. (1992). *Determining sample size*. University of Florida Cooperative Extension Service: Institute of Food and Agriculture Sciences, EDIS.
- Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. Sage.
- Ivanda, D. P., Igbokwe, E. M., & Olatunji, O. M. (2015). Assessment of food security situation of Tiv Farming households in Nigeria. *Journal of Agricultural Extension*, 19(1), 77-92.
- Ivankova, N. V. (2014). *Mixed methods applications in action research*. Sage.
- Iwara, I. O., & Netshandama, V. O. (2021). Small-Enterprise Capital Mobilization And Marketing In Rural Areas: A Review Synthesis Of Stokvel Model. *Academy of Entrepreneurship Journal*, 27(2), 1-11.
- Iwuagwu, O. (2012). Food Shortages, Survival Strategies And The Igbo Of Southeastern Nigeria During The Nigeria Civil War. *Journal of International Social Research*, 5(22).
- Iyorza, S., & Enyindah, S. (2021). Communication Media Convergence and Issues in Video Production, Distribution and Consumption among Nigerian Youths. *KIU Journal of Social Sciences*, 6(4), 255-265.
- Izquierdo, C., & Anguera, M. T. (2021). The analysis of interpersonal communication in sport from mixed methods strategy: The integration of qualitative-quantitative elements using systematic observation. *Frontiers in Psychology*, 12.
- Izuchukwu, O. (2011). Analysis of the contribution of agricultural sector on the Nigerian economic development. *World review of business research*, 1(1), 191-200.
- Jabbar Sa'id, A., & Singla, S. (2020). The Empirical Analysis of Agricultural Sector and Its Contribution to Economic Growth in Nigeria. *International Journal of Advance Research and Innovative Ideas in Education (IJARIE)*, 7(2), 1569-1574.
- Jackson, C., & Rao, N. (2009). Gender inequality and agrarian change in liberalizing India. *Gendered Impacts of Liberalization: Towards "Embedded Liberalism"*, 63-98.
- Jackson, S. D., Mohr, J. J., & Kindahl, A. M. (2021). Intersectional experiences: A mixed methods experience sampling approach to studying an elusive phenomenon. *Journal of Counseling Psychology*, 68(3), 299.
- Jacob, O. & Andrew, A. O. (2015), Terrorism and Insecurity in Nigeria: Moral, Values and Religious Education as Panaceas. *Journal of Education and Practice*. 6(11), 2015.
- Jacob, O. N., Monsurat, A. O., & Musa, A. (2021). Quality Assurance In Nigerian Public Higher Institutions: Challenges And Way Forward. *Web of Scientist: International Scientific Research Journal*, 2(07), 36-55.
- Jalil, M. M. (2013). Practical guidelines for conducting research-Summarising good research practice in line with the DCED standard. *Available at SSRN 2591803*.

- James, A. T., Ayobami, A. O., & Adeagbo, A. (2019). Raising Employability Bar and Building Entrepreneurial Capacity in Youth: A Case Study of National Social Investment Programme in Nigeria. *Covenant Journal of Entrepreneurship*, 3(2). Retrieved from <https://journals.covenantuniversity.edu.ng/index.php/cjoe/article/view/1832>
- Jeil, E. B., Abass, K., & Segbefia, A. Y. (2020). Challenges to sustaining beekeeping livelihoods in Ghana. *GeoJournal*, 1-18.
- Jelilov, G., & Bahago, K. A. (2017). Agro-Allied Industry and its Relevance on Economic Performance: Evidence from Nigeria. *Nile Journal of Business and Economics*, 3(6), 25-32.
- Jennison, K. M. (2004). The short-term effects and unintended long-term consequences of binge drinking in college: a 10-year follow-up study. *The American journal of drug and alcohol abuse*, 30(3), 659-684.
- Jennison, K. M. (2004). The short-term effects and unintended long-term consequences of binge drinking in college: a 10-year follow-up study. *The American journal of drug and alcohol abuse*, 30(3), 659-684.
- 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.
- Johnson, R. B. (1997). Examining the validity structure of qualitative research. *Education*, 118(2), 282.
- Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage publications.
- Johnson, R. B., & Christensen, L. B. (2014). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (5th ed.). Los Angeles, CA: Sage.
- Johnson, R., Onwuegbuzie, A., & Turner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, (1)112-133. doi: 10.1177/1558689806298224.
- Jonek-Kowalska, I., & Wolniak, R. (2021). The Influence of Local Economic Conditions on Start-Ups and Local Open Innovation System. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 110.
- Jootun, D., McGhee, G., & Marland, G. R. (2009). Reflexivity: promoting rigour in qualitative research. *Nursing standard*, 23(23), 42-47.
- Justice, A. E., & Louis, A. A. (2018). The nexus between food security and infant mortality-further evidence from Nigeria. *Amity Journal of Economics*, 3(1), 1-15.
- 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

- Kachooei, A. R., Ebrahimzadeh, M. H., Erfani-Sayyar, R., Salehi, M., Salimi, E., & Razi, S. (2015). Short Form-McGill Pain Questionnaire-2 (SF-MPQ-2): a cross-cultural adaptation and validation study of the Persian version in patients with knee osteoarthritis. *Archives of bone and joint surgery*, 3(1), 45.
- Kahan D.(2012). Entrepreneurship in farming. Food and Agriculture Organization of United nations. Retrieved from <http://www.fao.org/uploads/media/5-EntrepreneurshipInternLores.pdf>
- Kamishima, Y., Gremmen, B., & Akizawa, H. (2018). Can merging a capability approach with effectual processes help us define a permissible action range for AI robotics entrepreneurship?. *Philosophy of Management*, 17(1), 97-113.
- Kanu, I. A. (2019). Igwebuikeconomics: The Igbo apprenticeship system for wealth creation. *IGWEBUIKE: An African Journal of Arts and Humanities*, 5(4), 56-70.
- Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship theory and practice*, 39(3), 655-674.
- Kayode, A., Arome, A., & Silas, A. (2014). The rising rate of unemployment in Nigeria: the socio-economic and political implications. *Global Business and Economics Research Journal*, 3(1). 68.
- Kenneth, I.O. and Ananti, M., (2018). Marriage of inconvenience between herders and farmers in Nigeria: can elephant and hippo tango. *Art Human Open Acc J*, 2(6), pp.358-372.
- Kiebel S.J. & Holmes, A.P.(n.d). The general Linera Model. Retrieved from <https://www.fil.ion.ucl.ac.uk/spm/doc/books/hbf2/pdfs/Ch7.pdf>
- Kimaro, P. J., & Towo, N. N. (2015). Determinants of rural youth's participation in agricultural activities: the case of Kahe East ward in Moshi rural district, Tanzania. *International Journal of Economics, Commerce and Management*, 3(2), 33.
- Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of economic Literature*, 35(1), 60-85.
- Klasen, S., 2000. Measuring poverty and deprivation in South Africa. *Review of Income and Wealth*, 46(1), pp.33-58.
- Kock, N. (2017). Which is the best way to measure job performance: self-perceptions or official supervisor evaluations?. *International Journal of e-Collaboration (IJeC)*, 13(2), 1-9.
- Koesten, L., Gregory, K., Groth, P., & Simperl, E. (2021). Talking datasets—understanding data sensemaking behaviours. *International Journal of Human-Computer Studies*, 146, 102562.
- Krasniqi, B. A. (2007). Barriers to entrepreneurship and SME growth in transition: the case of Kosova. *Journal of Developmental Entrepreneurship*, 12(01), 71-94
- Krippendorff, K. (2011). Agreement and information in the reliability of coding. *Communication Methods and Measures*, 5(2), 93-112.

- Kulo, V. A., Agbogo, R. A., & Okudarie, J. U. (2018). Challenges of entrepreneurship education in Nigeria. *Nigerian Journal of Business Education (NIGJBED)*, 4(1), 50-56.
- Kumar, D. (2019). Prospects and challenges of agro-industry in Bangladesh: An agripreneur view. *African Journal of Agricultural Research*, 14(31), 1379-1389.
- Laderchi, C.R., 1997. Poverty and its many dimensions: The role of income as an indicator. *Oxford Development Studies*, 25(3), pp.345-360.
- Lambert, M., & Corteel, D. (2009). Capability for Learning in French Companies 28. *Net. Doc.* 50, 115.
- Lamidi, K. O., & Igbokwe, P. I. (2021). Social investment programmes in Nigeria: Impact and challenges. *African Journal of Social Work*, 11(1), 1-11. <https://www.ajol.info/index.php/ajsw/article/view/206270>
- Lavorel, S., Storkey, J., Bardgett, R. D., de Bello, F., Berg, M. P., Le Roux, X., ... & Harrington, R. (2013). A novel framework for linking functional diversity of plants with other trophic levels for the quantification of ecosystem services. *Journal of Vegetation Science*, 24(5), 942-948.
- Lawson, T., & Tony, D. E. (2010, April). Really reorienting modern economics. In *INET Conference, King's College*.
- Lazard, L., & McAvoy, J. (2020). Doing reflexivity in psychological research: What's the point? What's the practice?. *Qualitative research in psychology*, 17(2), 159-177.
- Lee, S. M., & Peterson, S. J. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of world business*, 35(4), 401-416.
- Lee, S. M., Chang, D., & Lim, S. B. (2005). Impact of entrepreneurship education: A comparative study of the US and Korea. *The international entrepreneurship and management journal*, 1(1), 27-43.
- Leviavery (2020). A map of the six geopolitical regions of Nigeria. Created on 29 October 2020. Available at https://en.wikipedia.org/wiki/Geopolitical_zones_of_Nigeria#/media/File:Geopolitical_Zones_of_Nigeria.svg
- Leung, L. (2016). Validity, reliability, and generalizability in qualitative research. *J Fam Med Prim Care*. 2015; 4 (3): 324.
- Levitt, H. M. (2021). Qualitative generalization, not to the population but to the phenomenon: Reconceptualizing variation in qualitative research. *Qualitative Psychology*, 8(1), 95.
- Liang, J., Ramanauskas, B., and Kurenkov, A. (2019). Job Loss Due To AI — How Bad Is It Going To Be? Available at: <https://www.skynettoday.com/editorials/ai-automation-job-loss>
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1-55.

- Liverpool-Tasie, L. S., Kuku, O., & Ajibola, A. (2011). Review of literature on agricultural productivity, social capital and food security in Nigeria (No. 21). International Food Policy Research Institute (IFPRI).
- Longe, O. (2017). Graduate unemployment in Nigeria: Causes, consequences and remediable approaches. *American International Journal of Contemporary Research*, 7(4), 63-73.
- López-Meri, A., Alonso-Muñoz, L., & Casero-Ripollés, A. (2021). What is behind the entrepreneurship intention in journalism? Entrepreneur typologies based on student perceptions. *Journalism Practice*, 15(3), 402-419.
- Lumen, L. D. P. (2020). *Factors Affecting Youth Involvement in Agriculture In Selected Areas Of The Davao Region* (Doctoral dissertation, University of the Philippines-Open University).
- Lyocks, J. S., Lyocks, S. W. J., & Kagbu, J. H. (2013). Mobilizing Youth for Participation in Nigerian Agricultural Transformation Agenda: A Grassroots' Approach. *Journal of Agricultural Extension*, 17(2), 78-87.
- Lyu, Y., Tuo, S., Wei, Y., & Yang, M. (2021). Time-varying effects of global economic policy uncertainty shocks on crude oil price volatility: New evidence. *Resources Policy*, 70, 101943.
- Macharia, G. S. (2021). *Entrepreneurial Determinants of Performance of Coffee-Based Micro and Small Agribusinesses of the Coffee Small Holders in Murang'a County* (Doctoral dissertation, JKUAT-COHRED).
- Magagula, B., & Tsvakirai, C. Z. (2020). Youth perceptions of agriculture: Influence of cognitive processes on participation in agripreneurship. *Development in practice*, 30(2), 234-243.
- Maïga, E., Christiaensen, L., & Palacios-Lopez, A. (2015, December). Are the youth exiting agriculture en masse? *Center for the Study of African Economies Conference, Oxford, UK*.
- Maina, W. N., & Maina, F. M. P. (2012). Youth engagement in agriculture in Kenya: Challenges and prospects. *Journal of Culture, Society and Development. Update*, 2. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.972.6946&rep=rep1&type=pdf>
- Majali, V. (2012). *The socio-cultural factors affecting the participation of women in agricultural development: Khezana Village in Alice District* (Doctoral dissertation, University of Fort Hare).
- Majumdar, M. and Subramanian, S., (2001). Capability failure and group disparities: some evidence from India for the 1980s. *Journal of Development Studies*, 37(5), pp.104-140.
- Majumdar, S., & Varadarajan, D. (2013). Students' attitude towards entrepreneurship: does gender matter in the UAE?. *Foresight. Emerald, Foresight Special Issue: Is the Middle East the Land of the Future?* 15(4). ISSN: 1463-6689. DOI: 10.1108/FS-03-2012-0011

