

**FACTORS INFLUENCING YOUTHS' PARTICIPATION IN AGRICULTURAL
ENTERPRISES IN NJORO SUB-COUNTY, KENYA**

NAVISON NYAKAPENE

**A Thesis Submitted to the Graduate School in Partial Fulfilment of the Requirements for
the Master of Science Degree in Agri-enterprise Development of Egerton University**

EGERTON UNIVERSITY

JUNE 2024

DECLARATION AND RECOMMENDATION

Declaration

I declare that this thesis is my original work and has not been presented in this University or any other for the award of a degree.



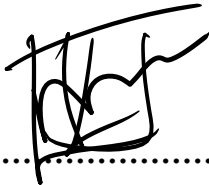
Signature **Date**17/04/2024.....

Navison Nyakapene

KM23/09031/20

Recommendation

This thesis has been submitted to the Graduate School of Egerton University with our approval as University supervisors



Signature **Date**19/04/2024.....

Dr. Jackson Langat, PhD

Department of Agricultural Economics and Agribusiness Management,
Egerton University



Signature **Date**18/04/2024.....

Prof. Edward Mutandwa, PhD

Department of Agricultural Economics and Agribusiness Management,
University of Zimbabwe.

COPYRIGHT

© 2024 Navison Nyakapene

All Rights Reserved. No part of this thesis may be reproduced, stored, or transmitted in any form or by any means, electronic, mechanical including photocopying, recording, or otherwise without prior written permission of the author or Egerton University on behalf of the author.

DEDICATION

This thesis is dedicated to my family, parents, siblings, supervisors, the international students' community at Egerton University, and all my friends, especially my late father Mr. Naison Nyakapene, my dear mother Tsitsi Nyakapene for their continuous support economically and socially.

ACKNOWLEDGEMENTS

I want to express my special gratitude to the almighty God for providing good health and protecting me spiritually during my studies. I also want to thank Egerton University staff from the Department of Agricultural Economics and Agribusiness Management for supervision, guidance, and for providing a conducive environment for my studies. I wish to thank Egerton University through its program called TAGDev for its financial support and also for the transformation of my life through quality education. Special thanks go to my supervisors Dr. J K Langat and Prof E Mutandwa for their support, constructive criticism, and patience throughout this research. I am very grateful to the MasterCard Foundation, Ruforum program, and also the TAGDev program at Egerton University with their leadership from coordinator Prof. Nancy W Mungai, and the dean Prof. Patience Mshenga for selecting me for this full board scholarship. This program exposed me to various training, networking, and international conferences, which finally changed me to be a change agent of agribusiness in Africa. Furthermore, I want to thank my mother Tsitsi Nyakapene. I also want to thank the following family members Naison Nyakapene, Nancy Nyakapene, Sarah Nyakapene, Judge Nyakapene, Evelyn Nyakapene, and Beullah Mavhangira for their moral support and prayers. These people always told me not to worry or quit and that I would finish this degree. My acknowledgment also extended to all the enumerators, key informants, and respondents who made this research possible. Sincere thanks also go to my supportive colleagues, friends, and relatives.

ABSTRACT

In Africa, underemployment and unemployment are endemic challenges facing many economies on the continent. Out of 1.2 billion people on the continent, more than 60% are aged between 18 and 35 years. This situation correlates with the Kenyan economy where about 80% of youth are unemployed. As a mitigation mechanism, agricultural entrepreneurship was an option for solving unemployment. The main objective of this study was to analyse factors influencing youths' participation in agricultural enterprises in Njoro Sub-County, Kenya. This research specifically focused on determining the extent to which youths participate in agricultural-oriented enterprises, challenges limiting youth participation in agricultural entrepreneurship, and identifying the socioeconomic factors influencing agricultural entrepreneurship. The research used random utility maximization as the guiding theory. A multistage sampling strategy was used to select 246 youths from three wards: Njoro, Mau Narok, and Mauche. The study used descriptive and inferential statistics to determine the extent to which youth are participating in agricultural entrepreneurship. Non-parametric tests such as Friedman's test were used to determine challenges limiting youth participation agricultural entrepreneurship and the probit regression model was used to identify socioeconomic factors influencing agricultural entrepreneurship. The descriptive statistics showed that 44.8% of the youths were participating in agricultural-oriented enterprises which was less than those not participating because agriculture needs more investment in terms of labour, capital, and managerial skills yet youths in rural areas cannot afford them. The results from the Friedman test ranked that challenges limiting youth agricultural entrepreneurship were lack of start-up capital, the high cost of starting up, legal restrictions which include policies, taxes, high risks to the business environment, and no access to land. The results from the probit regression models show that socioeconomic factors influencing agricultural entrepreneurship include the following; age, education, experience, credit access, marketplace ownership, income, and training. Less than 50% of youths are participating in agricultural-oriented enterprises support can be provided by both government and non-governmental organizations through a grant and loan system. There is a need for follow-up in terms of workshops, seminars, and training to capacitate youths with the required agricultural entrepreneurship skills. Policies could be amended specifically to support youth agricultural entrepreneurship through issuing capital access.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION	i
COPYRIGHT	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT.....	v
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS AND ACRONYMS	xi
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem	3
1.3 Objectives of the study	4
1.3.1 General objective	4
1.3.2 Specific objectives	4
1.4 Research questions	4
1.5 Justification of the study	4
1.6 The scope and limitation of the study	5
1.7 Definition of terms	5
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Overview of Youth Unemployment in Kenya	7
2.1.1 Causes of Youth Unemployment.....	8
2.1.2 Impacts of Youth Unemployment	8
2.2 Defining agriprenuership and the concept of youth agricultural entrepreneurship	9

2.3 Youth Participation in Agriculture Oriented Enterprises and Businesses	10
2.4 Challenges affecting youth agricultural entrepreneurship	12
2.5 Socio-economic drivers of agricultural entrepreneurship	14
2.6 Drivers and constraints to agricultural entrepreneurship	15
.....	17
2.7 Theoretical Framework	17
2.7.1 The Shapero’s entrepreneurial event theory (SEE)	17
2.7.2 The Theory of Planned Behaviour (TPB).....	18
2.7.3 The Random Utility Maximization Theory	20
2.8 Empirical studies on entrepreneurial intent	21
2.9 Conceptual Framework	22
CHAPTER THREE	24
RESEARCH METHODOLOGY	24
3.1 Study area.....	24
3.2 Research Design.....	25
3.3 Target Population	25
3.4 Sampling Procedure	26
3.5 Determination of Sample Size.....	26
3.6. Data Collection.....	27
3.7 Data Analytical Tools and Analysis.....	28
3.8 Analytical Framework.....	28
CHAPTER FOUR.....	33
RESULTS AND DISCUSSION	33
4.1 Descriptive statistics.....	33
4.2 Challenges limiting youth participation in agricultural entrepreneurship in the Njoro Sub-County.	39

4.3 The socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County	41
CHAPTER FIVE	50
CONCLUSIONS AND RECOMMENDATIONS.....	50
5.1 Conclusions	50
5.2 Recommendations	51
5.3 Suggestions for future research	51
REFERENCES.....	53
APPENDICES	74
Appendix A: QUESTIONNAIRE	74
Appendix B: Ethical Clearance.....	80
Appendix C: Research Permit (NACOSTI)	81
Appendix D: Regression output	82
Appendix E: Research Paper Abstract	83

LIST OF TABLES

Table 3. 1: Description of the sample size	27
Table 3. 2: Demonstration of Friedman test statistic	29
Table 3. 3: Description of variables in the probit regression model	31
Table 4. 1: The overall proportion of youths participating in agricultural-oriented enterprises... 33	
Table 4. 2: Gender and Education level of the youths who are participating in agricultural-oriented enterprises (%)	34
Table 4. 3: Mean difference across selected socioeconomic characteristics between those in agricultural entrepreneurship and those who not.	36
Table 4. 4: Friedman test-statistic table	39
Table 4. 5: Friedman test ranks	39
Table 4. 6: Testing multicollinearity of the considered variables in the study	42
Table 4. 7: The probit regression model specifications	42
Table 4. 8: Socio-economic factoring influencing agricultural entrepreneurship from probit regression model estimation among the rural youths in Njoro-Sub-County	44

LIST OF FIGURES

Figure 1: Youth unemployment rate in Kenya (2003-2022)	7
Figure 2: Relationship between the drivers and constraints to agri-entrepreneurship.....	17
Figure 3: Youths Agricultural Entrepreneurship Conceptual Framework.....	23
Figure 4: Study area map.....	25
Figure 5: The extent to which youth are participating in different stages of the agricultural value chain in Njoro Sub-County.....	38

LIST OF ABBREVIATIONS AND ACRONYMS

CBD	Central Business District
DF	Degrees of freedom
GDP	Gross Domestic Product
GoK	Government of Kenya
EI	Entrepreneurial Intent
ILO	International Labour Organization
KNBS	Kenya National Bureau of Statistics
NGOs	Non-Governmental Organizations
NYC	National Youth Council
OECD	Organization for Economic Co-operation and Development
SDGs	Sustainable Development Goals
TEE	Theory of Entrepreneurial Event
TPB	Theory of Planned Behaviour
WB	World Bank

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Over 50% of the 1.2 billion people in Africa, are aged below 35. Statistics from the world youth reports of the United Nations indicate that 230 million youths aged between 18 and 35 years (United Nations, 2015). In the development of Africa, youths play a crucial role in the economic, social, and political spheres (Adeyanju, 2019). Despite their role in national development, youths are faced with the problems of high poverty, food insecurity, high levels of unemployment, and underemployment (Ritsila & Tervo, 2022).

In the Kenyan national context, youths are legally regarded as those aged between 18 and 35 years (Government of Kenya, 2021). Using this classification system, 75% of the Kenyan population comprises youths. Even though the Kenyan economy has been growing since the 1970s and 80s, youth unemployment has remained a ubiquitous problem (Hanna, 2014). Several studies from Mudiwa *et al.* (2018) suggested that competition for scarce employment opportunities is further worsened by the fact that more than 500,000 youths graduate from Technical Colleges and Universities annually with an estimated unemployment rate of 80%. Therefore, the government's efforts to attain a middle-income country by 2030, require a specific focus on the youth.

Kenya has 47 counties, Nakuru County is one of the counties with an accelerating rate in terms of urbanization and population increase comprising above 2 million people and a 36 percent unemployment rate which is high. Nakuru County is ranked as the third largest county in Kenya due to its fastest-growing, Njoro sub-county is an agricultural region where most people are focusing on agricultural entrepreneurship activities and youths are unemployed.

Youth unemployment has several effects on the Kenyan economy. First, it results in a reduced level of human capital participating in the labour force for building the nation (Moore, 2003). As such, youths are suffering from deskilling and therefore it harms their economic potential to get future employment (Higgins & Ryan, 2007). Secondly, low youth participation in the economy results in informality which may culminate in a decrease in Gross Domestic Product (GDP) (Moore *et al.*, 2003). Third, the migration of youths to Western countries in search of greener pastures will result in a brain drain. Not only does this expose them to harsh working conditions, but also human trafficking, poor living standards, and social abuse.

Agricultural entrepreneurship was often seen as an option for integrating youths into the national economy in response to the paucity of formal job opportunities in the public and private sectors (Chutel, 2016). Entrepreneurship is a sustainable employment strategy for self-reliance and economic self-sufficiency for the youths while agricultural entrepreneurship is the development of business focusing more on agricultural enterprises and value chains as a means to generate income. Different funding mechanisms, programs, and policies which include, the Kenya Youth Employment and Opportunities Programme, National Youth Council, National Youth Service, the Youth Enterprise Development Fund, and the *Uwezo* Fund, were put in place among others to support entrepreneurship (Carlsson *et al.*, 2013; Kenya Youth Development Policy [KYDP], 2019). The establishment of the Youth Enterprise Development Fund (YEDF) is an indication of the government's commitment to ensuring the accessibility of credit to youths (Biradar, 2015; Cornia, *et al.*, 2016; Türker & Sonmez 2009). Currently, the government regulates and lowers the high interest rate imposed on smallholder youth agricultural entrepreneurs to improve the borrowing of loans (Dianga, 2020). The assessment of the current readiness of the government to offer loans to young agricultural entrepreneurs in Kenya has been made by the Food and Agriculture Organization of the United Nations (FAO) and agricultural loans with insurance coupled with credit life have been offered to youths (Pafumi & Arimbi, 2022). The government expansionary fiscal policy which involves increasing expenditures on loans, grants and decreasing taxes were carried out as means to boost agricultural entrepreneurship (Bello *et al.*, 2022). In addition, different institutions both government and private offer training on agricultural entrepreneurship skills.