- Mallick, M. A. (2013). Aspects of Positive Discrimination and Tribal Development in India. *South Asian Survey*, 20(2), 163-190.
- Man, N., 2012. Unleashing youth potentials in developing the agricultural sector. *Journal of Social Science and Humanities*, 20(1), pp.93-106.
- 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.
- Marenin, O. (1990). Implementing deployment policies in the National Youth Service Corps of Nigeria: Goals and constraints. *Comparative Political Studies*, 22(4), 397-436.
- Martinetti, E.C., 1994. A new approach to evaluation of well-being and poverty by fuzzy set theory. *Giornale degli economisti e annali di economia*, 53(7/9). pp.367-388.
- Matlay, H. (2008), "The Impact of Entrepreneurship Education on Entrepreneurial Outcomes", *Journal of Small Business and Enterprise Development*, 15(2), 382-396.
- Matlay, H., & Farashah, A. D. (2013). The process of impact of entrepreneurship education and training on entrepreneurship perception and intention. *Education + Training*, 55(8/9), 868-885. <https://doi.org/10.1108/ET-04-2013-0053>.
- Matthew, A., & Mordecia, D. B. (2016). The impact of agricultural output on economic development in Nigeria: 1986-2014. *Journal of archives of current research international*, 4(1), 1-10.
- Matthew, O. J., & Victor, A. A. (2018). Reducing Unemployment in Nigeria: an Evaluation of the Entrepreneurship Programmers in Ondo State. *Journal for Studies in Management and Planning*, 4(1), 26-36.
- McGranahan, L. (2017). *Darwinism and pragmatism: William James on evolution and self-transformation*. Taylor & Francis.
- Meijerink, G. W., & Roza, P. (2007). The role of agriculture in economic development (No. 4). Wageningen UR.
- Memudu, J., & Muhammad-Lawal, A. (2021). An Assessment of the Use of Agricultural Inputs and Farm machinery Among Food Crop Farmers in Kogi State, Nigeria. *NISEB Journal*, 13(2). 62-66.
- Meo, M. S., Kumar, B., Chughtai, S., Khan, V. J., Dost, M. K. B., & Nisar, Q. A. (2020). Impact of unemployment and governance on poverty in Pakistan: a fresh insight from non-linear ARDL co-integration approach. *Global Business Review*, 0972150920920440.
- Merikle, P. M., Smilek, D., & Eastwood, J. D. (2001). Perception without awareness: Perspectives from cognitive psychology. *Cognition*, 79(1-2), 115-134.
- Mertz, O., Mbow, C., Reenberg, A., & Diouf, A. (2009). Farmers' perceptions of climate change and agricultural adaptation strategies in rural Sahel. *Environmental management*, 43(5), 804-816.

- Mgbenka, R. N., Onwubuya, E. A., & Ezeano, C. I. (2015). Organic farming in Nigeria: Need for popularization and policy. *World Journal of Agricultural Sciences*, 11(6), 346-355.
- Minarcine, S., & Shaw, C. (2016). Motivations for entrepreneurship. *International Journal of the Academic Business World*, 10(2), 47-56.
- Ministry of Agriculture (2007). National Agricultural Extension Policy Implementation Framework. Nairobi, FAO.
- Mitullah, W., & Odek, P. (2010). Employment Creation in Agriculture & Agro-Processing Sector in Kenya in the Context of Inclusive Growth: Political Economy & Settlement Analysis. *Partnership for African Social and Governance Research Working Paper*, (020).
- Mkong, C. J., Abdoulaye, T., Donsop-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.
- Mohammed, A. (2018). *Effect of Government Intervention Programmes on Agricultural Production in Nigeria (1980-2014)* (Doctoral dissertation, Kwara State University (Nigeria)).
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2021). *Introduction to linear regression analysis*. John Wiley & Sons.
- Moreda, T. (2020). Review on Factors Affecting Youth Participation in Agribusiness in Ethiopia. *Plant*, 8(3), 80.
- Morris, M. H., Webb, J. W., Fu, J., & Singhal, S. (2013). A competency-based perspective on entrepreneurship education: conceptual and empirical insights. *Journal of small business management*, 51(3), 352-369.
- Morrison, A. (2000). Entrepreneurship: what triggers it?. *International Journal of Entrepreneurial Behavior & Research*. 6(2), pp. 59-71. <https://doi.org/10.1108/13552550010335976>
- Mousavi, T., Forwell, S., Dharamsi, S., & Dean, E. (2015). Do Nussbaum's ten central human functional capabilities extend occupational therapy's construct of occupation? A narrative review. *New Zealand Journal of Occupational Therapy*, 62(1), 21.
- Mousley, P. (2007). SMEs issues, challenges and prospects, Paper presented at Financial System Strategy (FSS) 2020 International Conference, Abuja. Retrieved June 7, 2017 from <http://www.cenbank.org/fss/mon/FSS2020Presentation%20@20International%20Conference.ppt>
- Muhammad-Lawal, A., Omotosho, O. A. and Falola, A. (2009). Technical efficiency of youth participation in agriculture: A case study of youth – in – Agriculture Programme in Ondo State, south western Nigeria. *Nigeria Journal of Agriculture, food and Environment*, 5(1), 20- 26

- Mukembo, S. C. (2017). *Equipping youth with agripreneurship and other valuable life skills by linking secondary agricultural education to communities for improved livelihoods: A comparative analysis of project-based learning in Uganda* (Doctoral dissertation, Oklahoma State University).
- Mukembo, S. C., Edwards, M. C., & Robinson, J. S. (2020). Comparative analysis of students' perceived agripreneurship competencies and likelihood to become agripreneurs depending on learning approach: A report from Uganda. *Journal of Agricultural Education*, 61(2), 93-114.
- Mulema, J., Mugambi, I., Kansiime, M., Chan, H. T., Chimalizeni, M., Pham, T. X., & Oduor, G. (2021). Barriers and opportunities for the youth engagement in agribusiness: empirical evidence from Zambia and Vietnam. *Development in Practice*, 1-17.
- Mumtaz, H., & Musso, A. (2021). The evolving impact of global, region-specific, and country-specific uncertainty. *Journal of Business & Economic Statistics*, 39(2), 466-481.
- Musa, S. F. P. D., & Basir, K. H. (2021). Smart farming: towards a sustainable agri-food system. *British Food Journal*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BFJ-03-2021-0325>.
- Nabay, O., Koroma, M., Johnson, A. J., & Kassoh, F. S. (2020). Analysis of the profitability and marketing distribution channels of sweet potato business in Sierra Leone. *Journal of Agricultural Extension and Rural Development*, 12(2), 26-35.
- Nabi, G., Liñán, F., Davey, T., Plewa, C., & Struwig, M. (2011). Entrepreneurship perceptions and career intentions of international students. *Education+ Training*, 53(5), pp. 335-352. <https://doi.org/10.1108/00400911111147677>
- Nandi, J. A., Haruna, S. K., & Abudu, S. (2012). Analysis Of Socio-Economic Factors Influencing Farmers' adoption Of Rice Varieties With High Yielding And Weed Suppressing Abilities In Kano River Irrigation Project (KRIP). *Journal of Agriculture, Forestry and the Social Sciences (JOAFSS)*, 10(1).
- National Bureau of Statistic. (2020). Gross Domestic Product report for 2019. <https://punchng.com/breaking-nigerias-economy-grew-by-2-27-in-2019-nbs/>
- National Bureau of Statistic. (2020). Labour Force Statistics: Unemployment and Underemployment Report
- National Bureau of Statistics (2010). *Labour Force Statistics, 2010. Archived from the original on 24 April 2015*. Retrieved on 26 June, 2021 from <https://web.archive.org/web/20150424153316/http://www.nigerianstat.gov.ng/pages/download/41>
- National Bureau of Statistics (2020), *Labor Force Statistics: Unemployment and Underemployment Report (Q4 2020)*. Available at [https://nigerianstat.gov.ng/elibrary?queries\[search\]=unemployment&perPage=100](https://nigerianstat.gov.ng/elibrary?queries[search]=unemployment&perPage=100).
- National Bureau of Statistics. (2018). Labor Force Statistics - Volume I: Unemployment and Underemployment Report.

- National Research Council. (2003). *Protecting participants and facilitating social and behavioral sciences research*. National Academies Press.
- National Youth Policy. (2019). <https://office.youthhubafrica.org/nigerian-national-youth-policy-2019/>
- Nchuchuwe, F. F., & Adejuwon, K. D. (2012). The challenges of agriculture and rural development in Africa: The case of Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 1(3), 45-61.
- Ndanitsa, M. A., Adetunji, A. O., Mohammed, D., & Ndako, N. (2021). Effects Of Agricultural Credit Delivery On The Income Of Arable Crop Farmers In Niger State Of Nigeria. *Agricultural Economics and Farm Management* [259]. URI: <http://repository.futminna.edu.ng:8080/jspui/handle/123456789/5189>.
- Nelson, P. J. (2021). *Global Development and Human Rights: The Sustainable Development Goals and Beyond*. University of Toronto Press.
- 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.
- Ngenoh, G. C. (2021). *Effects of Marketing Strategies on Product Line Margins Amongst the Cassava Microenterprises in Migori County, Kenya* (Doctoral dissertation, Egerton University).
- Niels, B., Stephen, H., Aileen, I., Donna, K., Maribel, G., & Thomas S. (2021). *Global Entrepreneurship Monitor 2020/2021 Global Report. the Global Entrepreneurship Research Association*, London Business School. Available at <https://www.gemconsortium.org/file/open?fileId=50691>.
- Njeru, L. K. (2016). *Influence of selected factors on youth participation in agriculture in Kajiado North Sub-County, Kenya* (Doctoral dissertation, Egerton University).
- Njeru, L. K. (2017). Youth in agriculture: Perception and challenges of enhanced participation in Kajiado North Sub County, Kenya. *Greener Journal of Agricultural Sciences*, 7(8), 203-209.
- Njeru, L. K., Gichimu, B. M., Lopokoityit, M. C., & Mwangi, J. G. (2015). Influence of Kenyan Youth's Perception towards Agriculture and Necessary Interventions; a Review. *Asian Journal of Agricultural Extension, Economics & Sociology*, 5(1), 40-45.
- Nkechi, A., Emeh Ikechukwu, E. J., & Okechukwu, U. F. (2012). Entrepreneurship development and employment generation in Nigeria: Problems and prospects. *Universal Journal of Education and General Studies*, 1(4), 88-102.
- 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.
- Nnadi, F. N., Chikaire, J., Echetama, J. A., Ihenacho, R. A., Umunnakwe, P. C., & Utazi, C. O. (2013). Agricultural insurance: A strategic tool for climate change adaptation in the agricultural sector. *Net Journal of Agricultural Science*, 1(1), 1-9.

- Noorani, M. (2015). *To farm or not to farm? Rural youth perceptions of farming and their decision of whether or not to work as a farmer: A case study of rural youth in Kiambu County, Kenya* (Doctoral dissertation, Université d'Ottawa/University of Ottawa).
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology*, 41(1-2), pp. 127-150.
- Note, A. S. (2018). The role of food and agriculture for job creation and poverty reduction in Jordan and Lebanon. *World Bank Agricultural Sector Note* (p166455).
- Novak, I., Dabic, M., Bayraktaroglu, E., Basic, M., & Daim, T. (2012). Exploring gender differences in attitudes of university students towards entrepreneurship. *Vol. 4 No. 3*, pp. 316-336. <https://doi.org/10.1108/17566261211264172>
- Ntukidiem, I. I. (2015). Agriculture in Nigeria: identifying opportunities for increased commercialization and investment. *Интернет-журнал Науковедение*, 7(1), 27-27.
- Nunfam, V. F. (2021). Mixed methods study into social impacts of work-related heat stress on Ghanaian mining workers: A pragmatic research approach. *Heliyon*, 7(5), e06918.
- Nussbaum, M., (2000). *Women and Human Development: The Capabilities Approach* Cambridge: Cambridge University Press.
- Nussbaum, M., (2003). Capabilities as fundamental entitlements: Sen and social justice. *Feminist Economics*, 9(2-3), pp.33-59.
- Nussbaum, M., (1995). Human capabilities, female human beings. *Women, culture and development: A study of human capabilities*, pp.61-104.
- Nwachuku, I. N., Agwu, N., Nwaru, J., & Imonikhe, G. (2010). Competitiveness and determinants of cocoa export from Nigeria. *Report and Opinion*, 2(7), 51-54.
- Nwambam, A. S., Nnennaya, O. O., & Nwankpu, I. S. (2018). Evaluating the entrepreneurship education programme in Nigerian universities for sustainable development. *Journal of Entrepreneurship Education*, 21(1), 1-13.
- Nwangwu, C., & Enyiazu, C. (2019). Nomadic Pastoralism and Human Security: Towards a Collective Action against Herders-Farmers Crisis in Nigeria. Conference: The Political Economy of Migration in Africa At: African Heritage Institution, 54 Nza Street, Independence Layout, Enugu state.
- Nwankwo, C. F. (2018). The battles for supremacy and agenda-setting: Representations of the farmers–herders conflict in Nigerian newspapers. *Unpublished MA dissertation, Keele University, UK*. [https://doi.org/10.13140/rg.2\(19585.92007\)](https://doi.org/10.13140/rg.2(19585.92007)).
- Nwankwo, N. N., Obinwa, U. A., & Onwuasoanya, S. C. (2021). Implication Of Entrepreneurship And Teacher Education For National Development. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 2(1), 200-208.

- Nwankwo, O. (2013). Agricultural financing in Nigeria: An empirical study of Nigerian agricultural co-operative and rural development bank (NACRDB): 1990-2010. *Journal of Management research*, 5(2), 28-44. *epreneurship*, 4(3), 316-336.
- Nwekeaku, C. (2013), "Entrepreneurship education and challenges to Nigerian universities", *Journal of Education and Practice*, Vol. 4, No. 3, pp.51-56.
- Nwosu, O. C., & Ugwuera, E. (2014). Analysis of Subsidy and Reinvestment Programme (SURE-P) and Youth Empowerment in Nigeria 2012-2014. *IOSR Journal of Humanities and Social Science*, 19(12), 25-32.
- Nwoye, M. (2007). Gender responsive entrepreneurial economy of Nigeria: Enabling women in a disabling environment. *Journal of International Women's Studies*, 9(1), 167-175.
- Nyabam, V. S., Tarawali, G., & Ijie, B. A. (2018). Empirical Analysis of IITA Youth in Agribusiness Model as a Panacea for Solving Youth Unemployment Problem in Nigeria. *International Journal of Governance and Development*, 5(1 & 2), 117-121.
- Nyanga, T. (2013). Agriculture: the unseen employment creation tool in Masvingo district, Zimbabwe. *Journal of Sustainable Development in Africa*, 15(5), 18-27.
- NYSC Directorate Headquarters (2017). *About The Scheme*. Retrieved on 26 June, 2021 from <https://www.nysc.gov.ng/aboutscheme.html>.
- Obah-Akpowoghaha, N. G., Ojatorotu, V., & Tarro, M. L. (2020). Porous Borders and the Challenge of National Integration in Africa: A Reflection of Ghana, Republic of Benin and Nigeria. *Journal of African Foreign Affairs*, 7(3), 89-111.
- Obim, I. E., Nwankwo, E. U., & Onah, J. C. (2021). Awareness And Competency Level Of Undergraduates For Entrepreneurship Opportunities In Library And Information Science Profession In University Of Nigeria, Nsukka. *Library Philosophy and Practice*, 1-16.
- Ochada, I. M., & Ogunniyi, M. B. (2020). Agricultural output performance, employment generation and per capita income in Nigeria. *BizEcons Quarterly*, 11, 15-26.
- Odetola, T., & Etumnu, C. (2013). Contribution of agriculture to economic growth in Nigeria. The 18th Annual Conference of the African Econometric Society (AES) Accra, Ghana/Economists (AAWE), 22nd and 23rd July, 2013. http://www.aaawe.org/wp-content/uploads/2015/01/Tolulope_paper_mod.pdf
- Odiji, O., Nwoke, O., & Adeseke, A. (2016). The YOU-WIN Entrepreneurship programme and National development in Nigeria. *International Journal of Economic Development, Research and Investment*, 7(1), 8-15.
- Oduwole, T. A. (2015). Youth unemployment and poverty in Nigeria. *International Journal of Sociology and Anthropology Research*, 1(2), 23-39.
- OECD. Publishing. (2016). OECD-FAO agricultural outlook 2016-2025. OECD Publishing.
- Ogunremi, O. O., Ogunremi, J. B., & Faleyimu, O. I. (2012). Relevance and benefits of agricultural youth empowerment programme to participating youth in Osun state, Nigeria. *Asian journal of social sciences & humanities*, 1(2), 7-19.

- Ogbodo, I. H., Aguaguiyi, F. N., Nwafor, G. O., & Umebali, E. E. (2021). Determinants of Adoption of Improved Agricultural Technologies among Fadama Rice Farmer Cooperative Societies in Enugu State, Nigeria. *University-Led Knowledge and Innovation for Sustainable Development*, 324.
- Ogbuehi, V. N. (2020). Impact of Cultural Diversity & Politics on Terrorism and Farmers/herders Clash in Nigeria. *JournalNX*, 6(02), 336835.
- Ogen, O. (2007). The agricultural sector and Nigeria's development: Comparative perspectives from the Brazilian agro-industrial economy, 1960-1995. *Nebula*, 4(1), 184-194.
- Oghuvbu, E. A. (2021). Security And The Challenges Of Securing Nigerian State. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 3924-3930.
- Ogunmodede, A. M., Ogunsanwo, M. O., & Manyong, V. (2020). Unlocking the Potential of Agribusiness in Africa through Youth Participation: An Impact Evaluation of N-Power Agro Empowerment Program in Nigeria. *Sustainability*, 12(14), 5737.
- O'Higgins, N. 2001. Youth unemployment and employment policy: A global perspective (Geneva, ILO)., Available at SSRN: <https://ssrn.com/abstract=3019316>
- Okafor, E. E. (2011). Youth unemployment and implications for the stability of democracy in Nigeria. *Journal of sustainable Development in Africa*, 13(1), 358-373.
- Okeke, O. E. (2014). Conflicts between Fulani herders and farmers in central and southern Nigeria: Discourse on proposed establishment of grazing routes and reserves. *AFRREV IJAH: An International Journal of Arts and Humanities*, 3(1), 66-84.
- Okere, A. (2021). Echoes from Post-Civil War Development in Nigeria: Igboland and Infrastructure Development in a Millennium Development Goals Epoch. *International Scholars Journal of Arts and Social Science Research*, 3(4), 306-322.
- Okolie, U. C., & Igbini, M. D. (2020). Leadership Failure and Acute Youth Unemployment in Nigeria. *RUDN Journal of Public Administration*, 7(3), 254-271.
- Okolo-obasi, N. E., & Uduji, J. I. (2021). Does agri-business/small and medium enterprise investment scheme (AGSMEIS) impact on youth entrepreneurship development in sub-Saharan Africa? Evidence from Nigeria. *Journal of Economic and Administrative Sciences*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEAS-05-2021-0094>
- Okotie, S. (2018). The Nigerian economy Before the Discovery of crude oil. In *The Political Ecology of Oil and Gas Activities in the Nigerian Aquatic Ecosystem* (pp. 71-81). Academic Press.
- Okoye, B., & Adamade, C. (2016). *Agriculture in Nigeria: Country Report for FAO-Nigeria*. Technical Report Presented during the Technical Training on Cassava Production and Processing Technologies provided under the Framework of the FAOChina South-South Cooperation (SSC) Programme, 2016. Retrieved on 26 June 2021 from https://www.researchgate.net/profile/Okoye-Bc/publication/351272788_Agriculture_in_Nigeria_Country_Report_for_FAO-

[Nigeria/links/608ecb5192851c490fb0e4c9/Agriculture-in-Nigeria-Country-Report-for-FAO-Nigeria.pdf](https://www.fao.org/nigeria/links/608ecb5192851c490fb0e4c9/Agriculture-in-Nigeria-Country-Report-for-FAO-Nigeria.pdf).

- Okpara, J. O., & Kabongo, J. D. (2009). An empirical evaluation of barriers hindering the growth of small and medium sized enterprises (SMEs) in a developing economy. *African Journal of Business and Economic Research*, 4(1), 7-21.
- Okpara, J. O., Halkias, D., Nwajiuba, C., Harkiolakis, N., & Caracatsanis, S. M. (2011). Challenges facing women entrepreneurs in Nigeria. *Management Research Review*.
- Okpo, O. (2013). The conflict between profit and ethics in the business of journalism in Nigeria. *European Journal of Business and Management*, 5(10).
- Okunlola, F. A., & Ehimare, A. O. (2019). Has Nigerian agricultural output spurred economic growth: the financing gap model using stepwise regression. *Investment Management & Financial Innovations*, 16(3), 157.
- Okwuosa, L., Nwaoga, C. T., & Uroko, F. (2021). The post-war era in Nigeria and the resilience of Igbo communal system. *Jàmbá: Journal of Disaster Risk Studies*, 13(1), 1-12.
- Oladiti, A. A., & Ajogbeje, O. O. (2019). A perceptual analysis of Oyo environs' populace towards waste-to-wealth for sustainable development in Nigeria. *African Journal of Inter/Multidisciplinary Studies*, 1(1), 73-83.
- Olaniyi, O. A., Adebayo, O. O., & Akintola, S. (2011). Perception of rural youth and utilization of agricultural information in Oyo State, Nigeria. *Journal of Agriculture and Social Sciences*, 7(4). 117-123.
- Olaore, G. O., Adejare, B. O., & Udofia, E. E. (2021). The gains and pains of small and medium-scale enterprises (SMEs): the way forward for entrepreneurship development in Nigeria. *Rajagiri Management Journal*. 15(1), 53-68. <https://doi.org/10.1108/RAMJ-09-2020-0056>.
- Olatunji, S., Yoade, A., & Adeyemi, S. (2021). Evaluation of Infrastructure in Ibadan Metropolis, Nigeria. *Ghana Journal of Geography*, 13(1), 81-102.
- Olomu, M. O., Ekperiware, M. C., & Akinlo, T. (2020). Agricultural sector value chain and government policy in Nigeria: issues, challenges and prospects. *African Journal of Economic and Management Studies*. 11(3), 525-538
- Olorundare, A. S., & Kayode, D. J. (2014). Entrepreneurship education in Nigerian universities: A tool for national transformation. *Asia Pacific Journal of Educators and Education*, 29(8), 155-175.
- Olowe, V. (2021). Africa 2100: how to feed Nigeria in 2100 with 800 million inhabitants. *Organic Agriculture*, 11, 199-208.
- Olujobi, O. J. (2021). Combating insolvency and business recovery problems in the oil industry: proposal for improvement in Nigeria's insolvency and bankruptcy legal framework. *Heliyon*, 7(2), e06123.