Youth agricultural entrepreneurship intent refers to a youth's willingness to start a business venture into the agriculture value chain. This is critical as it can have an impact on the number of youths eventually owning agricultural enterprises in the country and this economy of Kenya is agro-based which means there is opportunity of reducing youth unemployment through agriculture (Anne 2014; Rajesha *et al.*, 2016). Several factors may affect an individual's willingness to start an agricultural enterprise. For instance, assets and savings influence the youth's intent to start a business. Collateral can also impact their creditworthiness to access bank loans. Additionally, the political environment and social capital have a bearing on the ability and willingness of youths to become agricultural entrepreneurs (Kautonen & Palmroos, 2010). Extant literature points out that agricultural entrepreneurship varies considerably among youths because tend not be interested so

much with agricultural business. In this regard, youths with a higher proclivity of agricultural entrepreneurship intent, typically start an agricultural business and are likely to succeed while those with a low level of agricultural entrepreneurship intent fail to start (Golo, 2013; Wickham, 2001). Training becomes a very crucial factor as youth with exposure to agricultural entrepreneurship training programs have higher agricultural entrepreneurial intent levels.

Even though many programs, projects, training institutions, and policies were promulgated to reduce unemployment and underemployment, the problem remains a major hindrance to the utilization of human capital and economic development of the country. The rate at which youth unemployment in Kenya is growing is very high compared to job creation in the formal sector. Nakuru is the third county in Kenya with a large population and high unemployment among the youth. This study sought to analyse the factors influencing youths' participation in agricultural enterprises in Njoro Sub-County, Kenya. Further, it is determining the extent to which youths are participating in agricultural oriented enterprises and determine challenges limiting youth participation in agricultural entrepreneurship. Finally, the study wants to identify the socioeconomic factors influencing agricultural entrepreneurship among the youths in Njoro Sub-County.

1.2 Statement of the Problem

Over the years, youths in Kenya have been suffering from unemployment with the labour market that is failing to absorb available youths. An act of Parliament through the constitution on Act No. 55 of 2012 provided legal, institutional, and policy frameworks to solve problems facing the youths with the major one being unemployment but the percentage and rate are still increasing. Policies put in place to address youths' labour market and support entrepreneurship include the National Youth Council Act No. 10 of 2009, the National Youth Policy of 2007, Kenya Vision 2030, and, its Medium-Term Plans. Despite all the listed policies and various efforts put in place to capacitate youths, unemployment is still a major challenge across Kenya and youths still believe that formal employment is the way to go. To this end, the agricultural entrepreneurship idea comes up as a way to solve unemployment among the youth. However, there was limited information on the extent to which youths are participating in agricultural-oriented enterprises, and challenges that are affecting youth agricultural entrepreneurship. Additionally, the socio-economic drivers of agricultural entrepreneurship. This study was seeking to fill these knowledge gaps on drivers of agricultural entrepreneurship among rural youths.

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study was to contribute to employment creation through increased youth participation in agricultural-oriented enterprises in Njoro sub-county, Kenya.

1.3.2 Specific objectives

- i. To determine the extent to which youths are participating in agricultural oriented enterprises in Njoro Sub-County.
- ii. To determine challenges limiting youth participation in agricultural entrepreneurship in Njoro Sub-County.
- iii. To identify the socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County.

1.4 Research questions

- i. To what extent youths are participating in agricultural oriented enterprises in Njoro Sub-County?
- ii. What are the challenges limiting youths to participate in agricultural entrepreneurship in Njoro Sub-County?
- iii. What are the socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County?

1.5 Justification of the study

The rate of unemployment in the rural areas of Kenya where most youths reside is doubling every year. This study was generating insights that can be used to improve the Nakuru County Government-Sponsored Youth Agricultural Entrepreneurship Program to understand youth perceptions in terms of agricultural entrepreneurship. Information from this research can be used to identify sub-groups of youths who are interested in starting agricultural entrepreneurship. Therefore, programs like Njoro Youth Empowerment and Talent Support can use this information to develop appropriate programs to change youth attitudes towards agricultural entrepreneurship (National Youth Council [NYC], 2019). By analysing the drivers of the youth toward agricultural entrepreneurship, the government can determine financial budgets for such an activity. This study allows government policymakers to revisit the policies supporting agricultural entrepreneurship among the youths and ascertain whether these policies are conducive or if there is a need for adjustment. This research is in line with Kenya's Big Four Agenda, Vision 2030, and the

Sustainable Development Goals (SDGs) since the creation of jobs for the youths through agricultural entrepreneurship increases the tax base for the nation and leads to more revenue generation to fulfill national goals, like food security, affordable housing, manufacturing, and affordable healthcare for all citizens. The results of this research contributed to the researcher's body of knowledge on the sustainability approaches to solve youth unemployment in Kenya.

1.6 The scope and limitation of the study

This study was focusing on the analysis of the drivers of agricultural entrepreneurship among rural youths to see if they were willing to undertake agricultural entrepreneurship. Therefore, Njoro, Mauche, and Mau Narok wards were selected based on the large population relative to other wards in the region. Due to financial challenges, the research was not able to cover other areas where youth unemployment is a problem. Instead, the case study approach was adopted which means a case of the selected wards was selected to represent the entire youth's population facing unemployment. Based on the legal definition of youth, the survey was focusing on individuals between the ages of 18 to 35 years only. Failure or refusal of some respondents to participate in the study was a major challenge because participation was voluntary. On this limitation the researcher used key informants from this sub-county people life youth leaders, extension workers, chiefs and village head for them to assist by letting youths know the agenda of the data which was being collected this improves participation level. The study was carried from June 2021 to May 2024.

1.7 Definition of terms

Agricultural Entrepreneurship - starting an agriculture-based enterprise where the owner chooses to operate along value chain.

Entrepreneurship – this is the readiness and ability of an individual to develop, mobilize required resources and start a new business or enterprise, through the inclusion of all risks and uncertainties that are involved to generate profit in a business.

An entrepreneur – is a person who creates a new enterprise/business and gets ready to face all the risks and uncertainties of the business so that in end he/she can gain the rewards of the business.

Entrepreneurial motivation – these are factors that can affect a person's decision to become an entrepreneur and these can be social, economic, political, and institutional.

Entrepreneurship Training – these are programs that are intended to provide technical and management skills to promote the development of an entrepreneurial culture.

Unemployment – refers to the situation where a person in the active population is searching for occupation/employment but is not able to find a job.

Youth –a person aged between eighteen (18) years and thirty-five (35) years.

Rural areas – these are areas located out of the Central Business District (CBD) and towns mostly some kilometres from cities.

Big Four Agenda – this is a development goal launched by the Kenya government that comprises Food Security, Affordable Housing, Manufacturing, and Affordable Healthcare for citizens of the country.

Vision 2030 – this is the vision that is aiming to improve Kenya's economy into a middle-income economy by 2030.

Sustainable Development Goals (SDGs) –are targets set by the United Nations to improve the lives of the people given a set of time through cooperation with the government.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview of Youth Unemployment in Kenya

Kenya's population is around 47.5 million (Kenya Census, 2019). In 2019, youths were 6,504,514 males while the females were 7,113,427 (Kenya Census, 2019). Youths between the ages of 18 and 35 years were 13,618,462 of Kenya's population. This translates to about 30% of the total population (Kenya Census, 2019). One of the main reasons why youth unemployment is increasing is related to slow economic growth compared to the number of educated youths released into the job market each year (ILO, 2020).

Figure 2.0 shows the youth unemployment trends in Kenya since 2003. Generally, the annual youth unemployment rate has hovered between 6.94% and 13.47% for the years 2003 to 2023. In 2003, the youth unemployment rate was 6.94% and increased to 7.37% in 2016. The rate increased sharply to 13.83% in 2020 with a small decline of 0.36% in 2022 (World Bank, 2022). Generally, the graph indicates that unemployment is a ubiquitous problem in the country. Notably, the trend reflects that from 2003 up to 2022, the annual unemployment rate has not gone below 6.94%.

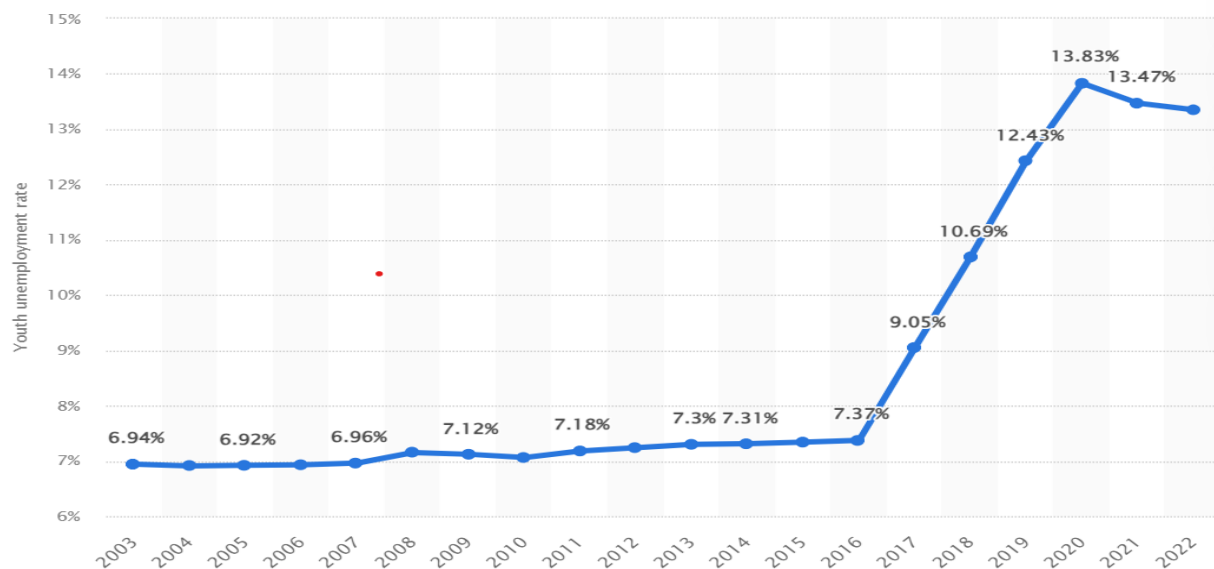


Figure 1: Youth unemployment rate in Kenya (2003-2022)

Source: World Bank Statista (2024)

2.1.1 Causes of Youth Unemployment

Several studies have been undertaken to understand the causes of youth unemployment in Kenya. Previous work experience is one of the major limiting factors which hinder youths to be formally employed (Bell & Blanchflower, 2011; Caroleo & Pastore, 2007). Several research findings including Bertola *et al.* (2007), showed that during periods of economic recession, firms react by freezing the hiring process before starting the procedure of redundancies, which makes more youths fall into the experience trap (Bouichou *et al.*, 2020).

Another factor that has been noted in the extant literature is the skill mismatch between potential employees and the skill set defined in formal job requirements (Uche, 2018). This implies that the likelihood of poorly educated youths getting formal employment is typically lower than those that are highly educated (Forti & Maina, 2012). In some cases, youths with graduate degrees still need to obtain relevant professional qualifications to increase their chances of employability (Otieno, 2009).

In the case of rural areas, firms are less likely to invest in such areas due to poor infrastructure, poor communication networks, and low business opportunities (Obonyo, 2014). An increasing population of rural-based youths is causing rural-urban migration which often results in youths looking for better economic opportunities in urban areas. However, this search is always in vain thus leaving the youths unemployed (Kenya Youth Development Policy [KYDP], 2019).