- Olukunle, O. T. (2013). Challenges and prospects of agriculture in Nigeria: the way forward. *Journal of Economics and Sustainable Development*, 4(16), 37-45.
- Olusola, O. (27 May 2021). Pros and Cons: The arguments for and against scrapping NYSC. *TheCable*. Published on 27 May 2021. Retrieved on 26 June 2021 from <https://www.thecable.ng/pros-and-cons-the-argument-for-and-against-nysc>.
- Oluwatoyese, O. P., & Applanaidu, S. D. (2014). Effect of agricultural sector determinants on economic growth. *Australian Journal of Basic and Applied Sciences*, 8(8), 68-72.
- Omale, M. G., Olorunfemi, J. F., & Aiyegbajeje, F. O. (2020). Legal viable options to incessant closure of Nigeria's international borders. *African Identities*, 1-20.
- Omodanisi, E. O., Egwakhe, A. J., & Ajike, O. E. (2020). Smart Agripreneurship: A Panacea for Food Security In Nigeria. *IOSR Journal of Business and Management (IOSR-JBM) e-ISSN X*, 2278487, 65-74.
- Omotola, J.S., 2008. Combating poverty for sustainable human development in Nigeria: The continuing struggle. *Journal of Poverty*, 12(4), pp.496-517.
- Onah, N. G., & Okwuosa, L. N. (2016). Youth unemployment and peace in Nigerian society. *Mediterranean journal of social sciences*, 7(1 S1), 52.
- Onehi, V. (3 July 2020). Six jobs available for N-Power Batch C applicants. Daily Trust Newspaper. Retrieved from <https://www.dailytrust.com.ng/six-jobs-available-for-n-power-batch-c-applicants.html>. Last Assessed on 15 June 2021.
- Oni, S. (2018). *Comparative Analysis of Data Cleaning Tools*. University of Maryland, Baltimore County.
- Oni, S., Chen, Z., Hoban, S., & Jademi, O. (2019). A comparative study of data cleaning tools. *International Journal of Data Warehousing and Mining (IJDWM)*, 15(4), 48-65.
- Onifade, A. O., Abdulraheem, M. I., & Olarinwa, O. S. (2021). Problems Affecting Small Scale Farmers in Marketing Agricultural Produces in Rural Area. *European Journal of Science, Innovation and Technology*, 1(2), 16-23.
- Onuma, N. (2016). Entrepreneurship education in Nigerian tertiary institutions: A remedy to graduates unemployment. *British Journal of Education*, 4(5), 16-28.
- Onwuegbuzie, A. J., Johnson, R. B., & Collins, K. M. (2009). Call for mixed analysis: A philosophical framework for combining qualitative and quantitative approaches. *International journal of multiple research approaches*, 3(2), 114-139.
- Onwuka, E. M., Ugwu, K. E., & Chukwuma, E. D. (2020). Implications of youth unemployment and violent crime on the economic growth (a case study of anambra state, Nigeria). *Australian Journal of Commerce Study*. <https://www.researchgate.net/publication/347973524>
- Onyekuru, N. A., Ihemezie, E. J., & Chima, C. C. (2019). Socioeconomic and profitability analysis of catfish production: a case study of Nsukka Local Government Area of Enugu State, Nigeria. *Agro-Science*, 18(2), 51-58.

- Onyemechalu, S. J., & Ugwuanyi, J. K. (2021). concepts and practice of indigenous cultural heritage management in the Igbo cultural area of south-eastern Nigeria. *Journal of Cultural Heritage Management and Sustainable Development*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JCHMSD-12-2020-0177>.
- Oriola, E. O. (2009). A framework for food security and poverty reduction in Nigeria. *European Journal of Social Sciences*, 8(1), 132-139.
- Osabohien, R., & Bamigbola, A. (2017). Sustainable agricultural investment and employment generation in Nigeria: The role of institutional framework. *FUTA Journal of Management and Technology*, 2(1), 113-123.
- Osabuohien, E. S., Okorie, U. E., & Osabohien, R. A. (2018). Rice production and processing in Ogun state, Nigeria: qualitative insights from farmers' association. In *Food Systems Sustainability and Environmental Policies in Modern Economies* (pp. 188-215). IGI Global.
- Osarenren, C. O., & Ojor, A. O. (2014). Marketing analysis of smoke-dried fish in Etsako East Local Government Area of Edo State, Nigeria. *Net Journal of Agricultural Science*, 2(3), 104-106.
- Osuji, E. E., Eze, E. U., Tim-Ashama, A., Njoku, U. G., Odor, H. A., & Obi-Nwandikom, C. O. (2021). Economic implication of climate change and soil management practices in Nigeria, Empirical in-depth analysis. *International Journal of Biosciences, Agriculture and Technology*, 12(1), 1-13.
- Owenvbiugie, R. O., & Egbri, J. N. (2020). Unemployment in Nigeria: Can need for power improve the scourge?. *International Business Education Journal*, 13, 43-50.
- Owolabi, O. A., Bichi, D. B., & Onanaiye, O. O. (2017, February). Economic growth may affect agriculture sector output: evidence from Nigeria. In 6th international Social and Management Science Research conference, Themed "Issues in Economic Recession, Recovery & Governance.
- Owoo, N. S. (2021). Demographic considerations and food security in Nigeria. *Journal of Social and Economic Development*, 23(1), 128-167.
- Owusu-Mensah, D., Quaye, E. K., & Brako, L. (2021). Firm productivity, profit and business goal satisfaction: an assessment of maintenance decision effects on small and medium scale enterprises (SME's). *Journal of Applied Research in Technology & Engineering*, 2(1), 23-31.
- Oxford Business Group. (2019). Nigeria- Agriculture. Available at <https://oxfordbusinessgroup.com/analysis/leveraging-growth-agricultural-exports-are-although-various-hurdles-still-need-be-overcome>
- Oyejide, T. A., Ogunkola, E. O., & Bankole, A. S. (2019). Building and integration of agricultural value chains in Nigeria. *Canadian Foreign Policy Journal*, 25(3), 254-268.

- Oyekunle, O. I. (2020). *Addressing Youth Unemployment and Poverty through Social Investment Programme in Nigeria (A Case Study of Nigeria's Social Investment Programme)* (Master's thesis, University of Agder).
- Oyetade, O. (2021). Impact of Agricultural Output on Economic Growth in Nigeria: Application of Numerical Prediction and Econometric Analysis. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(12), 1793-1801.
- Oyewole, C. I., & Oyewole, A. N. (2010). Failure Of Agricultural Mechanization in Nigeria: The Multiple Cropping System Factor. *The Story of New Africa*, 139-150.
- Oyinlola, O., & Abdullahi, A. A. (2021). A Phenomenological Study Of Perceived Anxiety And Its Implications On Academic Job Interview In Ilorin, Nigeria. *Asian Journal of Advances in Research*, 41-50.
- Ozuzu, S., & Isukul, A. (2021). Government Expenditure and its Effect on the Industrial Sector in Nigeria. *Asian Journal of Economics, Business and Accounting*, 81-92.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, 42(5), 533-544.
- Pappas, I. O., & Woodside, A. G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. *International Journal of Information Management*, 58, 102310.
- Pasquini, M. W., & Alexander, M. J. (2005). Soil fertility management strategies on the Jos Plateau: the need for integrating 'empirical' and 'scientific' knowledge in agricultural development. *Geographical Journal*, 171(2), 112-124. [doi:10.1111/j.1475-4959.2005.00154.x](https://doi.org/10.1111/j.1475-4959.2005.00154.x).
- Patel, V., Kumar, A. S., Paul, V. K., Rao, K. D., & Reddy, K. S. (2011). Universal health care in India: the time is right. *Lancet (London, England)*, 377(9764), 448.
- Pavlis, E. S., Terkenli, T. S., Kristensen, S. B., Busck, A. G., & Cosor, G. L. (2016). Patterns of agri-environmental scheme participation in Europe: indicative trends from selected case studies. *Land Use Policy*, 57, 800-812.
- Pazhanisamy, R. (2021). Agro-Business Strategies and Objectives to Develop Sustainability. *International Journal of Modern Agriculture*, 10(2), 3021-3029.
- Peace, P. W. S. (2017). Herders against farmers: Nigeria's expanding deadly conflict. *Africa Report*, 19(252).
- Pelenc, J. (2010, August). Crossing Sen's capability approach with Critical Natural Capital theory: toward a new perspective to reconcile human development and Nature conservation goals. In *Bienal conference of the International society of ecologic economics" advancing sustainability in time of crisis*.

- Pelzom, T., & Katel, O. (2018). Youth Perception of Agriculture and potential for employment in the context of rural development in Bhutan. *Development, Environment and Foresight*, 3(2), 92-106.
- Penaluna, K., Penaluna, A., & Jones, C. (2011). Towards an understanding of the global context of enterprise education. In ISBE 2011 (pp. 1-18).
- Peyton-Caire, L., & Stevenson, A. (2021). Listening to Black Women: The Critical Step to Eliminating Wisconsin's Black Birth Disparities. *A special issue on the Impact of Race & Racism on Health*, 39.
- Philip, A. A., Samson, A. J., & Ogwu, H. P. (2013). Strategy for reducing unemployment in Nigeria: The role of informal sector. *International Journal of capacity building in education and management*, 2(1), 32-44.
- 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*.
- Powell, R. R. (2006). Basic research methods for librarians. *Library & Information Science Research*, 28, 149-167.
- Premium times (12 December, 2020). Budget 2021: *Buhari increases National Assembly's allocation, reduces defence ministry's*. Available at <https://www.premiumtimesng.com/news/headlines/419264-budget-2021-buhari-increases-national-assemblys-allocation-reduces-defence-ministrys.html>. Accessed on 21 July 2021.
- Priyaraj, P. M. (2017). Career choices and agropreneurship. *ZENITH International Journal of Business Economics & Management Research*, 7(6), 17-23.
- Proctor, F. and Lucchesi, V., 2012. Small-scale farming and youth in an era of rapid rural change. Knowledge Programme Small Producer Agency in the Globalised Market.
- Pulka, B. M., Rikwentishe, R., & Ibrahim, B. (2014). An Evaluation of Students' Attitude towards Entrepreneurship Education in some Selected Universities in North East Nigeria. *Global Journal of Management and Business Research*.
- Punch Newspapers (2019). Pay us as and when due, N-Power beneficiaries beg FG. Published on 15 August 2019. Retrieved from <https://punchng.com/pay-us-as-and-when-due-n-power-beneficiaries-beg-fg/>. Accessed 15 June, 2021.
- PwC. (2017). Transforming Nigeria's Agricultural Value Chain: A case study of the Cocoa and Dairy industries. Available at: <https://www.pwc.com/ng/en/assets/pdf/transforming-nigeria-s-agric-value-chain.pdf>
- PwC. (2020). Economic Alert. Available on: <https://www.pwc.com/ng/en/assets/pdf/economic-alert-september-2020.pdf>

- Qing, P., Li, C., Chan, S. H. J., & Deng, S. (2021). Farmer entrepreneurs in China: an empirical investigation of their motivations, success factors, and challenges faced. *Journal of Small Business & Entrepreneurship*, 33(3), 349-369.
- Rae, D. and Woodier-Harris, N. (2013), "How does enterprise and entrepreneurship education influence postgraduate students' career intentions in the New Era economy?", *Education+ Training*, Vol. 55, No. 8/, pp.926-948.
- Raheem, D., Dayoub, M., Birech, R., & Nakiyemba, A. (2021). The Contribution of Cereal Grains to Food Security and Sustainability in Africa: Potential Application of UAV in Ghana, Nigeria, Uganda, and Namibia. *Urban Science*, 5(1), 8.
- Rahmann, G., Grimm, D., Kuenz, A., & Hessel, E. (2020). Combining land-based organic and landless food production: a concept for a circular and sustainable food chain for Africa in 2100. *Organic Agriculture*, 10(1), 9-21.
- Ramdan, I. M. (2019). Reliability and validity test of the Indonesian version of the hamilton anxiety rating scale (ham-a) to measure work-related stress in nursing. *Jurnal Ners*, 14(1), 33.
- Rao, V. (Ed.). (2004). *Culture and public action*. Orient Blackswan. Stanford University Press. Pp. 1-442.
- Ratinho, T., & Mitsopoulos, M. (2021). New forms of entrepreneurship support in a growing entrepreneurial ecosystem: the case of business incubation in Greece. In *Handbook of Research on Business and Technology Incubation and Acceleration*. Edward Elgar Publishing.
- Ratnasingam, J., Vacalie, C., Sestras, A. F., & Ioras, F. (2014). Public perception of forestry practices in Malaysia. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 42(1), 280-285.
- Reuben, R. C., Danladi, M. M., Saleh, D. A., & Ejembi, P. E. (2021). Knowledge, attitudes and practices towards COVID-19: an epidemiological survey in North-Central Nigeria. *Journal of community health*, 46(3), 457-470.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., ... & Chin, N. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998–2003. *Small business economics*, 24(3), 205-231.
- Robeyns, I. (2005). The capability approach: a theoretical survey. *Journal of human development*, 6(1), 93-117.
- Robeyns, I., (2003). Sen's capability approach and gender inequality: selecting relevant capabilities. *Feminist Economics*, 9(2-3), pp.61-92.
- Robeyns, I., (2008). Sen's capability approach and feminist concerns. In: S., Alkire; F., Comim; M., Qizilbash, ed. *The Capability Approach: Concepts, Measures and Applications*, pp. 82-104. Cambridge : Cambridge University Press.
- Robeyns, I., 2000. An unworkable idea or a promising alternative?: Sen's capability approach re-examined. Discussion Paper 00.3. Katholieke Universiteit Leuven: Centre for