Urban sprawl has seen many urban areas expanding rapidly into rural farming land. Consequently, much of rural land is being converted from agriculture to other urban uses. The emerging land bottlenecks imply that youths are not able to rely on agriculture and natural resources as means of economic sustenance (Gitonga, 2008; Obonyo, 2014). Past research (Anyanwu, 2013; Brixiová & Kangoye, 2013) showed that youths are not able to access land for their projects in rural areas (Higgins, 2012). Exogenous factors including instability in the economy, high inflation, and low industrial expansion disproportionately affect unemployed youths (Anyanwu, 2013). Other authors argue that perceived tribal issues are a greater challenge for some youth sub-groups as they may disadvantage them in obtaining jobs (Nesoba, 2010).

2.1.2 Impacts of Youth Unemployment

Youth unemployment causes social isolation which can lead to decreased participation of the youth in nation-building (Munyao, 2019). This situation can lead to other social problems such as drug abuse, early marriages, and crime (Munyao, 2019). Being unemployed for a long period

also lowers personal motivation (Perugini & Signorelli, 2010). Gul (2012) highlighted that increased crime rates, divorce, financial instability, poverty, homelessness, failure to manage debts, and family tensions are some of the social costs related to youth unemployment.

According to Lorenzini and Macro (2012) mentioned that youth unemployment also has political ramifications which leads to mass demonstrations in the country. In some parts of Kenya, it has been observed that unemployed youths have threatened foreign investors (Jacob & Khan, 2012). As a result, foreign direct investment opportunities are curtailed due to political instability (Monyao, 2019).

The informality of the Kenyan economy makes it difficult to register companies for purposes of taxation. This results in a loss in potential revenue for the government as many businesses do not register or pay taxes (Nedeljkovic, 2004; Kenya Vision, 2030). Countries like Kenya spend most of the revenue and money collected from taxes to provide social services to citizens (Hanapi & Mohd, 2013).

2.2 Defining agripreneurship and the concept of youth agricultural entrepreneurship

According to Stephan and Zarafshani (2012), agripreneurship is a business in the agriculture value chain that takes all the risks involved in the production, processing, distribution, and consumption in anticipation of profit. Agripreneurship has the potential to create youth employment and develop new ideas, goods, and services that are helpful to the society and environment (Khuong *et al.*, 2016). A study by Gutan (2005), noted that youth agricultural entrepreneurship uses the available opportunities in the agricultural environment to answer the questions from consumers for example what, who, and where the production of goods and services is taking place. Youth agricultural entrepreneurship creates employment and contributes to the other sectors of the economy such as adding to GDP, revenue creation, and improving agro-tourism. Agripreneurship is a continuous process with different people having their mission, vision, change, and innovations in agriculture business (Kuratko & Covin, 2008). Youth agricultural entrepreneurship can be used to solve problems that include unemployment, food shortages, and poor health services through the development of responsive innovations (Skosana & Bird, 2014). The youth participating in agripreneurship possess attributes such as being energetic enough to harmonize required resources, passionate about business, risk-taker, able to form effective teams, literate enough to write and interpret business plans for funders, and able to come up with business opportunities from the natural environment (Sutha, 2016).

2.3 Youth Participation in Agriculture Oriented Enterprises and Businesses

The youth are participating in the different agriculture value chains and businesses. The labour force mostly from youth side employed in agriculture sector is continuing to decline and current statistics indicated that 28.47% its youth labour force (International Labour Organization [ILO], 2020; Kenya National Bureau of Statistics [KNBS], 2020; Kenya Labour Force Participation Report, 2018). The engagement of youths agripreneurs across Kenya is flexible since there is participations in different stages of the value chain. Youth agripreneurs have been created focus groups participants in agriculture including local leaders, community organizations in agribusiness, Kenya youths' organizations, the Young Farmers' Federation of Uganda (UNYFA) or the Kakamega County Youth Agripreneurs Association, as well as smaller and informal youth groups from the three countries (Kuwornu *et al.*, 2014).

Youth are participating in the agriculture-oriented enterprises within the scope of helping farmers to access market information, seminars, workshops and trainings to improve the income level of the households (Khatun & Roy, 2020). Youth also participating in the digital technologies in Kenya through providing information to farmers on their phones, televisions and computers, this digital activity has been triggered by COVID-19 pandemic where a lot to do with disseminating information was done through online. Currently in Njoro Subcounty farmers can order farm inputs using digital apps created by the youths (Kuwornu *et al.*, 2014).

In the agribusiness sector where youths are participating there are major components generally known as tri-aggregates of agribusiness. These components are critical in the study of youths as entrepreneurs and these components include farm input supply, farm production, processing, distribution, wholesaling and retailing (Mmbengwa *et al.*, 2011). There are four major components mostly studied to know the interest of youths to be agripreneurs and these are input supply, farm production, farm processing and finally distribution to consumers. Youth are participating in the different stages of the agriculture businesses because of their experience, skills, passion, and interest (Sharma, 2016).

Analysis from past researchers reviewed that youths are participating in crop production mainly rice production, maize, cassava, tobacco, and yam, with them facing a major challenge of market. Crop production mainly for youths as agripreneurs it is cheap because normally its rain and youths they have to invest in seeds, agrochemicals and land only. A study by Girei *et al.* (2016) concurs with this analysis in the fact that youths as agricultural entrepreneurs are more in crop

production but focusing on crops that can give them quick money example horticulture crops. Nwibo and Okorie (2013) revealed that most of entrepreneurs in South-East, Kenya are into arable crop production. This disagreed with the finding of Johnson (2016) who deduced that agro-enterprises in Latin America and the U.S. were marketers of apples, grapes, pears, and other fruits as well as vegetables. Amegnanglo *et al.* (2015) reported that 47% of youth in agriculture are into crop farming as their career choice in Kenya.

The youth in agricultural entrepreneurship are also participating in livestock and poultry production. A study by John (2015) revealed that youth in agricultural business comprise of 29.4% in poultry, 15.3% in piggery, 14.7% in fish production, and also 11.9% in goats production. The findings were consonance with research from Elisa *et al.* (2015) who supported that livestock production is one of the prominent businesses among rural youths in agricultural entrepreneurship.

It has been noted that other youths in agricultural entrepreneurship are also participating in the service sector through giving farmers farm inputs and extension services. The supplied farm inputs include fertilizer, agro-chemical, livestock feed, farm equipment and also seedlings. This was argued negatively by Amegnaglo *et al.* (2015) who noted that more than 60% of the youths are not interested in the supply of agricultural inputs. Value addition is one of the important activities which is being encouraged by researchers to farmers for them to improve profit generation from there produce (Cheruiyot & Onyari, 2013; Ogeto, 2021; Tarawali *et al.*, 2012). Youth participating agricultural entrepreneurship are also involved in marketing of cereals, legumes, nuts, livestock feed, cassava and flour. This was supported by Mbam (2023) who said youths are in agricultural marketing and also involved in non-farm activities example trading, transport, and agro-tourism.

Youths in agricultural entrepreneurship find information on agribusiness mostly online, namely through search engines, free online courses, and social media, especially Facebook and WhatsApp groups (Mapiye *et al.*, 2007). Slight differences were noted by country, whereby Kenyans frequently referred to county-level youth in agribusiness platforms while Ugandans also mentioned extension workers and local radios as trusted sources of information. In terms of sharing knowledge with other youth, participants across the three countries concurred on the prevalence of WhatsApp groups followed by social media platforms specifically Facebook, Twitter, YouTube, LinkedIn, Telegram, and community-based agribusiness platforms. To reach youth in rural areas with little to no access to the internet, the most used channels are physical meetings,

calls and SMS. Youths are providing facilities for agribusiness business growth, as well as market information that is relevant enough to their local context (Kuwornu *et al.*, 2014).

2.4 Challenges affecting youth agricultural entrepreneurship

Lack of experience and training in agricultural entrepreneurship limits the survival of youth business ventures especially those who want to develop enterprises along agriculture value chains. The few financial resources available, difficulties in accessing funds, including debt finance, and a poor environment for startups negatively affect youth entrepreneurs (Organisation for Economic Co-operation and Development [OECD], 2014). Start-up capital, in particular, remains a major challenge affecting youth agricultural entrepreneurship (Gwija *et al.*, 2014). There is regulatory red tape, little interest in business, and a lack of equality in information dissemination about youth agriculture entrepreneurial support schemes (Sambo, 2015). In addition, poorly developed youth agricultural entrepreneurship services, lack of mentors, and business incubators are some of the constraints faced by youths.

The Bureau for Economic Research (2016), showed that in Kenya, young agricultural enterprises are challenged by poor infrastructure, lack of suitable resources for business, poor access to land, inadequate research and development (R&D), unfriendly labour regulations, limited educated workers, poor, long and inefficient government bureaucracy. According to a related study, about 39% of the youths who were agripreneurs cited money-related problems as the main challenge to starting a business, whilst 34% of the youths mentioned business strategy and risk of the agriculture environment as the main constraint since it rain-fed (Finscope, 2010). Challenges like poor management systems, poor access to business-related information, failure to do basic bookkeeping, and records of bankruptcy also affect youths (Marivate, 2014). Technology change poses a big challenge to the growth of youth agricultural entrepreneurship because most small enterprises are not able to adopt new technology due to its high initial and installation costs (Phillips *et al.*, 2014). Adapting to new technology has also been hampered by the slow rate of economic growth in Kenya (Moreno *et al.*, 2014).

Hiremath (2020), said that the majority of youth (84.17%) in agriculture who reside in rural areas reported that lack of cooperation and poor decision-making as their challenges. Concerning the sociopsychological challenges 52% reported that poor risk management and also lack of social support as those among the challenges. A study by Phalke and Shaikh (2018), postulated that the

majority of youths in rural areas are suffering from unemployment because there are no irrigation facilities to support youth agricultural entrepreneurship.

Youth in agricultural entrepreneurship shows that they have educational, economic, social, and health problems (Muhammad *et al.*, 2017). Rural youth are facing the problem of poor market access once they have produced their products selling them has been a major challenge (Selvi, 2019). Majority of youths in rural areas about 81,67% reported that there is lack of awareness specifically about modern agricultural technologies which are available for them to use in value addition and lack of improved machines (Savita, 2021). Regarding rural females' youths they revealed that lack of training to do different tasks, lack of awareness about agricultural entrepreneurship and others mentioned health related problems.

Youths constitute a bigger percentage of Kenya's population studies found inadequate funding for the available national youth associations and poor recognition of youth as important stakeholders in the development of community plans that are in line with the national development plan. There is also a failure of youths to manage disagreements and misunderstandings as internal affairs problems erupt and a lack of good leadership qualities which is now leading to failure to create good donor links (Umeh & Odom, 2011). Rural agricultural entrepreneurship is still facing problems such as poor agribusiness skills, shortage of raw materials, and also their cost too high, and poor communication which have been caused by no rural electrification taking place in the past 4 decades and transport services. There is limited support from the government and county government youth offices which are responsible for land distribution and rural development, the institutions for agribusiness incubation, and agro-industrial parks, and also poor creation of networks and cooperation with rural development agencies both private and public sectors (Chris, 2017).

Lower-price of agricultural produce, lack of irrigation water for crop cultivation, lack of hybrid and disease-resistant seeds for planting, lack of training about modern technologies to use in farms, and the majority of rural farmers are using traditional seeds rather than licensed improved seeds (Angaitkar *et al.*, 2019). Hadagali (2016), reported that about 75% of rural youth in agricultural entrepreneurship are concerned about the shortage of labour as a major problem followed by inadequate and poor timing of supply of fertilizer and also chemicals. This problem has been triggered by the migration of youths to urban areas as they are arguing that agriculture is not lucrative, therefore they have to move to towns for better opportunities. Preethi (2015), noted

that among the major challenges hindering youth agricultural entrepreneurship are lack of inputs, no irrigation facilities in arid areas, and lack of electricity. There is also poor infrastructure development which involves no roads, no storage facilities on farms, and no government loans availed to the youths for agricultural projects.

Vihari (2018), reported that the most important constraints encountered by the rural youth were the high cost of cultivation, inadequate availability of labor, low returns, pests, and diseases problems, inadequate power supply, inadequate and untimely supply of fertilizers, lack of remunerative prices, inadequate irrigation facilities, inadequate training programs, underemployment, adequate and untimely supply of seed, lack of proper guidance, destruction of crops by wild boars, and inadequate technical know-how about chemicals.

2.5 Socio-economic drivers of agricultural entrepreneurship

Agricultural entrepreneurship experience through training and participation in agribusiness incubation improves the chances of one ending up participating in agriculture. This was in line with a study done by Bosma (2021) who supported that having experience in any particular area improves the chances of being an entrepreneur and becoming self-employed.