Economic Studies. Available at: <https://feb.kuleuven.be/drc/Economics/research/dps-papers/dps00/dps0030.pdf>

- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship theory and practice*, 15(4), 13-32.
- Rogers, M. A. (2018). Urban Agriculture as a Tool for Horticultural Education and Youth Development. *Urban Horticulture*, 211-232.
- Roma, L., (2008). Climate change, population drift and violent conflict over land resources in north-eastern Nigeria. *J. Hum. Ecol*, 23(4), pp.311-324.
- 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>.
- 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.
- Ross, B. (2014). William James: Spoiled child of American psychology. In *Portraits of pioneers in psychology* (pp. 39-52). Psychology Press.
- Roxas, B. G., Cayoca-Panizales, R., & de Jesus, R. M. (2008). Entrepreneurial knowledge and its effects on entrepreneurial intentions: development of a conceptual framework. *Asia-Pacific Social Science Review*, 8(2), 61-77.
- Ruswa, A., Chikobvu, D. and Walker, M., 2014. The Capabilities Approach and Measurement: The Influence of Human Capabilities on Student Academic Achievement - A Case Study in South Africa. *Mediterranean Journal of Social Sciences*, 5(23), p.1139.
- Salami, C. G. E. (2013). Youth unemployment in Nigeria: A time for creative intervention. *International Journal of Business and Marketing Management*, 1(2), 18-26.
- Saliu, O. J., Onuche, U., & Abubakar, H. (2016). Perception of Kogi State university agricultural students on farming as a career. *International Journal of Sustainable Agricultural Research*, 3(4), 72-81.
- Sancho, M. P. L., Ramos-Rodríguez, A. R., & Vega, M. Á. F. (2021). Is a favorable entrepreneurial climate enough to become an entrepreneurial university? An international study with GUESS data. *The International Journal of Management Education*, 19(3), 100536.
- Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: the necessity to develop a specific guideline. *Journal of medical ethics and history of medicine*, 7, 14. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263394/>
- Sanni, J. S. (2021). Dismantling structures of dehumanisation in Nigeria's education system: Lessons from African traditional education and communication. In *Education, Communication and Democracy in Africa* (pp. 219-233). Routledge.

- Saqib, K. M., Rizvi, S. J. H., Ozair, S., & Rasheed, A. (2021). Forensic Auditing Is Helpful To Identify Financial Crimes With Reference To Money L. *Journal of the Research Society of Pakistan*, 58(1), 166.
- Sarpong, D. B., Quatey, S. N., & Harvey, S. K. (2005). Food And Agriculture Organization of The United Nations (FAO). Final Report. Retrieved from <http://fishcomghana.com/wp-content/uploads/2017/03/The-Economic-and-Social-Contribution-of-Fisheries-to-Gross-Domestic-Product-and-the-Rural-Development-in-Ghana-1.pdf>.
- Satpathy, C., & Panda, S. (2014). Perception of youths towards farming as means of livelihood. *The Indian Society of Extension Education*, 50(1and2), 69-72.
- Sawyer, A., (2007). *The application of Sen's Capability approach to selected women in Khayelitsha*. (Masters dissertation. University of the Western Cape).
- Sawyer, L. (2018). Resilience and Realities. In Oluwatamilore Oni and Aminu Banu (Eds) (2018). Resilience. *Heinrich Böll Stiftung*.
- Schindler, S., & Kanai, J. M. (2021). Getting the territory right: Infrastructure-led development and the re-emergence of spatial planning strategies. *Regional Studies*, 55(1), 40-51.
- Schneider, K.; Gugerty, M.K. Gender and Contract Farming in Sub-Saharan Africa 2010, Evans School Policy Analysis and Research (EPAR); Brief No 7: 1–13; University of Washington: Washington, DC, USA, 2010
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfjSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(2), 107-131.
- Schouten, G., & Bitzer, V. (2015). The emergence of Southern standards in agricultural value chains: A new trend in sustainability governance?. *Ecological economics*, 120, 175-184.
- Schusler, T. M., & Krasny, M. E. (2008). Youth participation in local environmental action: An avenue for science and civic learning?. In *Participation and learning* (pp. 268-284). Springer, Dordrecht.
- Seaman, C. E. (1995). Real world research-a resource for social scientists and practitioner-researchers. *British Food Journal*, 97(10), 44.
- Sebaganwa, A., & Semuhoza, E. S. (2021). Causes of Early Motherhood, Consequences and Prevention Strategies: the case of early Pregnant Teenagers. *Rwanda Journal of Social Sciences, Humanities and Business*, 2(1), 1-132.
- Sen, A. (1985a). Well-being agency and freedom: the Dewey lectures 1984'. *The journal of philosophy*, 82 (4), pp.169-221.
- Sen, A. (1987). *The standard of living* (Vol. 82). Cambridge: Cambridge University Press.
- Sen, A. K. (1985a). Well-being, Agency and Freedom: the Dewey Lectures. *Journal of Philosophy*, 82(4), 169–221.

- Sen, A. K. (1992b). "Missing Women," *British Medical Journal*, 304, 6827, 587–8.
- Sen, A., (1984). *Resources, Values and Development*. Oxford: Basil Blackwell.
- Sen, A., (1990). *Development as Capability Expansion*. In: K. Griffin and J. Knight, eds. *Human Development and the International Development Strategy for the 1990s*. London: Macmillan, pp. 41-58.
- Sen, A., (1993). *Capability and well-being*. Nussbaum and Sen (eds.), pp.31-53.
- Sen, A., (2001). *Development as freedom*. New York: Oxford University Press.
- Sen, A., (2011). *The idea of justice*. Harvard University Press.
- Sen, A.,(1985b). *Commodities and Capabilities*. Oxford: Elsevier Science Publishers.
- Sen, A.K., 1992. *Inequality re-examined*. Oxford: Clarendon Press.
- Senkrua, A. (2021). A Review Paper on Skills Mismatch in Developed and Developing Countries. *International Journal of Sustainable Energy and Environmental Research*, 10(1), 8-24.
- Senyolo, M. P., Long, T. B., Blok, V., Omta, O., & van der Velde, G. (2021). Smallholder adoption of technology: Evidence from the context of climate smart agriculture in South Africa. *Journal of Development and Agricultural Economics*, 13(2), 156-173.
- Serifat, O. A. (2020). Effects of Youth Unemployment and its Consequences on Economic Growth in Nigeria. *KIU Journal of Humanities*, 5(3), 33-40.
- Shaffril, H. A. M., D'Silva, J. L., Uli, J., & Samah, B. A. (2010). Socio-demographic factor that impinge youth acceptance towards agriculture: The case of contract farming in Malaysia. *Am-Eu. J. Agric. Environ. Sci*, 7, 242-246.
- Sharah, H. A. (2013). Profitability drive against risk: the case of grasshopper collection business in Maiduguri, a semi-arid zone of north-eastern Nigeria. *International Journal of Agricultural Sciences*, 3(1), v+-373.
- Shi, Y., & Lin, X. (2021). A Test of Maslow's Hierarchy of Needs Concept by a Correlational Model among Adult Learners. *American Association for Adult and Continuing Education*.
- Shidiq, M. R. (2020). determinants of agripreneurial career intentions: evidence from agriculture students. *Jurnal Manajemen & Agribisnis*, 17(2), 128-128.
- Shiraz, H. A. M. I. D. A. (2017). *Perception of Final Year Undergraduate Students of Agriculture at the University of Ghana on Self-Employment in Agribusiness* (Doctoral dissertation, University Of Ghana).
- 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).

- Shook, J. R., & Margolis, J. (Eds.). (2008). *A companion to pragmatism*. John Wiley & Sons.
- Siani, J. (2017). The role of freedom in Sen's Capability approach. *Economics Bulletin* 37(1), 107-117.
- Silva, J. L., Mohamad Shaffril, H. A., Uli, J. & Abu Samah, B. (2010) Socio-demography factors that influence youth attitude towards contract farming, *American Journal of Applied Sciences*, 7(4), 603 – 608
- Sim, J. (2021). Distinctive aspects of consent in pilot and feasibility studies. *Journal of Evaluation in Clinical Practice*, 27(3), 657-664.
- Singh, K., Speizer, I. S., Ijdi, R. E., & Calhoun, L. M. (2021). The association of empowerment measures with maternal, child and family planning outcomes in Plateau State Nigeria by urban-rural residence. *BMC pregnancy and childbirth*, 21(1), 1-14.
- Sithas, M. T. M., & Surangi, H. A. K. N. S. (2021). Systematic Literature Review on Ethnic Minority Entrepreneurship: Citation and Thematic Analysis. *Journal of Ethnic and Cultural Studies*, 8(3), 183-202.
- Smith, J., Bekker, H., & Cheater, F. (2011). Theoretical versus pragmatic design in qualitative research. *Nurse researcher*, 18(2), 39-51.
- Sofian, M. F., & Mukhtar, D. (2021). Apprenticeship-Based Entrepreneurship Education: Review of Malaysia Approach. In *First International Conference on Society 5.0* (p. 392).
- Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: investigating the role of education major. *Education+ Training*. 55(3), 253-271.
- Steenekamp, A. G., Van der Merwe, S. P., & Athayde, R. (2011). An investigation into youth entrepreneurship in selected South African secondary schools: An exploratory study. *Southern African Business Review*, 15(3), 46-75.
- Stewart, F. and Deneulin, S., 2002. Amartya Sen's contribution to development thinking. *Studies in Comparative International Development*, 37(2), pp.61-70.
- Sturgiss, E. A., & Clark, A. M. (2020). Using critical realism in primary care research: an overview of methods. *Family Practice*, 37(1), 143-145.
- Subramani, S. (2019). Practising reflexivity: Ethics, methodology and theory construction. *Methodological Innovations*, 12(2), 2059799119863276.
- Sule, P. E. (2020). Open grazing prohibitions and the politics of exclusivist identity in Nigeria. *Africa Review*, 1-17.
- Swarts, M. B., & Aliber, M. (2013). The 'youth and agriculture problem: implications for rangeland development. *African journal of range & forage science*, 30(1-2), 23-27.
- Szymanski, S. (2017). Entry into exit: insolvency in English professional football. *Scottish Journal of Political Economy*, 64(4), 419-444.

- Tade, O., & Yikwabs, Y. P. (2020). Conflict triggers between farming and pastoral communities in Nasarawa State, Nigeria. *Journal of Aggression, Conflict and Peace Research*. DOI: 10.1108/JACPR-10-2019-0448
- Tadele, G., & Gella, A. A. (2012). 'A last resort and often not an option at all': Farming and young people in Ethiopia. *IDS Bulletin*, 43(6), 33-43.
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*. 5. 18-27. 10.2139/ssrn.3205035.
- Taiga, U. U., & Ameji, N. E. (2020). Agricultural Exports and its Impact on Economic Growth in Nigeria. *Greener Journal of Agricultural Sciences*, 10(1), 43-50.
- Taiwo, A. A. (2021). Effects of Farmers-Herders Crisis on the Attainment of Sustainable Development Goals by Nigeria in 2030. *SAU Journal of Management and Social Sciences*, 5(1), 219-227.
- Tambo, J. A., & Abdoulaye, T. (2012). Climate change and agricultural technology adoption: the case of drought tolerant maize in rural Nigeria. *Mitigation and Adaptation Strategies for Global Change*, 17(3), 277-292.
- Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Sage handbook of mixed methods in social & behavioral research*. sage.
- Taylor, E. (2010). William James and the humanistic implications of the neuroscience revolution: An outrageous hypothesis. *Journal of Humanistic Psychology*, 50(4), 410-429.
- Taylor, E. (2011). *William James on consciousness beyond the margin*. Princeton University Press.
- The Food and Agricultural Organization of the United Nations (FAO, 2014). *Boosting Youth Employment in Nigeria*. retrieved from <http://www.fao.org/partnerships/resource-partners/investing-for-results/news-article/en/c/1146542/>
- Tijjani, B. A., Audu, M., Wulet, I., & Ibikunle, A. M. P. (2021). Efficiency of Resource-Use in Tomato Production in Jere Local Government Area of Borno State, Nigeria. *African Journal of General Agriculture*, 5(3).
- Timothy, G. (30 May 2021). [COLUMN] NYSC Must Not Die. *Leadership News - Nigeria News, Breaking News, Politics and more*. Retrieved on 26 June 2021 from <https://leadership.ng/column-nysc-must-not-die/>.
- Titilola, S. T. (2008). Environment and sustainable agricultural development in Nigeria. Structural Adjustment Program in a Developing Economy: The case of Nigeria, Ibadan: NISER.
- Tobi, H., & Kampen, J. K. (2018). Research design: the methodology for interdisciplinary research framework. *Quality & quantity*, 52(3), 1209-1225.