The household annual income revealed that it was positively and statistically significant in influencing the participation of individuals in agricultural activities because income is the one that can determine the availability of inputs and machinery to participate in agribusiness. This correlates with research done by Bohacek (2023) who said wealth accumulated by families or income causes a higher probability of those families to venture into businesses or support their children to be entrepreneurs. It is further explained that families with higher income levels are more tolerant to risks and uncertainty, hence their chances to be in agricultural entrepreneurship are high.

Families with an agricultural entrepreneurship history tend to have individuals who can open enterprises in the future than those without this history of entrepreneurship. This was justified by Druker *et al.* (2019) who said parents motivate their children to open businesses since they will be guided by the agriprenurial history they have. However, in the agricultural entrepreneurship environment, people with a history tend to learn from their failures and challenges therefore they can build experience which can help them to motivate others.

Age indicates a positive relationship with participation in agriculture therefore as the age of the person increases the more, they are willing to start a business or to participate in

agripreneurship. However, some studies showed that as the age increases up to a certain level participation in agricultural entrepreneurship tends to decrease. In agricultural entrepreneurship, people in active populations are targeted mostly comprised of youth are recommended because of the competitiveness and labour intensive of agriculture and agro-processing industry (Kuwornu, 2021). These findings concur with research done by Alam *et al.* (2023) who noted that there was no relationship between age and participation in the agro-processing industry.

The education level shows how people have made human capital investments and the more they acquire knowledge the more they strengthen their ability to venture into livelihoods businesses (Asmah, 2011; Eneyew, 2012). Education sometimes influences willingness to participate in agricultural entrepreneurship in both direction positive and negative, which implies that farmers who have secondary and primary education are more likely to engage in farm-level production.

The crop and livestock producers have different views towards participation in the value-addition or agro-processing. Livestock producers tend to favor selling their produce directly to buyers without adding any value since they argue that it is machinery, capital, and labor-intensive to do the processing of livestock before selling them. Crop producers participate in value addition depending on the level of the farmer to see if it is a small-scale or large-scale producer farmer, normally large scale can participate in agro-processing because they have pieces of equipment and collateral security.

Research by Eneyew (2012) and Kuwornu *et al.* (2014) revealed that land size or area of production has the potential to influence the extent of participation. This means that producers with larger areas of production increase the extent of their participation in the agribusiness value chain. Other researchers which include Okoye *et al.* (2009), found results that were not consistent with that in the sense they were saying there was a negative effect between farm size or area production with participation in agricultural entrepreneurship.

Land ownership classifies land into different ownership example title deed, leasehold, and freehold therefore smallholder farmers or youths located on farms with title deeds participate more in agricultural entrepreneurship as compared to those without title deeds.

2.6 Drivers and constraints to agricultural entrepreneurship

Previous research identifies socio-economic drivers (pull) and constraints (push) factors related to agricultural entrepreneurship (Verheul *et al.*, 2010). Accordingly, pull factors positively

affect agricultural entrepreneurs while push factors have negative effects on agricultural entrepreneurs (Kim, 2012; Segal & Schoenfield, 2005; Van, 2003).

Pull factors attract individuals to start their agricultural entrepreneurship as a way of seeking independence, self-actualization, and opportunities for socio-economic development. Push factors, on the other hand, come from lack of satisfaction such as poor pay, abuse at work, difficulty in finding a job, disagreements with managers, job insecurity, underemployment, home activities conflicting with work activities, inability to grow in former occupations and inflexible working conditions (Nieman & Nieuwenhuizen, 2014). The high unemployment rate in Kenya forces youths to be agricultural entrepreneurs thus becoming a push factor. Nieman and Nieuwenhuizen (2014), argued that there is youth agricultural entrepreneurship by necessity which is always the result of not having any source of income. Due to the lack of other careers or other job tasks in the traditional environment of employment, public and private organizations encourage youths to be agri-entrepreneurs (Ismail & Chowdhury, 2012).

Figure 2.1 shows the relationship between drivers and constraint factors as they contribute to the development of youth agricultural entrepreneurship. Agricultural entrepreneurship is a central decision that youths can take based on their evaluation of the costs (push) and benefits (pull) associated with the process.

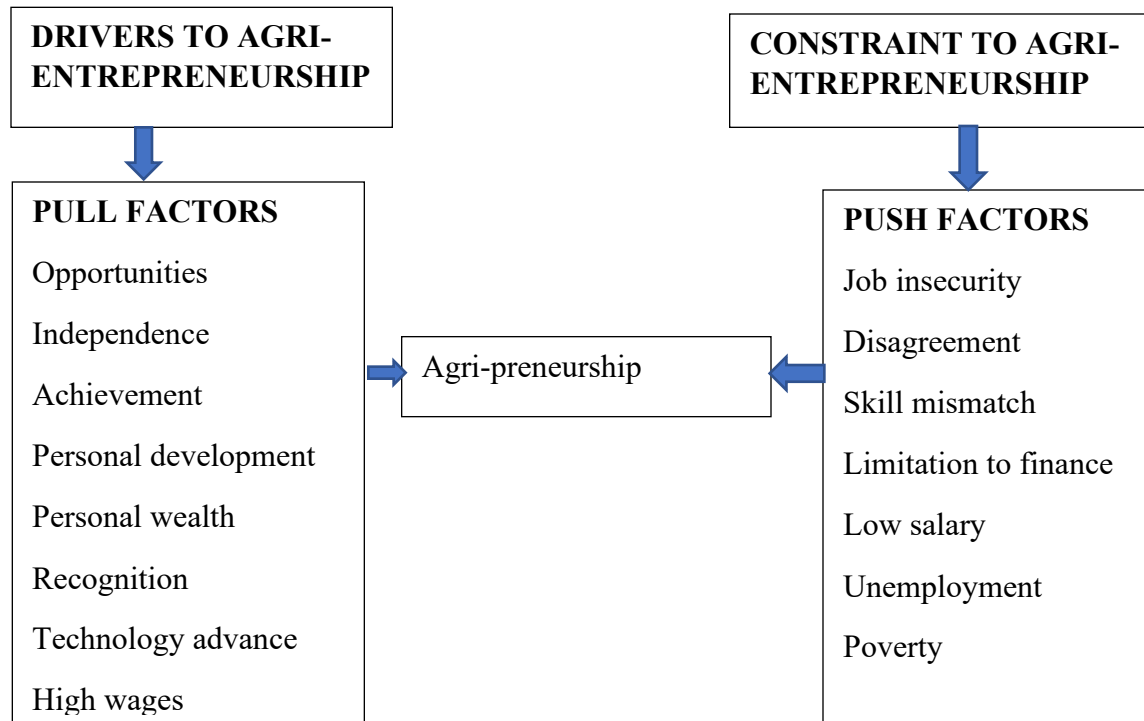


Figure 2: Relationship between the drivers and constraints to agri-entrepreneurship

2.7 Theoretical Framework

Among the theories adopted in this study, the first theory was the theory of entrepreneurship event of drivers and constraints by Shapero (2009), the second theory adopted for this study was the Theory of Planned Behaviour (TPB), and finally the Random Utility Maximization theory. These theories were chosen due to their relevance in this study as the researcher wants to find how intrinsic and extrinsic factors drive youth agricultural entrepreneurship.

2.7.1 The Shapero's entrepreneurial event theory (SEE)

Entrepreneurial event theory argues that drivers and constraints of agricultural entrepreneurship determine the possibility of agripreneurs having businesses or enterprises in agriculture in the future. The theory further argues that activities, abilities, acquired skills, risks, and favorability of the agribusiness environment can determine the event of creating new businesses in the future. On that note, entrepreneurial events help to determine the drivers and constraints of agricultural entrepreneurship.

Therefore, the theory suggests that there are several factors to consider under the drivers of agricultural of entrepreneurship. Shapero (2009) reveals that perceived feasibility and

opportunities are factors contributing mostly to drivers of agricultural entrepreneurship. Perceived feasibility considers the available resources and opportunities which can make agripreneurs to start businesses.

Kings and Solomon (2009) observed that the intrinsic drivers for agricultural entrepreneurs entail; being their boss, being more in control of their own, and having ultimate responsibility for the success of the business, while the extrinsic drivers are expected monetary rewards reflected in salary and benefits of investing in agriculture. With regards to drivers and constraints factors, Demartino and Barbato (2003), pointed out that drivers sometimes are internal such as the need to be their own boss, the need for autonomy, the need for achievement, the need for power, independence, and flexibility, wealth creation, opportunities in the market, to take advantage of providing job security, my creative talent, to realize my dream, enjoy taking a risk; earn a reasonable living enjoying a quality life.

This theory suggests constraints to agricultural entrepreneurship can inhibit or act as obstacles to agripreneurs from having new businesses. For example, Ooi and Ahmad (2012), grouped the obstacles to agricultural entrepreneurship into exogenous factors (high-interest rate, high labour cost, strict government regulations, tight labour market, high taxes, lack of government support, and strong competition) and endogenous factors (stress, fear of failure, lack of business skill, lack of planning and long-sighted and excessive risk, high operating expenses, lack of working capital/ investment, fund and lack of good suppliers). Furthermore, Rae and Woodier (2006), elucidated that the factors that hinder career choices and agricultural entrepreneurship in rural areas are the lack of awareness, financial uncertainty, lack of relevant working experience, limited entrepreneurship guidance, and technical know-how in setting up a business and the lack of confidence, creativity, and innovative ideas.

2.7.2 The Theory of Planned Behaviour (TPB)

Fayolle (2004), mentioned that the Theory of Planned Behaviour (TPB) contributed to the development of reasoned actions in entrepreneurship. This theory gives clear entrepreneurial intent or behaviour because it predicts human behaviour (Davidsson, 2009). The study of entrepreneurial intent was regarded as a predictor of human behaviour when youth's behaviour tends to be controlled by different factors around the development of entrepreneurship. Krueger and Carsrud, (2006) argued that the theory includes factors that can affect entrepreneurial intent which is very

critical as they can be used as variables. The TPB is comprised of four constructs that collectively represent a person's actual control over the behaviour in the study of entrepreneurial intent.

Behavioural Intention

This refers to the motivational factors (push or pull) that can influence a given youth's behaviour towards entrepreneurship. Pull factors comprise opportunity identification, independent/self-employment, achievement, personal development, personal wealth, advancement in technology, and high return on business. On the other hand, factors that include job insecurity and frustration, skills mismatch, low salary and unemployment, retrenchment, poverty, overpopulation, and limited alternatives tend to push individuals to engage in entrepreneurship as a way of overcoming such challenges (Davidsson, 2009).

Perceived power

TPB explained this construct as the factors which are external or beyond the control of the person but they also influence youths' intent. These factors hinder behaviour and most youths fail to perform entrepreneurial activities due to challenges like lack of start-up capital, cost of start-up, legal restrictions, lack of training, poor market access, lack of resources, lack of land, lack of technology, lack of training, and political instability. Institutional factors like legal restrictions (policies, taxes, loan accessibility), and political instability play a big role in hindering the actions or intent of youths (Fitzsimmons & Douglas, 2005).

Subjective norms

The TPB refers to what youths perceive to be important in the process of entrepreneurship. This includes entrepreneurial orientation characteristics such as risk-bearing, achievement motive, internal locus of control, innovation and creativity, self-confidence, determination and commitment, alertness to opportunity, problem-solving, decision-making behaviour, and information-seeking behaviour. This also includes individual-level factors and demographic factors like age, gender, marital status, education level, family size, family assets index, access to training, livelihood diversification strategies, fear of doing business, and experience.

Perceived self-control

According to TBP, these are activities or factors that youths can control. Kolvereid and Isaksen (2006), found that youths prefer more government opportunities than self-employment because of a loss of trust in the sustainability of self-owned businesses. Self-employment intent is

predicted significantly by attitude and subjective norms. Similarly, Zhang and Yang (2006), found a significant positive relationship between entrepreneurial intention and entrepreneurial behaviour.

2.7.3 The Random Utility Maximization Theory

After reviewing and analyzing the two theories above which are the theory of planned behavior and the theory of drivers and constraints by Shapero, I have realized that those theories cannot be properly suitable for my study. Random Utility Maximization Theory is the best theory that can explain the choice of youths to venture into agricultural entrepreneurship or not then participate in non-agricultural entrepreneurship activities.