- Tope, A., Otaki, A.O. & Margret, B. (2014). Entrepreneurship Education: A Panacea to Graduate Unemployment in Nigeria. *Journal of Sustainable Development in Africa*, 16(4).
- Touré, M., & Fadayomi, T. O. (1992). Migrations, development and urbanization policies in Sub-Saharan Africa. CODESRIA, Dakar, SN.
- Trienekens, J. H. (2011). Agricultural value chains in developing countries; a framework for analysis. *International food and agribusiness management review*, 14(2), 51-83.
- Tsekoura, M. (2016). Debates on youth participation: from citizens in preparation to active social agents. *Revista Katálysis*, 19(1), 118- 125.
- Tshivhase, M., Turpin, M., & Mathee, M. (2016). The use of Sen's capability approach in ICT4D: an exploratory review. *International Conference on Information Resources Management (CONF-IRM)*. Association for Information Systems AIS Electronic Library (AISeL).
- Turker, D., & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European industrial training*. 33(2), 142-159. <https://doi.org/10.1108/03090590910939049>
- Turnbull, D., Chugh, R., & Luck, J. (2021). Learning management systems: a review of the research methodology literature in Australia and China. *International Journal of Research & Method in Education*, 44(2), 164-178.
- Twycross, A., & Shields, L. (2004). Validity and reliability-What's it all about? Part 2 Reliability in quantitative studies. *Paediatric Nursing*, 16(10), 36.
- Ucbasaran, D., Shepherd, D. A., Lockett, A., & Lyon, S. J. (2013). Life after business failure: The process and consequences of business failure for entrepreneurs. *Journal of management*, 39(1), 163-202.
- Uche, C., & Familusi, L. C. (2018). The adoption of agriprenurship as a mitigating measure to unemployment in Nigeria: a topical review. *Global Journal of Management and Business Research*.
- Uche, E. (2019). Development plans and policies in Nigeria: Observed impediments and practical best alternatives. *International Journal of Research and Scientific Innovation*, 6(7), 27-36.
- Uddin, M. M. (2019). Book review: Md Saiful Karim, Shipbreaking in Developing Countries: A Requiem for Environmental Justice from the Perspective of Bangladesh (Routledge, 2017) 150 pp. *Asia Pacific Journal of Environmental Law*, 22(2), 295-299.
- Uddin, P. S. O. (2013). Causes, effects and solutions to youth unemployment problems in Nigeria. *Journal of emerging trends in economics and management sciences*, 4(4), 397-402.
- Udeorah, K. E., & Michael, O. (2014). Influence of entrepreneurship development on unemployment reduction in Nigeria (2009-2013). *International Journal of Youth Empowerment and Entrepreneurship Development*, 1(1), 82-96.

- Uduku, O. (2002). The socio-economic basis of a diaspora community: Igbo bu ike. *Review of African Political Economy*, 29(92), 301-311.
- Ugbudu, M. I. (2021). The role of Benue State Anti-Open Grazing and Ranches Establishment Law in enhancing peace-building in Benue State. *Journal of Global Social Sciences*, 2(6), 35-50.
- Ugwoke, T. I., & Onyenama, J. C. (2021). Impact of Infrastructure on Industrialisation and Economic Growth in Nigeria. *SAU Journal Of Management And Social Sciences*, 6(1), 265-274.
- Ukpong, J. S. (2013). Curriculum redesign and entrepreneurship skills acquisition at tertiary education level. *Journal of Education and Leadership Development*, 5(2). 81-87.
- Umeaku, N. N., Nnedum, A. O., & Nweke, K. O. (2021). External Financing Of Entrepreneurship: Implications For Future Growth Of Entrepreneurship In Sub-Saharan Africa. *Nigerian Journal Of African Studies (NJAS)*, 3(1).
- Umeh, N. G., Nwibo, S. U., Nwofoke, C., Igboji, C., Ezech, 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.
- UNICEF. 2019. Education [Website]. Accessed 07/01/20. <https://www.unicef.org/nigeria/education>
- Unimna, F. A., Essien, E. E., Opoh, F. A., & Unimke, S. A. (2021). Fashion Designing Skills'acquisition And Employability Of Social Studies Graduates In Labour Markets In Calabar Education Zone Of Cross River State, Nigeria. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(08), 693-700.
- Ünver, H. (2014). Explaining education level and internet penetration by economic reasoning-worldwide analysis from 2000 through 2010. *Int J Inf Secur*, 7, 898-912.
- Uplaonkar, S. S., & Biradar, S. S. (2015). Development of agriculture in India through agripreneurs. *International Journal of Applied Research*, 1(9), 1063-1066.
- Van den Broeck, J., Cunningham, S. A., Eeckels, R., & Herbst, K. (2005). Data cleaning: detecting, diagnosing, and editing data abnormalities. *PLoS Med*, 2(10), e267.
- Van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard (through 2013)*, 16(40), 33.
- Vanguard (July 21, 2015), *War Against Insurgency: Boko Haram Begg for Dialogue*. Retrieved from <http://www.vanguardngr.com/2015/08/war-against-insurgency-boko-haram-begs-for-dialogue/#sthash.opHua9KP.dpuf>. Accessed 21 July, 2021.
- Vanni, A., & Tsietsi, T. (2020). African Practice in International Economic Law 2017-2019. *African Journal of International Economic Law*, 1, 321-338.
- Varadjanin, V., Viduka, B., & Dimić, G. (2014, May). An overview of entrepreneurship education in vocational high schools in Eu And Serbia. In The 2nd International Conference on Research and Education—Challenges Toward the Future.

- Venatus, K. and Agnes, I. A. I. (2010). Youth unemployment in Nigeria: causes and related issues. *Canadian social science*, 6(4), 231-237.
- Venkatesh, V., Brown, S. A., & Sullivan, Y. W. (2016). Guidelines for conducting mixed-methods research: An extension and illustration. *Journal of the Association for Information Systems*, 17(7), 2.
- Vera-Toscano, E., Gómez-Limón, J. A., Moyano, E., & Garrido, F. (2008). Factors determining citizen's attitudes towards agri-environmental property rights. *Environmental and Resource Economics*, 41(4), 541-561.
- Viladrich, C., Angulo-Brunet, A., & Doval, E. (2017). A journey around alpha and omega to estimate internal consistency reliability. *Annals of Psychology*, 33(3), 755-782.
- Vinoth, R., & Paramasivam, R. (2016). Innovation in agricultural research and education for agripreneurship development in India. *Innovative farming*, 1(3), 72-78.
- Vítková, E., Chovancová, J., & Veselý, D. (2017). Value Driver and Its Impact on Operational Profit in Construction Company. *Procedia computer science*, 121, 364-369.
- Vranceanu, R. (2014). Corporate profit, entrepreneurship theory and business ethics. *Business Ethics: A European Review*, 23(1), 50-68.
- Wahyuningsih, D., Yunaningsih, A., Priadana, M. S., Darma, D. C., & Purwadi, P. (2020). Why are Unemployment and Poverty Still Happening in Borneo Island, Indonesia?. *International Journal of Economics and Financial Issues*, 10(2), 235.
- Wairimu, J. R. (2021). Youth Involvement in Agripreneurship as Nexus for Poverty Reduction and Rural Employment in Kenya. *Journal of Agricultural Economics*, 7(1), 968-981.
- Waters, J. (2015). Snowball sampling: A cautionary tale involving a study of older drug users. *International Journal of Social Research Methodology*, 18(4), 367-380.
- Watts, L. (2019). Reflective practice, reflexivity, and critical reflection in social work education in Australia. *Australian Social Work*, 72(1), 8-20.
- Webber, C. M., & Labaste, P. (2009). *Building competitiveness in Africa's agriculture: a guide to value chain concepts and applications*. The World Bank.
- Wessel, L., Baiyere, A., Ologeanu-Taddei, R., Cha, J., & Blegind-Jensen, T. (2021). Unpacking the difference between digital transformation and IT-enabled organizational transformation. *Journal of the Association for Information Systems*, 22(1), 102-129.
- Wiles, R., Crow, G., Charles, V., & Heath, S. (2007). Informed consent and the research process: following rules or striking balances?. *Sociological Research Online*, 12(2), 99-110.
- Willmott, L., White, B., Feeney, R., Chambaere, K., Yates, P., Mitchell, G., & Piper, D. (2021). Collecting data on end-of-life decision-making: Questionnaire translation, adaptation and validity assessment. *Progress in Palliative Care*, 1-11.

- Wilson, D. (1987). Traditional systems of communication in modern African development: An analytical viewpoint. *Africa Media Review*, 1(2), 87-104.
- Wilson, V., & McCormack, B. (2006). Critical realism as emancipatory action: the case for realistic evaluation in practice development. *Nursing Philosophy*, 7(1), 45-57.
- Wobst, P. (2012). Youth Employment Promotion in Agriculture. Available at: http://www.fao.org/fileadmin/templates/tci/pdf/Investment_Days_2012_2nd_day/Session_V/PeterWobst.pdf
- World Bank. (2000). *World development report 2000/2001: Attacking poverty*. The World Bank.
- World Bank. (2014). Agriculture Overview. Available at: <https://www.worldbank.org/en/topic/agriculture/overview#1>
- World Bank. (2019). The World Bank In Nigeria. <https://www.worldbank.org/en/country/nigeria/overview>
- World Population Review (2020), Most Violent Countries 2020. Retrieved from <http://worldpopulationreview.com/countries/most-violent-countries>. Accessed on 21 July, 2021.
- Wright, S., O'Brien, B. C., Nimmon, L., Law, M., & Mylopoulos, M. (2016). Research design considerations. *Journal of graduate medical education*, 8(1), 97.
- Yakub, M. U., (2008). The impact of oil on Nigeria's economy: the boom and the burst cycles.. *Bullion*, 32(2), 41–5. <http://library.cbn.gov.ng:8092/jspui/handle/123456789/248>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd Ed). New York: Harper and Row.
- Yardley, L., & Bishop, F. (2008). Mixing qualitative and quantitative methods: A pragmatic approach. *The Sage handbook of qualitative research in psychology*, 352-370.
- Yaya, S., Yeboah, H., & Udenigwe, O. (2021). Demography, Development and Demagogues. Is Population Growth Good or Bad for Economic Development?. In *Beyond Free Market* (pp. 109-124). Routledge.
- Younas, A., & Porr, C. (2021). A step-by-step approach to developing scales for survey research. *Nurse researcher*, 29(2).
- Youssef, M., Mokni, K., & Ajmi, A. N. (2021). Dynamic connectedness between stock markets in the presence of the COVID-19 pandemic: does economic policy uncertainty matter?. *Financial Innovation*, 7(1), 1-27.
- Yusoff, M. S. B. (2015). Psychometric properties of the secondary school stressor questionnaire among adolescents at five secondary schools. *Journal of Taibah University Medical Sciences*, 10(2), 159-168.
- Yusuf, A. S., Akhideno, L. O., Omoghie, E. S., Adetola, O. O., Osazuwa, D. K., & Simpson, V. B. (2021). Determinant of Youth Participations in Agri-Business in Oluyole Local

Government Area of Oyo State. *International Journal on Integrated Education*, 4(3), 322-332.

- Yvonne, F. M. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research*, 4(1), 6-16.
- Zait, A., Ursachi, G. & Horodnic I.A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679 –686.
- Zaremohzzabieh, Z., Krauss, S. E., D'Silva, J. L., Tiraieyari, N., Ismail, I. A., & Dahalan, D. (2021). Towards agriculture as career: predicting students' participation in the agricultural sector using an extended model of the theory of planned behavior. *The Journal of Agricultural Education and Extension*, 1-26.
- Zheng, Y., (2007). Exploring the value of the capability approach for E-development. In: London School of Economics, The 9th International Conference on Social Implications of Computers in Developing Countries. São Paulo, Brazil, May 2007.
- Zidana, R., Kaliati, F., & Shani, C. (2020). Assessment of Youth Engagement in Agriculture and Agribusiness in Malawi: Perceptions and Hindrances. *Journal of Entrepreneurship & Management*, 9(2), 19-28.
- Zimmerman, M. A., & Chu, H. M. (2013). Motivation, success, and problems of entrepreneurs in Venezuela. *Journal of Management Policy and Practice*, 14(2), 76-90.
- Zulu, L. C., Djenontin, I. N., & Grabowski, P. (2021). From diagnosis to action: Understanding youth strengths and hurdles and using decision-making tools to foster youth-inclusive sustainable agriculture intensification. *Journal of Rural Studies*, 82, 196-209.
- Zwane, E., & Van Niekerk, J. (2017). The Perceptions and Attitudes of Small-scale Cane Growers' Offspring towards Farming and Implications for Sustainability: A Case Study of Kwazulu Natal North Coast, South Africa. *Journal of Human Ecology*, 60(1), 1-8.

Appendices

Appendix A: The Research Questionnaire

Young Graduate Perception about Agriculture Entrepreneurship in Nigeria

Thank you for participating in this survey. The study seeks to empirically investigate perception of young graduates about agriculture entrepreneurs in Nigeria and the determinants of such perception. Please read all questions carefully and answer as honest as possible. All your responses will be kept confidential and used only for the purpose of this research. PLEASE PARTICIPATE IN THIS SURVEY ONLY IF YOU ARE A PROSPECTIVE CORPS MEMBER, CURRENT CORPS MEMBER OR FINISHED SERVING IN NOT MORE THAN 6 MONTHS AGO.
FORM ID(YGP010)

* Required

1. Email *

Information Sheet

https://docs.google.com/document/d/1Um6gs5g6EZnCGWSpThuFoGaBJsRW38hwgb8rguZ_gp/edit?usp=sharing

Consent Form

<https://docs.google.com/document/d/16iDxt0cniHIWFuTkO2w8Dnoqoa4P0FgWdAP6-LOLXLM/edit?usp=sharing>

2. I have read the information sheet and agreed to the consent form *

Check all that apply.

Yes

Demographic Information

3. In which State and local government are you currently serving or did you served? (e.g., Sokoto-Gwadabawa) *

4. What year did you finish service?(put " currently serving" if you are still serving) *

5. Which of these age categories does your age falls? *

Mark only one oval.

Below 20

20-25

26-30

6. What is your gender *

Mark only one oval.

Male

Female

Prefer not to say

7. What was your primary discipline during your undergraduate study?(e.g economics, pharmacy, medicine...)*

8. Which of these tribes do you belong? *

Mark only one oval.

Yoruba

Hausa

Igbo

Others

9. Which of these income categories does your immediate family belong? *

Mark only one oval.

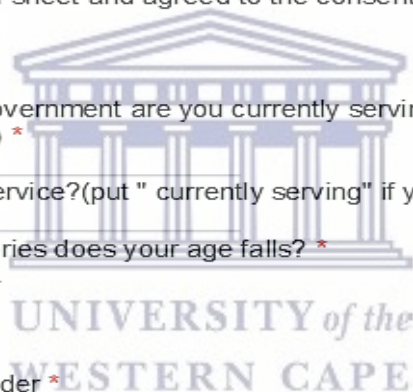
Poor

Low Income

Middle Class

Upper Class

Perception about Entrepreneurship/Agriculture/Agricultural Entrepreneurship



Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Agriculture business is for the poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entrepreneurship is for dull student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agriculture business is for the uneducated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
entrepreneurship in agriculture is lucrative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nigeria is not safe for agropreneurs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agric profession is for old people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entrepreneurship is stressful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agric business is risky	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agric business is highly capital intensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agric profession in Nigeria is admirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



10. I will set-up an agriculture business in the nearest future *

Mark only one oval.

Yes

No

Not sure yet

Determinants of Low Participation of Youth in Agriculture Entrepreneurship

12. In simple terms to what extent do you agree with the following statements(Tick as appropriate) *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There is low governemnt support for agric business in Nigeria	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is no adequate bank/financial institution support for agric business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is no market for agro products in Nigeria	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nigeria does not possess adequate infrastructure for agric business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nigeria agriculture sector is lacking in new technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information and Communication Technologies are essential for agric sector development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Which of these youth agriculture intervention programs are you aware of? *

Check all that apply.

FADAMA Graduate Unenemployed Youth and Women Agro-preneur Support

IITA Youth Agripreneurs Youth Employment in Agriculture Program(YEAP)

CBN Anchor Borrowers' Program

Npower Agro

Others

None

14. Did you pertake in any of them? *

Mark only one oval.

Yes

No

15. If No, why? *

16. Did you undertake any entrepreneurship course/program during your course of undergraduate study? * *Mark only one oval.*

- Yes
 No

12. Do you think the course properly equipped you to start a business in the nearest future? *

Mark only one oval.

- Yes
 No

13. What do you think can be improved of the entrepreneurship course in the Nigerian Institutions? *

Youth Unemployment in Nigeria and Agriculture Entrepreneurship

19. Which of the following suits you best now or upon completing your service? *

Mark only one oval.

- I expect to get job
 I already have a job waiting
 I will be starting a business
 I have already started a business
 No hope of job/business for me

20. Do you think agriculture entrepreneurship can solve youth unemployment in Nigeria? *

Mark only one oval.

- Yes
 No
 Not sure

21. If your answer to the question above is yes, how do you think agric entrepreneurship can solve youth unemployment? *

22. Thank you for participating, we have a reward system in place, we reward you N100 per valid response you help us to get, drop your WhatsApp number for us to reach you if you wish to help us get more people

Appendix B: Consent Letters



University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865

E-mail: pkippie@uwc.ac.za or spenderis@uwc.ac.za

Letter of Consent for Interview

Title: Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria: A Capability Approach

Researcher: Kenechukwu Ikebuaku

1. I confirm that I have read and understood the information sheet explaining the above research project and I have had the opportunity to ask any questions about the project.
2. I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time, without having to explain myself. I am aware that this interview might result in research which may be published, but my name may be/ not be used.
3. I understand my response and personal data will be kept strictly confidential. I gave permission for members of the research team to have access to my anonymised responses. I understand that the information derived from this research is confidential and treated as such.
4. I agree that my responses to the questions may be recorded using an audio device.
5. I agree that the data collected from me to be used in the future research.
6. I agree to take part in the above research project.

Name of the participant:.....Signature..... Date

Name of the Interviewer:.....Signature.....



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Telephone : (021) 959 3858/6 Fax: (021) 959 3865

E-mail: pkippie@uwc.ac.za or spenderis@uwc.ac.za

Letter of Consent for Survey Questionnaire

Title: Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria: A Capability Approach

Researcher: Kenechukwu Ikebuaku

- 7. I confirm that I have read and understood the information sheet explaining the above research project and I have had the opportunity to ask any questions about the project.
- 8. I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time, without having to explain myself. I am aware that this survey might result in research which may be published, but my name may be/ not be used.
- 9. I understand my response and personal data will be kept strictly confidential. I gave permission for members of the research team to have access to my anonymised responses. I understand that the information derived from this research is confidential and treated as such.
- 10. I agree that the data collected from me to be used in the future research.
- 11. I agree to take part in the above research project.

Name of the participant:.....Signature..... Date

Name of the Interviewer:.....Signature.....

Appendix C · Information Sheets



University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865

E-mail: pkippie@uwc.ac.za or spenderis@uwc.ac.za

INFORMATION SHEET FOR SURVEY

Title: Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria: A Capability Approach

Researcher: Kenechukwu Ikebuaku

What is this study about?

My name is Kenechukwu Ikebuaku, a student at the University of Western Cape in South Africa. I am conducting a research to investigate Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria. The study is for academic purpose and its aim is to explore the multi-faceted factors that underpin success in Agric entrepreneurship. The outcome of the study will be of value to entrepreneurs, scholars, policy makers and other stake-holder by providing them with a comprehensive understanding of the various issues to consider in developing holistic Agric entrepreneurship programmes. In view of this, as a selected graduate/entrepreneurs, I am inviting you to participate in this research project. Your ideas and opinions will be of great value, and your participation as well as your input in this study will be highly appreciated.

What will I be asked to do if I agree to participate?

If you agree to participate in this research project, you will be asked to complete a survey questionnaire pertaining to your entrepreneurial journey. This will take about one 30 mins and will be done virtually.

Would my participation in this study be kept confidential?

All your personal information, including your name will be kept confidential and will not be disclosed to anyone. Only pseudonyms will be used in the final report and in all published reports to protect your privacy. All information obtained will be treated with strict confidentiality and will be used for research purposes only. The completed questionnaire will be kept securely in a locked file cabinet in my study room that will only be accessed by me. Furthermore, you and I will be asked to sign a consent form that binds me to keep to what we would have agreed upon.

What are the risks of this research?

There are no known risks associated with participating in this research project. Nonetheless, the nature of the questions may evoke difficult feelings. If you need to be counselled, please contact Mrs.

Laide Latinwo, Director, Social Welfare, Lagos State Ministry of Youths & Social Development on +234 (0) 8033183911.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

Is any assistance available if I am negatively affected by participating in this study?

This research will not expose you to any harm as a result of your participation.

What if I have questions?

If you have any questions feel free to contact Kenechukwu Ikebuaku, the researcher on email address: kenechukwuikebuaku@gmail.com , or on phone number: 227 741244112.

If you have any questions about the research study itself, please contact my supervisor Prof Dinbabo at The Institute for Social Development (ISD), University of Western Cape. His telephone number is +27 219593858.



INFORMATION SHEET FOR SEMI-STRUCTURED INTERVIEW

Title: Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria: A Capability Approach

Researcher: Kenechukwu Ikebuaku

What is this study about?

My name is Kenechukwu Ikebuaku, a student at the University of Western Cape in South Africa. I am conducting a research to investigate Youth Agricultural Entrepreneurship as a Vehicle for Employment Creation in Nigeria. The study is for academic purpose and its aim is to explore the multi-faceted factors that underpin success in Agric entrepreneurship. The outcome of the study will be of value to entrepreneurs, scholars, policy makers and other stake-holder by providing them with a comprehensive understanding of the various issues to consider in developing holistic Agric entrepreneurship programmes. In view of this, as a selected graduate, I am inviting you to participate in this research project. Your ideas and opinions will be of great value, and your participation as well as your input in this study will be highly appreciated.

What will I be asked to do if I agree to participate?

If you agree to participate in this research project, you will be asked to answer questions pertaining youth agricultural entrepreneurship in Nigeria. The interview will take about one hour and will be held virtually.

Would my participation in this study be kept confidential?

All your personal information, including your name will be kept confidential and will not be disclosed to anyone. Only pseudonyms will be used in the final report and in all published

reports to protect your privacy. Your identity will be protected to the maximum extent possible. This research project involves making audiotapes. The interview will be recorded so that I can accurately transcribe the conversation. All information obtained from the interview will be treated with strict confidentiality and will be used for research purposes only. The recorded notes during the interview will be kept securely in a locked file cabinet in my study room that will only be accessed by me. Furthermore, you and I will be asked to sign a consent form that binds me to keep to what we would have agreed upon.

What are the risks of this research?

There are no known risks associated with participating in this research project. Nonetheless, the nature of the questions may evoke difficult feelings. If you need to be counselled, please contact Mrs. Laide Latinwo, Director, Social Welfare, Lagos State Ministry of Youths & Social Development on +234 (0) 8033183911.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

Is any assistance available if I am negatively affected by participating in this study?

This research will not expose you to any harm as a result of your participation.

What if I have questions?

If you have any questions feel free to contact Kenechukwu Ikebuaku, the researcher on email address: kenechukwuikebuaku@gmail.com, or on phone number: 227 741244112.

If you have any questions about the research study itself, please contact my supervisor Prof Dinbabo at The Institute for Social Development (ISD), University of Western Cape. His telephone number is +27 219593858

Appendix D: Raw Analysis

Case Processing Summary

		N	Marginal Percentage
Agric Entrepreneurship Participation	Yes	745	88.9%
	No	93	11.1%
Tribes	Hausa	165	19.7%
	Igbo	186	22.2%
	Others	292	34.8%
	Yoruba	195	23.3%
Course Category	Agric	97	11.6%
	Non Agric	741	88.4%
Income Category	Poor	56	6.7%
	Low Income	265	31.6%
	Middle Income	320	38.2%
	Upper Income	197	23.5%
Participation in Agric Intervention Program	Yes	466	55.6%
	No	372	44.4%
Participation in Entrepreneurship Prog	Yes	723	86.3%
	No	115	13.7%
Gender	Male	592	70.6%
	Female	246	29.4%
Valid		838	100.0%
Missing		0	
Total		838	
Subpopulation		674 ^a	

a. The dependent variable has only one value observed in 654 (97.0%) subpopulations.