This study was based on the random utility maximization theory. Random utility theory aims to model individuals' choices among discrete alternatives. It is assumed that a utility function can describe an individual's preferences among the available alternatives. The individual chooses the alternative with the highest utility. The utility of an alternative depends on attributes of the alternative and individual that the analyst observes example price of a product if utility is indirect, the age of an individual, and attributes that the analyst does not observe example whether the individual is buying for a special occasion. Observed attributes are represented in the utility function by explanatory variables. Unobserved ones are represented as random variables, giving rise to the term "random utility model. This was referenced by Ben-Akiva *et al.* (1985) in their discussions of the theory of random utility modeling.

In this case, the utility is determined by the available exogenous variables that drive youths to agricultural entrepreneurship. Therefore, the decision to venture into agricultural entrepreneurship or not depends on whether agricultural entrepreneurship is giving higher utility to the youths than non-agricultural activities. The major assumption in use under this methodology was that youths were faced with two choices and the other choice youth normally depended on the available resources for them to be motivated to venture into agricultural entrepreneurship (Hensher & Johnson, 1981). The expected net utility that youths can derive from participating in agricultural entrepreneurship or non-agricultural activities is determined as follows:

$$EU_i A = f(W_i) + e_i \dots \dots \dots (1)$$

$$EU_i N = f(X_i) + e_i \dots \dots \dots (2)$$

Where $EU_i A$, was the youths expected utility from participating in agricultural entrepreneurship. $EU_i N$, was the youths' expected utility from participating in non-agricultural activities. A - denoted agricultural entrepreneurship while N – non-agricultural activities. W_i and X_i were independent

Fayolle (2007), observed that factors such as fashion trends, lifestyle, social media influence (blogging), participation in cultural events, the creativity of people, and social environments (which include values, attitudes, beliefs, wants, and desires of the customers) also determine perceptions of desirability and feasibility.

Individual-level factors like age, gender, marital status, education level, family size, family assets index, and entrepreneurs' access to training influence the intent of people to start a business. Family members, friends, other close relatives, and wealthy or ethnic groups in society are some of the factors that affect the desirability and availability of adequate finance to determine the feasibility and propensity to agricultural entrepreneurship (Fayolle, 2007; Shapero & Sokol, 1982).

For new ventures to emerge, institutional factors like bank credit accessibility, political stability, government policies (taxes), legal restrictions, and youth support programs determine the rate at which people can venture into business (Krueger *et al.*, 2008). The research further proposes that the entrepreneurial event emerges from the interactions between cultural, and social variables. Schulte and Stamp (2008), view the entrepreneurial process as an event that is initiated by some sort of displacement event. The appearance of displacement events like push and pull could lead to the initiation of entrepreneurial action.

2.9 Conceptual Framework

Figure 3 below shows the interactions of the variables of interest that was used in this study. Through the use of the guiding theory which was the Random Utility Maximization Theory (RUM), predictors forming the conceptual framework in the study of youth agricultural entrepreneurship include; socio-economic factors, institutional factors, challenges, and push/pull factors. Youth agricultural entrepreneurship was the central variable in question. In addition, predictors in this framework help us to understand the behaviour of youths which comprised verbal and nonverbal expression in the study of youth agricultural entrepreneurship. Predictors like socio-economic factors help us to understand the verbal expressions of youths about their feelings and beliefs to understand what drives them to start agricultural entrepreneurship. Push/pull factors and institutional/government power form the basis of understanding youths' perceptual reactions, psychological reactions, and overt behaviours concerning agricultural entrepreneurship (EI).

Conceptual Framework

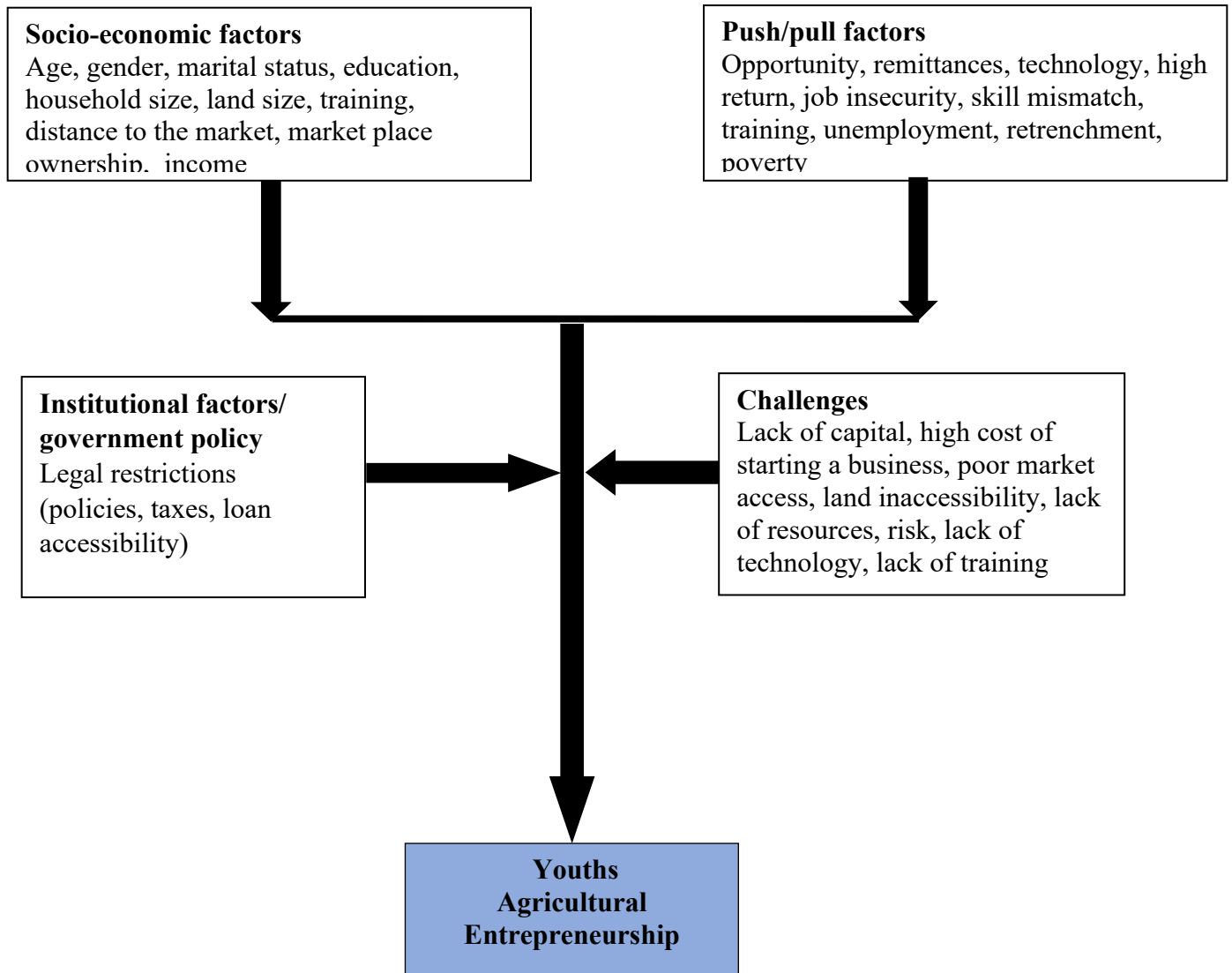


Figure 3: Youths Agricultural Entrepreneurship Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study area

The study was carried out in Njoro Sub-County, Nakuru County Kenya. The geographical area covered by Njoro Sub-County is 713.3 Square Kilometres and lies within the Great Rift Valley of Nakuru County (Government of Kenya, 2013). Njoro Sub-County is made up of six wards which are Mau-Narok, Mauche, Njoro, Lare, Kihingo, and Nesuit. Mauche ward lies between 2100 and 2500 meters above sea level (A.S.L.), Mau Narok between 1700-2850 meters (A.S.L), and Njoro 1650-2200 meters (A.S.L). The Njoro Sub-County is located between the longitudes 35° 28' and 35° 36' East and latitudes 0° 12" and 1° 10" South (Kenya National Bureau of Statistics [KNBS], 2017). Soils in this area are very rich with moderate drainage and a lot of nutrients to make it loam clay soil with productivity ranging from moderate to high (Government of Kenya, 2013). The temperature ranges from 11°C to 24.5°C annually and rainfall ranges from 950 mm to 1500 mm per annum (Ogeto *et al.*, 2013). Nakuru County normally has long rains between March, April, May, and June whilst short rains occur in October and November (Government of Kenya, 2013). The population of the Njoro Sub-County is around 208,359 individuals with a density of 362 households per square kilometre (Kenya National Bureau of Statistics [KNBS], 2019). People who live in the Njoro Sub-County practice a diversity of activities from small-scale farming, and trading, to civil service (Kinuthia *et al.*, 2012). Main farm activities include crops, agroforestry, and livestock. Farmers constitute 12.17 percent of the population as per the 2019 census, with most of their livestock being dairy cows, dairy goats, sheep, and poultry (Jaetzold & Schmidt, 2010). The study was undertaken in this county due to the characteristics enumerated above. It is important to note that most of the land has been converted to urban land due to urban sprawl. As a result, most youths remain stranded and experience a significant threat to their livelihoods due to the rapid conversion of peri-urban agricultural land to other non-farm uses such as residential housing, industries, schools, and public social facilities (Government of Kenya, 2013).

Njoro Sub-County Map

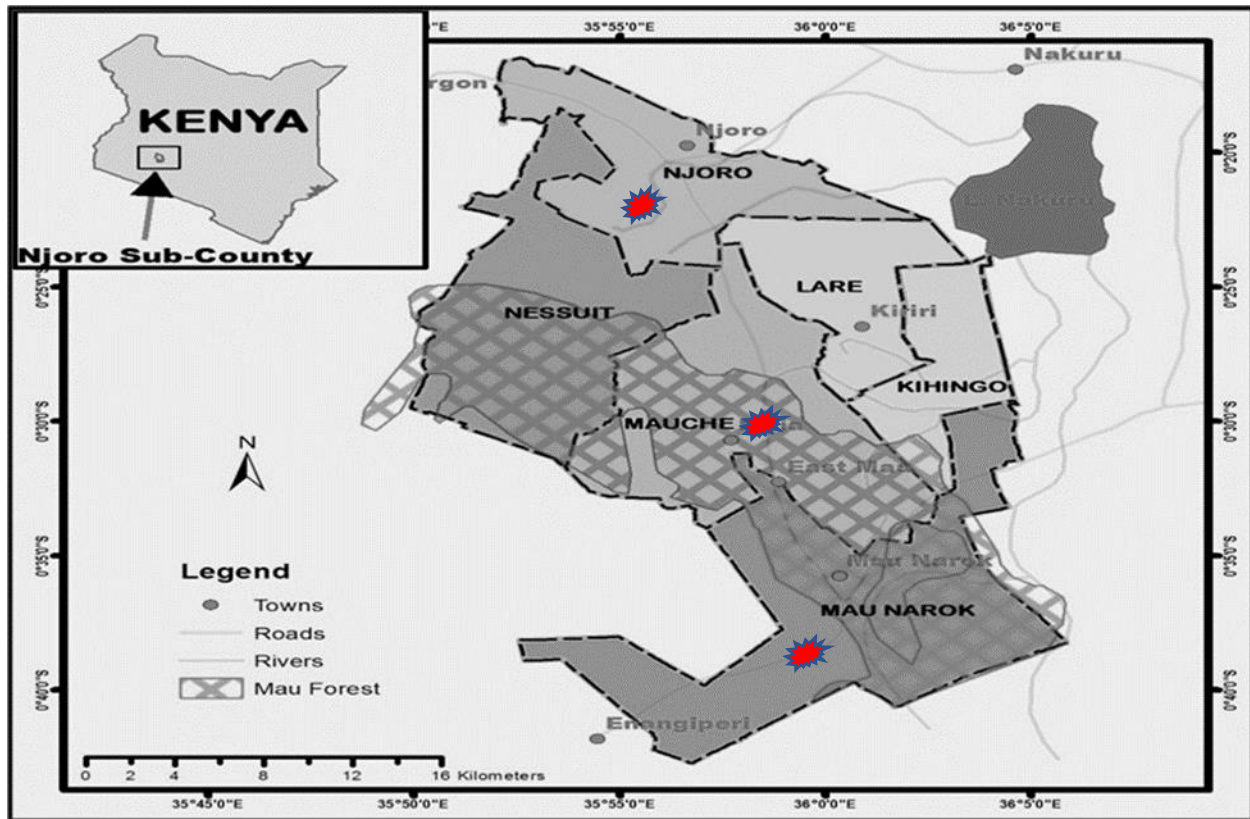


Figure 4: Study area map

Source: Kirianki *et al.* (2018)

3.2 Research Design

The study used a social survey research design based on collection of quantitative data. The design allowed the researcher to gather relevant information to address research objectives. The collection of required cross-sectional data from various youths of different age groups was conducted. This allows the identification of the sample which represented the whole population (Frankel *et al.*, 2000). The social science survey approach was adopted in this research because it allows interaction between the researcher and respondents so that issues can be easily articulated regarding certain topics of interest.