Model Fitting Information

Model

Model Fitting Criteria				
Intercept Only	543.303			
Final	488.587	54.715	14	0.000

Pseudo R-Square

Cox and Snell	0.063
Nagelkerke	0.126
McFadden	0.094

Likelihood Ratio Tests

Effect

Model Fitting Criteria				
Intercept	488.587 ^a	0.000	0	
Low Government Support	488.878	0.290	1	0.590
No Financial Support	489.124	0.537	1	0.464
lack of market for agric produce	495.984	7.397	1	0.007
Lack of Infrastructure	489.074	0.486	1	0.486
Tribes	494.867	6.280	3	0.099
Course Category	488.945	0.358	1	0.550
Income Category	492.524	3.937	3	0.268
Participation in Agric Intervention Program	490.665	2.077	1	0.150
Participation in Entrepreneurship Prog	510.688	22.101	1	0.000
Gender	489.378	0.791	1	0.374

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

Parameter Estimates

Agric Entrepreneurship Participation ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B) Lower Bound	Upper Bound
Yes	Intercept	2.495	0.838	8.872	1	0.003			
	Low Government Support	0.091	0.168	0.293	1	0.588	1.095	0.788	1.522
	No Financial Support	0.126	0.172	0.541	1	0.462	1.135	0.810	1.589
	lack of market for agric produce	-0.368	0.142	6.732	1	0.009	0.692	0.525	0.914
	Lack of Infrastructure	-0.113	0.162	0.484	1	0.487	0.893	0.650	1.228
	[Tribes=1.00]	-0.753	0.373	4.074	1	0.044	0.471	0.227	0.978
	[Tribes=2.00]	-0.817	0.373	4.806	1	0.028	0.442	0.213	0.917
	[Tribes=3.00]	-0.544	0.354	2.364	1	0.124	0.581	0.290	1.161
	[Tribes=4.00]	0 ^b			0				
	[Course Category=1.00]	0.237	0.405	0.342	1	0.559	1.267	0.573	2.803
	[Course Category=2.00]	0 ^b			0				
	[Income Category=1.00]	-0.971	0.482	4.059	1	0.044	0.379	0.147	0.974
	[Income Category=2.00]	-0.383	0.364	1.104	1	0.293	0.682	0.334	1.392
	[Income Category=3.00]	-0.308	0.351	0.766	1	0.381	0.735	0.369	1.464
	[Income Category=4.00]	0 ^b			0				

[Participation in Agric Intervention Program=1.00]	0.367	0.255	2.074	1	0.150	1.443	0.876	2.378
[Participation in Agric Intervention Program=2.00]	0 ^b			0				
[Participation in Entrepreneurship Prog=1.00]	1.330	0.273	23.672	1	0.000	3.781	2.213	6.461
[Participation in Entrepreneurship Prog=2.00]	0 ^b			0				
[Gender=1.00]	0.227	0.253	0.804	1	0.370	1.254	0.764	2.058
[Gender=2.00]	0 ^b			0				

a. The reference category is: No.

b. This parameter is set to zero because it is redundant.



Parameter Estimates

Dependent Variable: Agric Entrepreneurship Perception

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	36.120	.909	39.738	.000	34.336	37.904
[GEN=1.00]	.155	.293	.529	.597	-.421	.731
[GEN=2.00]	0 ^a	.	.	.	.	.
[Tribes=1.00]	-.182	.414	-.439	.661	-.994	.631
[Tribes=2.00]	-.407	.396	-1.027	.305	-1.184	.371
[Tribes=3.00]	-.225	.354	-.636	.525	-.920	.470
[Tribes=4.00]	0 ^a	.	.	.	.	.
[Coursecat=1.00]	1.070	.420	2.550	.011	.247	1.894
[Coursecat=2.00]	0 ^a	.	.	.	.	.
[Incomecat=1.00]	4.123	.616	6.699	.000	2.915	5.332
[Incomecat=2.00]	2.953	.395	7.473	.000	2.177	3.728
[Incomecat=3.00]	2.804	.375	7.472	.000	2.068	3.541
[Incomecat=4.00]	0 ^a	.	.	.	.	.
[agricintprog=1.00]	-.175	.295	-.592	.554	-.753	.404
[agricintprog=2.00]	0 ^a	.	.	.	.	.
[entprog=1.00]	2.109	.397	5.311	.000	1.329	2.888
[entprog=2.00]	0 ^a	.	.	.	.	.
lgs	-.225	.180	-1.249	.212	-.579	.129
nfs	.218	.183	1.193	.233	-.141	.577
nmark	-.651	.142	-4.589	.000	-.929	-.372
loinfr	.489	.163	3.005	.003	.170	.809

a. This parameter is set to zero because it is redundant.

Respondent Service Region * I will set-up an agriculture business in the nearest future

Crosstab			I will set-up an agriculture business in the nearest future	
			1.00	2.00
Respondent Service Region	North Central	Count	137	15
		% within Respondent Service Region	75.7%	8.3%
	North East	Count	129	15
		% within Respondent Service Region	74.6%	8.7%

	North West	Count	109	21
		% within Respondent Service Region	74.1%	14.3%
	Pcm	Count	15	1
		% within Respondent Service Region	71.4%	4.8%
	South East	Count	75	10
		% within Respondent Service Region	77.3%	10.3%
	South South	Count	89	10
		% within Respondent Service Region	74.8%	8.4%
	South West	Count	207	22
		% within Respondent Service Region	75.3%	8.0%
Total		Count	761	94
		% within Respondent Service Region	75.1%	9.3%

Crosstab				
			I will set-up an agriculture business in the nearest future	Total
			3.00	
Respondent Service Region	North Central	Count	29	181
		% within Respondent Service Region	16.0%	100.0%
	North East	Count	29	173
		% within Respondent Service Region	16.8%	100.0%
	North West	Count	17	147
		% within Respondent Service Region	11.6%	100.0%
	Pcm	Count	5	21

		% within Respondent Service Region	23.8%	100.0%
	South East	Count	12	97
		% within Respondent Service Region	12.4%	100.0%
	South South	Count	20	119
		% within Respondent Service Region	16.8%	100.0%
	South West	Count	46	275
		% within Respondent Service Region	16.7%	100.0%
Total		Count	158	1013
		% within Respondent Service Region	15.6%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.121 ^a	12	.693
Likelihood Ratio	8.750	12	.724
N of Valid Cases	1013		

a. 2 cells (9.5%) have expected count less than 5. The minimum expected count is 1.95.

Symmetric Measures ^a	
	Value
N of Valid Cases	1013

a. Correlation statistics are available for numeric data only.

Age Category * I will set-up an agriculture business in the nearest future

Crosstab	
	I will set-up an agriculture business in the nearest future

			1.00	2.00	3.00
Age Category	20-25	Count	246	28	67
		% within Age Category	72.1%	8.2%	19.6%
	26-30	Count	512	64	90
		% within Age Category	76.9%	9.6%	13.5%
	Below 20	Count	3	2	1
		% within Age Category	50.0%	33.3%	16.7%
Total		Count	761	94	158
		% within Age Category	75.1%	9.3%	15.6%

Crosstab			
			Total
Age Category	20-25	Count	341
		% within Age Category	100.0%
	26-30	Count	666
		% within Age Category	100.0%
	Below 20	Count	6
		% within Age Category	100.0%
Total		Count	1013
		% within Age Category	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.865 ^a	4	.028
Likelihood Ratio	9.253	4	.055
N of Valid Cases	1013		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is .56.

Symmetric Measures ^a	
	Value
N of Valid Cases	1013

a. Correlation statistics are available for numeric data only.

Gender Category * I will set-up an agriculture business in the nearest future

Crosstab			I will set-up an agriculture business in the nearest future	
			1.00	2.00
Gender Category	Female	Count	216	30
		% within Gender Category	66.7%	9.3%
	Male	Count	529	63
		% within Gender Category	79.5%	9.5%
	Prefer not to say	Count	16	1
		% within Gender Category	66.7%	4.2%
Total		Count	761	94
		% within Gender Category	75.1%	9.3%

Crosstab			I will set-up an agriculture business in the nearest future	Total
			3.00	
Gender Category	Female	Count	78	324
		% within Gender Category	24.1%	100.0%
	Male	Count	73	665
		% within Gender Category	11.0%	100.0%
	Prefer not to say	Count	7	24
		% within Gender Category	29.2%	100.0%
Total		Count	158	1013
		% within Gender Category	15.6%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	32.609 ^a	4	.000
Likelihood Ratio	31.216	4	.000
N of Valid Cases	1013		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.23.

Symmetric Measures ^a	
	Value
N of Valid Cases	1013

a. Correlation statistics are available for numeric data only.

Course Category * I will set-up an agriculture business in the nearest future

Crosstab					
			I will set-up an agriculture business in the nearest future		
			1.00	2.00	3.00
Course Category	1.00	Count	91	8	7
		% within Course Category	85.8%	7.5%	6.6%
	2.00	Count	670	86	151
		% within Course Category	73.9%	9.5%	16.6%
Total		Count	761	94	158
		% within Course Category	75.1%	9.3%	15.6%

Crosstab			
			Total
Course Category	1.00	Count	106
		% within Course Category	100.0%
	2.00	Count	907
		% within Course Category	100.0%
Total		Count	1013

	% within Course Category	100.0%
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Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.335 ^a	2	.015
Likelihood Ratio	9.810	2	.007
Linear-by-Linear Association	8.318	1	.004
N of Valid Cases	1013		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.84.

Symmetric Measures					
		Value	Asymptotic Standardized Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	.091	.024	2.895	.004 ^c
Ordinal by Ordinal	Spearman Correlation	.088	.025	2.823	.005 ^c
N of Valid Cases		1013			

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- a. Not assuming the null hypothesis.
 b. Using the asymptotic standard error assuming the null hypothesis.
 c. Based on normal approximation.

Tribes * I will set-up an agriculture business in the nearest future

Crosstab						
			I will set-up an agriculture business in the nearest future			Total
			1.00	2.00	3.00	
Tribes	Hausa	Count	139	27	26	192
		% within Tribes	72.4%	14.1%	13.5%	100.0%
	Igbo	Count	167	23	27	217
		% within Tribes	77.0%	10.6%	12.4%	100.0%
	Others	Count	271	30	56	357
		% within Tribes	75.9%	8.4%	15.7%	100.0%

	Yoruba	Count	184	14	49	247
		% within Tribes	74.5%	5.7%	19.8%	100.0%
Total		Count	761	94	158	1013
		% within Tribes	75.1%	9.3%	15.6%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.992 ^a	6	.030
Likelihood Ratio	13.800	6	.032
N of Valid Cases	1013		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.82.

Symmetric Measures ^a	
	Value
N of Valid Cases	1013

a. Correlation statistics are available for numeric data only.

Income Category * I will set-up an agriculture business in the nearest future

Crosstab		I will set-up an agriculture business in the nearest future			
		1.00	2.00	3.00	
Income Category	1.00	Count	44	12	7
		% within Income Category	69.8%	19.0%	11.1%
	2.00	Count	243	30	35
		% within Income Category	78.9%	9.7%	11.4%
	3.00	Count	290	35	89

		% within Income Category	70.0%	8.5%	21.5%
	4.00	Count	184	17	27
		% within Income Category	80.7%	7.5%	11.8%
Total		Count	761	94	158
		% within Income Category	75.1%	9.3%	15.6%

Crosstab			
			Total
Income Category	1.00	Count	63
		% within Income Category	100.0%
	2.00	Count	308
		% within Income Category	100.0%
	3.00	Count	414
		% within Income Category	100.0%
	4.00	Count	228
		% within Income Category	100.0%
Total		Count	1013
		% within Income Category	100.0%

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Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.505 ^a	6	.000
Likelihood Ratio	24.721	6	.000
Linear-by-Linear Association	.014	1	.907
N of Valid Cases	1013		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.85.

Symmetric Measures				
	Value	Asymptotic Standardized Error ^a	Approximate T ^b	Approximate Significance

Interval by Interval	Pearson's R	.004	.029	.117	.907 ^c
Ordinal by Ordinal	Spearman Correlation	-.005	.030	-.148	.882 ^c
N of Valid Cases		1013			

- | |
|--|
| a. Not assuming the null hypothesis. |
| b. Using the asymptotic standard error assuming the null hypothesis. |
| c. Based on normal approximation. |