3.3 Target Population

The target group for this research was youths aged between 18 to 35 years who want to start agricultural entrepreneurship, those already in agricultural entrepreneurship, and those who do not want to start agricultural entrepreneurship (if there are any) but live in the selected wards. These youths were identified through assistance of extension officers, youth indigenisation

officers, and community youths' leaders. For those youths who did not want to participate, the researcher had an oral interview with them to grasp the cause and reasons. Therefore, during analysis, the researcher used that information to recommend how best to overcome the proposed reasons.

3.4 Sampling Procedure

Multistage sampling was used for this study. First, Njoro Sub-County was purposively selected from eleven Sub-Counties of Nakuru County because it is among the top four sub-counties with the highest population in Nakuru County as follows Naivaisha, 355 385, Njoro, 238 773, Rongai, 199 906, and Nakuru Town west, 198 661. Njoro subcounty was chosen because among the other sub-counties Njoro is developing at faster rate with a lot of agricultural activities which is taking place and many youths reside in rural areas are unemployed. After the analysis of the United National Development Program [UNDP] data shows that 60% of youths reside in Njoro Sub-County. In the second stage, Njoro Sub-County was stratified and divided into 6 wards which were comprised with the population as follows Mau-Narok, 22 346, Mauche, 17 605, Kihingo, 10 237, Nesuit 9 692, Lare 15 498, and Njoro, 37 896. In the third stage, three wards (Njoro, Mauche, and Mau Narok) were purposively selected because they have highest population of youths and many of these youths in those wards, urban sprawl is limiting rural youths' opportunities, and the research was also mainly for educational purposes. Based on the information obtained from the county data sources under each ward, Ministry of Agriculture and the Ministry of Lands, housing, urban and rural development Njoro Sub-County is experiencing high unemployment rate for the youths (Nakuru County, 2019). Finally, to allow equal chances for all youths from different gender to be equally selected, simple random sampling was used in the selected wards to select youths that can constitute the study respondents. A list from Youth Office in Njoro Sub-County was used to select the youths from these wards.

3.5 Determination of Sample Size

The sample size was calculated using the formula outlined by Kothari (2004) as shown below:

$$n = \frac{pqZ^2}{E^2}$$

From the above formula by Kothari, n-is the required sample size, Z-represents confidence level ($\alpha \leq 0.05$), p-is the proportion of the population of interest (youths in the study area), q-is the

weighting variable as $(1-p)$, and E is the acceptable error. P is 0.8 which means statistically, a proportion that is above 0.5 gives a sufficient and reliable sample size in cases where the actual population is not known. Now q is 0.2 from $q=(1-p)$. According to Kothari (2004), 0.05 is the acceptable error which is less than 10%. In this study, an error of 0.05 was used to approximate the sample size of 246 youths from the selected wards.

$$n = \frac{0.8 \times 0.2 (1.96)^2}{0.05^2} = 246 \text{ respondents}$$

The population of the three wards is 126,902 distributed as Njoro (57,429), Mauche (34,044), and Mau Narok (35,429). The respective sample sizes for each of the three wards were determined using proportionate allocation sampling. $\frac{p}{N} \times Tss$

Where; p = population of one ward, N = total population of three wards, and Tss = Total sample size (246). The sample size per ward is indicated in the table below;

Table 3. 1: Description of the sample size

WARD	POPULATION	SAMPLE SIZE
Njoro	57429	111
Mauche	34044	66
Mau Narok	35429	69
Sub-total	126902	246

3.6. Data Collection

The researcher, through the assistance of trained enumerators, collected primary data directly from respondents (rural youths). The researcher had one translator since he was not able to speak Swahili, and four locally trained enumerators to accelerate the process of data collection in the field. Data was collected through the use of structured questionnaires which included open and closed ended questions, interviews, key informants, and observations method. Interviews were mainly focused on variables such as sources and types of information on agricultural entrepreneurship they received from public and private organizations and the challenges they face when they try to venture into agricultural entrepreneurship. Key informants are people with better knowledge about the aspect of the community. In this study, the key informants interviewed included Youth Ward Administrators, Agricultural extension officers, Youth leaders in the community, and chiefs or headmen.

3.7 Data Analytical Tools and Analysis

Data was analysed using STATA version 14 and SPSS version 20. The researcher ran descriptive statistics such as the mean, median, standard deviation, frequency distribution tables, bar charts, pie charts, and inferential statistics. The probit regression model and Friedman test for ranking was used in the analysis.

The Principal Component Analysis (PCA) with Varimax rotation was used to reduce variables since there was a possibility of correlation among variables. PCA is a very flexible tool and it allows analysis of datasets that may contain, for example, multicollinearity, missing values, categorical data, and imprecise measurements. The goal was to extract the important information from the data and to express this information as a set of summary indices called principal components. For variables that are not able to be included directly in the regression model data manipulation technics example creating an index through the average weighting method was used. It is more appropriate for the variable measured by the Linkert scale. One advantage of index variables is that measurement errors in the variables can cancel out.

3.8 Analytical Framework

Objective 1: To determine the extent to which youths are participating in agricultural oriented enterprises in Njoro Sub-County.

Descriptive statistics which include the bar charts, mean, mode, variance, standard deviation, percentage, was used to calculate and measure the extent to which youths are participating in agricultural oriented enterprises from the selected wards (Njoro, Mauche, and Lare), in Njoro Sub-County.

Objective 2: To determine challenges limiting youth participation in agricultural entrepreneurship in Njoro Sub-County.

The Friedman test was used for ranking the challenges faced by youths as they were seeking to venture into agricultural entrepreneurship. Friedman test is a non-parametric statistics test that was developed by Milton Friedman (1937) and can be used to compare three or more matched groups. Each constraint was ranked according to the extent to which it affects agricultural entrepreneurship. This was done on a 5-point Likert scale. Friedman test shows the mean and ranks all proposed challenges, it also shows the number of test statistics, degree of freedom (DF), and p-value concerning the challenges which were affecting youth agricultural entrepreneurship in Njoro Sub-County, Kenya.

Table 3. 2: Demonstration of Friedman test statistic

Challenge (j)	Level of influence (i)					Total
	Very High	High	Medium	Low	Very Low	
Challenge 1	
Challenge 2						
Challenge 3						
...	
Challenge n	
Total	

Challenges that were considered include lack of start-up capital, cost of start-up, legal restrictions, lack of training, poor market access, lack of resources, lack of land, lack of technology, and political instability. Given data $\{x_{ij}\}_{n \times k}$, n -rows from the table (blocks), k -treatments (columns), degrees of freedom ($K-1$)

The Friedman test statistic formula:
$$Q = \frac{12n}{k(k+1)} \sum_{j=1}^k \left(R_j - \frac{k+1}{2} \right)^2 \dots\dots\dots (i)$$

From the above formula, Q is the probability distribution of p which will be approximated by chi-squared distribution, R_j -sum of ranks for challenges j , n -number of independent blocks, k -number of challenges to be ranked, and degrees of freedom ($K-1$).

Comparing the calculated Friedman test statistic to the Friedman critical value, the null hypothesis was rejected if the calculated F value was larger than the Friedman critical value.

Objective 3: To identify the socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County.

The probit regression model was used to identify the socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County. It is commonly used in social and behavioral data analysis (Fox, 2019). Probit analysis is a specialized form of regression analysis, which is

applied to binomial response variables. The probit regression model is used for dependent variables with 2 outcomes. The researcher was interested in determining the significant drivers for agricultural entrepreneurship among the rural youths. This focus needs to identify those predictors that are in line with choice theory of Random Utility Maximization (RUM) in determining drivers to agricultural entrepreneurship among youths. The Probit regression model involve the entry of predictor variables measured with the numeric scale, binary or dummy variables including socio-economic and other variables of the analysis.

The utility a youth can derive from being in agricultural entrepreneurship or not follows the random utility model (Greene, 2012). Following the referenced random utility model by Greene (2012), the utility, U_{ij} that the i th youth can obtain from venturing into agricultural entrepreneurship activity j , can be expressed as linear sum of the combined two components; that is a deterministic part V_{ij} which is comprised of observable components of the utility function and a random error term ε_{ij} that captures the unobservable components of the function. The function is expressed as follows;

$$U_{ij} = V_{ij} + \varepsilon_{ij} \dots \dots \dots (1)$$

For the choices now regarding participation in agricultural entrepreneurship, equation (1) translates to;

$$y_i = x_i B + e_i \dots \dots \dots (2)$$

Where y_i is the dependent variable which takes a value of 1 if the entrepreneur is an agripreneur for the decision between agricultural entrepreneurship or not and a youth for the decision to be a farmer or not; x = regressors; B = parameter estimates; e = error term.

Therefore, the binary probit function for the analysis of drivers of youth to participate in agricultural entrepreneurship included the following variables;

$$y_i = \alpha_0 + \alpha_1 \text{Age} + \alpha_2 \text{Gen} + \alpha_3 \text{Educ} + \alpha_4 \text{Hhsz} + \alpha_5 \text{Lsize} + \alpha_6 \text{Mplcownership} + \alpha_7 \text{Exp} + \alpha_8 \text{Acscscredit} + \alpha_9 \text{Mstatus} + \alpha_{10} \text{Rtraining} + \alpha_{11} \text{MDstcmakrt} + \alpha_{12} \text{Income} + \alpha_{13} \text{Dist} + \alpha_{14} \text{Affod} + \alpha_{15} \text{ICTrn} + \varepsilon_1 \dots \dots \dots (3)$$

Where: y_i = A binary value of 1 if youth are participating in agricultural entrepreneurship, 0 if otherwise or not and α_0 = Constant, α_1 - α_{15} = Coefficients and ε_1 = Error term

Table 3. 3: Description of variables in the probit regression model

Variable name	Variable description	Measurement	Expected sign
<i>Dependent</i>			
Business type	Agricultural entrepreneurship /other non-agriculture business	Dummy 1=agricultural entrepreneurship, 0=Other business	+/-
<i>Independent</i>			
GENDER	Gender	Dummy 1=male, 0=female	+/-
AGE	Age of the youth	Number of years	+
HHSIZE	Household size	Number of individuals	+
MARSTATUS	Marital status	Dummy 1=married, 0=otherwise	+/-
EDUCATION	Education (primary, secondary or tertiary)	Numbers of years in school	+
EXPERNC	Experience in Agricultural entrepreneurship	Number of years in agri-preneurship	+
MAKTPLCOWN	Market place ownership	Dummy 1=yes, 0=no	+/-
CREDITACSS	Access to credit	Dummy 1=yes, 0=no	+/-
LANDSIZE	Size of land owned	Land size in acres	+
RECVEDTRAINING	Youth received agri-entrepreneurship training	Dummy 1=yes, 0=no	+/-
DSTNCMRT	Distance to the market	Distance in kilometers	+
ANNUALINCME	Annual Trading Income	Amount in Kshs	+

PUSH/PULLFCTR	Pull/push factors index	Average weighted	+
S		number of pull and push factors	

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents and discusses the empirical results of this study. The study is divided into three major sections starting with descriptive statistics for the extent to which youth participate in agricultural-oriented enterprises. Then it also presents the non-parametric Friedman tests of ranking challenges that are affecting youth agricultural entrepreneurship. Finally, the study shows the results of the probit regression model of the socioeconomic drivers of agricultural entrepreneurship in Njoro Sub-County.

4.1 Descriptive statistics

Table 4. 1: The overall proportion of youths participating in agricultural-oriented enterprises

Variable	Description	Frequency	Percentages	t-test	p-value
Youths' business type	Youth participating in agricultural enterprises	119	48.4	15.151	0.000
	Youth not participating in non-agricultural enterprise	127	51.6		

*** = Significant at 1% level

Table 4.1 presents the overall estimated proportion of youths who were participating in agricultural-oriented enterprises in the Njoro Sub-County. The frequency shows that 119 youths participated in agricultural-oriented enterprises while a bigger number of about 127 youths were not interested in participating in agribusiness. Most youths in the Njoro sub-county statistically are in between participating in agricultural-oriented enterprises or not. This result indicates that agricultural entrepreneurship is an important avenue for improving livelihoods among youths and reducing poverty but the uptake by youths is low because there are resources like land, labour, capital, and management skills that are important to start an agricultural enterprise. Most rural youths in Kenya are unemployed and they are looking for a means of survival therefore investing in agricultural enterprise looks more expensive thus why they are diverting more to non-agricultural activities. Above 80% of the youths in rural areas are unemployed and the youths are looking for employment more in non-agricultural oriented enterprises and agricultural businesses as means to find employment.

The model was significant at 1% with a 95% confidence interval, which means youths in Njoro Sub-County are interested in agricultural entrepreneurship. Youths are participating in agricultural business because the unemployment problem has been there for decades in Kenya and youths have proven the labor market's failure. Hieu (2017), supported that agricultural entrepreneurship is the fundamental development instrument that can help youth with job creation and solve socioeconomic challenges given more support of resources. The results were also in line with those of Brixioxa and Kangoye (2013) who said the employment side can be unlocked with agricultural entrepreneurship and more than 90% of the unemployed youths can get an occupation easily.

Table 4. 2: Gender and Education level of the youths who are participating in agricultural-oriented enterprises (%)

Variable	Description	Participating in agricultural-oriented enterprise	Not participating in agricultural-oriented enterprise	t-stat	p-value
Gender	Male	55.5	52.8	16.98	0.000
	Female	44.4	47.2		
Education level	Primary	27.7	22.8	64.20	0.000
	Secondary	52.9	60.7		
	Tertiary	19.4	16.5		

*** = Significant at 1% level

Table 4.2 above presents that regarding gender, 55.5% of the male youths were participating in agricultural-oriented enterprises whilst female youths constitute about 44.5%. It means that gender is contributing more in determining youths' participation in agricultural enterprises. More male youths tend to be interested in agribusiness because some have already finished school and agricultural entrepreneurship is also a form of employment. Another reason is that in Kenya there are traditional reasons linked to land distribution, livestock ownership, and business ownership, which are more confined to men than women. Female youths tend to have lower intentions of agribusiness because there is the problem of early marriage and inequality in land rights between men and women. These results were supported by Senou and Soro (2022) who said young men engage in agricultural entrepreneurship more than young women because in rural areas men access financial resources more than women. Furthermore, the results referenced more

developing countries in Africa where women suffer a lot of constraints in accessing resources to start agricultural entrepreneurship, limiting or lowering their entrepreneurial motivation Doing Business (2020). Further findings from different researchers argued that African traditions and cultural values are associated with poor property rights, discrimination of women in accessing collateral security, and lack of flexibility to manage family and business, therefore triggering lower agri-preneurial mindset for women to start enterprises (Anambane & Adom, 2018; Aterido *et al.*, 2013; Dutta & Banerjee, 2018).

There was a significant relationship between youths' level of education and participation in agricultural-oriented enterprises at a 1% significance level. In terms of education, the majority of youths managed to access education. Among those participating in agricultural-oriented enterprises, 52.9% had secondary education followed by 27.7% who attained primary education, while 19.3% had tertiary education. Education plays a key role in influencing youths' decisions towards agricultural entrepreneurship because literate youths are likelier to choose sustainable business ideas and the legal issues surrounding agribusinesses in Kenya. There was also another reason for writing agricultural proposals where education is important and also, we have business accounts that involve small mathematics to understand profit and loss. This result is supported by Brixiova and Kangove (2019) who said that agricultural entrepreneurship is improved through the level of education. In line with the above results Alaref *et al.* (2020), said that entrepreneurial-focused education supports the development of agricultural ideas and unlocks an agricultural entrepreneurship mindset among the youth. However, Arminda *et al.* (2013) opposed that, even without education in entrepreneurship youths tend to have a business interest. Dutta *et al.* (2011) supported the argument above while extant literature supports that the notion of education is fundamental for successful agricultural entrepreneurship, other authors argue that it is not enough.

Table 4.3 presents the mean difference between the age, household size, experience, and land size of youths participating in agricultural-oriented enterprises and also those who are not participating. Youths participating in agricultural-oriented enterprises had a mean age of 26.07 years as compared to 22.71 of those not participating in agricultural-oriented enterprises. There was a significant difference in the mean age of youths who are participating in agricultural-oriented enterprises at a 1% significance level. Youths' age is very important in agricultural entrepreneurship because funding is bound to the age limit. Youths mostly tend to have more agricultural business developments because opportunities for government employment are limited.

Some researchers supported that youths make decisions from the ages of 25 to 34 years to start their agricultural businesses (Choo & Wong, 2006; Delmar & Davidsson, 2000). In contrast, several studies (Ayalew & Zeleke, 2018; Choo & Wong, 2006; Hatak *et al.*, 2015; Kautonen *et al.*, 2010; Minola *et al.*, 2016) indicated that there is a lack of consensus among authors on the role of age in agricultural entrepreneurship because some authors said youth prefer white color jobs. The lower likelihood of youth being entrepreneurs is associated with age and is also inversely related to intentions for agricultural entrepreneurship (Chaudhary, 2017).

Table 4. 3: Mean difference across selected socioeconomic characteristics between those in agricultural entrepreneurship and those who not.

Variable	Participation in agricultural-oriented enterprise	Mean	St. Err	t-stat	p-value
Age	yes	26.07	0.48	75.5	0.000
	no	22.71	0.39		
Household size	yes	5.31	0.19	0.547	0.000
	no	5.69	0.20		
Experience	yes	0.84	0.28	0.000	0.000
	no	0.53	0.04		
Land size	yes	2.91	0.71	0.430	0.000
	no	2.02	0.23		

***, ** = Significant at 1% and 5% significance levels respectively

The mean household size of members who were participating in agricultural-oriented enterprises was less compared to those not participating this is because a bigger proportion of youths in rural areas don't have access to resources like land, entrepreneurial skills, and capital for them to start their agricultural enterprises rather they will prefer non-agricultural activities and migrate to urban areas. Availability of agricultural enterprises from the youth requires a conducive environment that involves tax holidays and a flexible loan repayment system plays an important role in allowing new agricultural businesses to emerge. In the study of agricultural entrepreneurship, family background, and household size act as significant pillars that provide youth with resources for them to start entrepreneurship (Mohd *et al.*, 2014). This result above is in line with the Kenya National Youth Policy [KNYP] agenda which says rural youths must be

supported for their developmental projects since this is the way to reduce unemployment. In addition, the Youth Enterprise Development Fund [YEDF] was released to support youths to access resources like entrepreneurial skills and capital to start agricultural business enterprises (Government of Kenya, 2013).

The mean experience for those participating in agricultural-oriented enterprises was higher at 0.84 years compared to those not intending to start. There was a significant mean difference between experience and participation in agriculture-related enterprises at a 1% significance level. Youths with more experience in agricultural entrepreneurship know how to manage risks and also the kind of profitable businesses therefore they intend to venture into agriculture more than those without experience. The findings are consistent with the results of Basu and Virick (2008), who said there is a positive relationship between family business experience which is related to agriculture and agricultural entrepreneurship. Working in a family business can motivate and build youths to have an entrepreneurship mindset which can allow them to have experience before they have theirs (Verd *et al.*, 2019). The results contradict Malebano and Swanepoel (2015) who say there is no positive relationship and significant effect between family business experience and agricultural entrepreneurship on youths.

The mean land size for those youths participating in agricultural-oriented enterprises was higher at 2.91 acres compared to those not participating which was at 2.02 acres. There were significant mean differences in land size at a 1% significance level. This could be caused by land being the key to agricultural entrepreneurship because it takes more than 60% of production. Kenya is overpopulated even in rural areas land is a scarce resource and youths cannot access it easily. Poor access to land is one of the main factors that is limiting the participation of youths in entrepreneurship and agriculture (FAO, 2010). This result was supported by Cotula (2011) who says the land is crucial for productivity and biodiversity. Some youths have occupied leased and inherited land in which land is shared among many siblings so they end up having small pieces of land that cannot allow them to do entrepreneurship, agriculture, and also acquiring land rights or deeds (World Bank, 2019).

Figure 4.1 shows how youths are participating in different enterprises including even those without any enterprise. In the agricultural value chain, figure 4.1 helps us understand in which part of the value chain youths mostly exist. The agricultural value chain consists of 5 main stages which are input supply, production, processing, distribution, wholesaling, and retailing. From the figure

below no youths are participating in the first stage of the value chain which involves input supply to farms and being involved in running agro-vet shops or agriculture hardware because this stage needs high capital investment in terms of acquiring business land. On production, we have youths who are participating in crop production which involves cereals and horticultural crops and there are also youth participating in poultry production which involves keeping broilers specifically for selling. Youths are running a few restaurants which is in the processing stage where agricultural produce is being processed to finished products ready food for consumption. Youths are not participating in the distribution stage of the value chain which involves carrying produce to the markets and also the consumers this is because this stage needs more investment in terms of machines that are specifically for distribution like refrigerated vehicles, lorries, and other required modes of transport like a train.

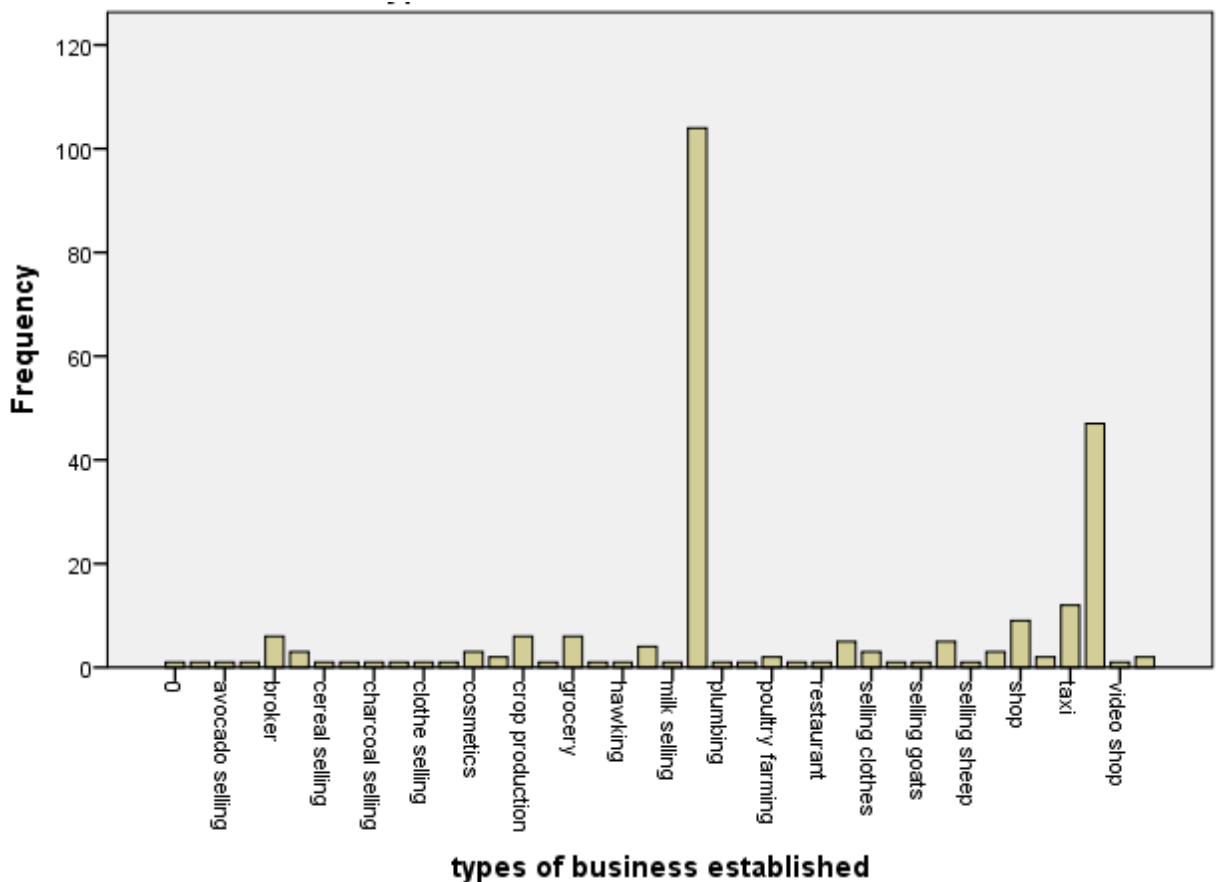


Figure 5: The extent to which youth are participating in different stages of the agricultural value chain in Njoro Sub-County

Wholesaling and retailing are the stages of the value chain where most youths participate, they are involved in fruit selling, selling processed and unprocessed cereals, milk selling, grocery

shops, selling goats and sheep, and doing broker business. Youths are participating in these activities in bigger numbers because this is the end of the value chain and there is quicker money. Most youths prefer this stage of the value chain because generating income is very fast since all produce from the agricultural enterprise is mature and ready for sale. Regarding unemployment in Kenya youths and the use of agricultural entrepreneurship to solve the problem, support is lacking to make sure that youths are participating in all stages of the value chain.

4.2 Challenges limiting youth participation in agricultural entrepreneurship in the Njoro Sub-County.

The t-test statistic of Friedman was significant at a 1% significance level with p-value=0.000. This means that several challenges impede the process of agricultural entrepreneurship. The significance of these challenges contributes more to the reasons why unemployment is higher among the youth. Then Friedman test further ranks those challenges according to their level of influence on youths.

Table 4. 4: Friedman test-statistic table

N	Chi-square	df	Asymp. sig
246	412.444	8	.000

*** = Significant at 1% significance level

Table 4. 5: Friedman test ranks

Challenges	Friedman Ranks
Lack of start-up capital	2.79
High cost of starting up a business	3.45
Legal/restrictions (business policies, taxes)	4.90
High risks to the agriculture environment	5.41
No access to land	5.48
Political instability	5.48
Poor market access	5.58
Lack of suitable resources	5.61
Lack of entrepreneurship training	6.30

*** = Significant at 1% significance level

The most important factor was the lack of start-up capital ranked at 2.79. This is because start-up capital is the key to starting projects or businesses. Young Upstarts (2011), noted that the

major stumbling block for youth to engage in agricultural entrepreneurship is the start capital since setting up a business the whole process involves financial expenses. Lack of start-up capital is noted as a persistent problem because of the inaccessible business finances by youths due to a lack of collateral security (Njongeri, 2015).

The high cost of starting up a business ranked at 3.45 was also among the top limiting factors to youth to start up projects because in Kenya the registration process is not free for those starting projects. There are no discounts for registering a company or a partnership for youths starting a new enterprise to curb unemployment. The results are consistent with Van (2010), who indicated that the rigid and bureaucratic nature of the business registration process for business involves red tape, high costs, and labor-restrictive measures. Fong *et al.* (2020) said that one of the fundamental challenges is the high cost of starting up a business which has been triggered by the high cost of land in Kenya for the past decades.

Legal restrictions at 4.90 involve business policies and taxes, which also affect many youths when they think of starting agriculture entrepreneurship. This is because there are no tax holidays in Kenya for businesses that are still starting or infants in the industry. These policies limit the motivation of youths to start projects because it is not guaranteed that youths will start a project and break even in the first month for them to cope with these costs. Harrington *et al.* (2010) supported no tax holiday or discounts given to youths who wants to start a new business and this is also adding to the high cost of starting up an agricultural enterprise.

High risks in the agriculture environment were ranked at 5.41 as the third most challenging factor. Youths in rural areas found that risks and uncertainty in the agriculture environment involve competition, business interruptions, unpredictable policies, violence, pandemics, and inflation all these make it difficult for youths to start agricultural enterprise. These challenges cause a lot of fear to the youths thereby causing failure to cope with these risks. Zimmerman and Chu (2013) argued that in developing countries challenges that limit youths to venture into agricultural entrepreneurship involve instability in the business environment which involves political demonstrations, looting, and difficulties in obtaining property rights. Inflation is eroding money value daily which is now a threat to new entrepreneurs whether to invest or not (Verd, 2019).

Land and political instability were rated as the fourth limiting factor in the challenges affecting youth agricultural entrepreneurship. Youths mentioned that due to the politics of tribes, it is difficult to access land from another region where the dominance is not your tribe. To some

extent, it can happen, but still, people are living in fear because some properties were destroyed during the political violence period because of tribal reasons. Even though some areas have good business opportunities youths can invest in places. This result was supported by Keats and Wigg (2016) who said in Kenya youths in rural areas face land challenges for business or farming because a bigger proportion of land is under inheritance and family control, in their areas land is distributed considering tribe of dominance and also political interest.

Respondents ranked poor market access 5.58 as the fifth constraint militating against the decision to start an agricultural entrepreneurship. Generally, accessing markets is a challenge for many rural youths. In the horticultural sector, for instance, young entrepreneurs faced problems with timely market access especially for tomatoes, carrots, and leafy vegetables. Due to poor road networks, product quality was reduced thereby negatively affecting revenues. In addition, competition was intense, especially for agricultural products as many youths were already involved in this activity. The economic disincentive from low prices discouraged potential business entrants. The result above is in line with Fong *et al.* (2020), who revealed that market dynamics are key in influencing the viability of small agricultural businesses.

Lack of suitable resources ranked at 5.61 and lack of agricultural entrepreneurship training was the last at (6.30), turning business ideas into real projects requires resources like raw materials, land, facilities, buildings, machinery, computers, supplies, vehicles, educational, and emotional resources. For successful use of these resources, youths must be trained to get the skills, and a lot of youths have secondary education which is not resourceful in terms of agricultural entrepreneurship teaching. The results of research conducted by Jongh and Meyer (2017) confirm that among the youths who want to be entrepreneurs, the barrier is a lack of suitable resources like land, management skills, finances for business, and labour. Sean (2020), emphasized that due to a lack of sustainable entrepreneurship training, skilled employees and professionals become a problem, and also resources that can cope with technological change.

4.3 The socioeconomic factors influencing agricultural entrepreneurship in Njoro Sub-County

The first analysis was to test the variables of interest in the study for multi-collinearity using the Variance Inflation Factor (VIF), from the VIF rule which says if the VIF ranges from 1 to 5 ($1 < \text{VIF} < 5$), it means there is no multicollinearity among the variables and if the VIF ranges from 5

to 10 ($VIF \geq 5$ to 10) which means there is high probability of multicollinearity among the variables.

Table 4. 6: Testing multicollinearity of the considered variables in the study

Variables	VIF	1/VIF
Age	1.63	0.614865
Marital status	1.43	0.700766
Market place ownership	1.25	0.802063
Experience	1.24	0.806258
Total land size	1.21	0.829183
Training	1.11	0.897996
Household size	1.11	0.904418
Access to credit	1.09	0.914528
Income	1.08	0.923986
Education	1.08	0.925196
Push/pull factors index	1.07	0.932525
Gender	1.06	0.944035
Mean VIF	1.20	

Table 4.7 above where multicollinearity was tested using the VIF shows that among the considered variables in the regression model, there was no multicollinearity from the independent variables because the total mean VIF is below 5 and is between ($1 < VIF < 5$).

Model analysis

The probit regression model was used to identify the factors influencing entrepreneurship among the youths in Njoro Sub-County. The probit regression model is one of the very useful models in predicting individual-level decisions, it has been used in the study of entrepreneurial intention by past researchers (Mohan *et al.*, 2018). A probit regression model was applied and variables included in the model comprised demographic factors, personal characteristics, and push and pull factors as the factors that can motivate youths' intentions to start a business.

Table 4. 7: The probit regression model specifications

Log-likelihood	Chi 2 (12)	Prob > Chi 2	Pseudo R ²
-124.67534	91.42	0.0000	0.2683

As indicated above in Table 4.8 the model was significant at 1% ($p=0.000$). this means variables that were put into consideration were adding significant impact in determining youths' participation in agricultural entrepreneurship.

Table 4.8, below depicts the factors that influencing youth's agricultural entrepreneurship. The model reflected the following socio-economic factors such as age, education, experience, credit access, marketplace ownership, income, and training show significant influence as drivers of youths to agriculture. Other factors include household size, land size, gender, marital status, and push-pull factors that did not show significant influence in driving youths to agricultural entrepreneurship.

The p-value for age is 0.001, meaning age was significant at a 1% significance level. There was a positive relationship between participation in agricultural entrepreneurship and the age of the youth. If age increases by 1 year, the odds of starting an agricultural entrepreneurship increase by 3%, holding all other predictors constant. Age plays an important role in youth agricultural entrepreneurship because youths who started agribusiness early and participated in family business, show more experience of good management in business. As people get older, they tend to become more interested in agriculture since some employment opportunities also put an age limit, therefore agriculture entrepreneurship suits any age. Levesque and Minniti (2006) supported the result above they said because of the opportunity cost of time age becomes a concern in agricultural entrepreneurship since youths believe in enterprise development later. Chaudhary (2017), was in contrast with the argument above in his results he said that age has no significant influence on youth agricultural entrepreneurship and it also has negative relationship.

Table 4. 8: Socio-economic factoring influencing agricultural entrepreneurship from probit regression model estimation among the rural youths in Njoro-Sub-County

Variables	Coef.	Std. Error	Marginal effects	P-value
Age	0.074	0.008	0.030	0.001***
Education	0.068	0.014	0.027	0.066*
Experience	0.962	0.075	0.344	0.000***
Household size	-0.028	0.017	-0.011	0.503
Credit access	0.468	0.105	0.184	0.081*
Land size	0.034	0.012	0.014	0.275
Gender	0.117	0.074	0.047	0.534
Marital status	0.225	0.082	0.089	0.276
Marketplace ownership	0.373	0.080	0.148	0.066*
Income	4.190	0.000	0.167	0.007***
Training	1.540	0.088	0.442	0.000***
Push-pull factors index	-0.186	0.087	-0.074	0.396

***, **, * = Significant at 1%, 5%, 10% significance level respectively

Number of obs = 246LR chi2(12) = 91.42

Prob > chi2 = 0.0000 Pseudo R2 = 0.2683

Log likelihood = -124.67534

Education had a positive significant effect on participation of youths to agricultural entrepreneurship at 10% significance level. Therefore, there was a positive relationship between participation in agricultural entrepreneurship and education level, which means an increase in education level by a year of schooling will increase the odds of youth participating in agricultural entrepreneurship by 2%. Education plays a crucial role in driving youths to agricultural entrepreneurship because agricultural knowledge of agronomic practices, marketing, and also income generation is accessed through education. The ability to read and write catalyze information retrieval and processing of relevant information for agricultural entrepreneurship thereby improving the likelihood of youths to venture into agriculture. Youths are getting an education from different sources like government schools, vocational training centers, workshops, and also online, which now helping rural communities improve their literacy level to adopt

agricultural entrepreneurship. Gieure *et al.* (2019), mentioned that youths are being driven to start agricultural businesses because the education they have helps them with skills for development. In contrast, Barba (2018) said that because of the population increase and high unemployment rate youths are motivated to start agricultural entrepreneurship not by education.

Experience had a significant and positive effect at 1% on youth participation in agricultural entrepreneurship. Therefore, there was a positive relationship between participation in agricultural entrepreneurship and years of experience in agribusiness. That is as experience increases by one year the odds of participating in agricultural entrepreneurship increase by 34%, which means the experience contributes more to driving youths to be agripreneurs. Normally people get experience through repeating the same business or doing the same business for years therefore they can start to understand the risks and uncertainties involved in such type of business and have the ability to avoid losses in the future. Experience builds confidence in starting new enterprises. Shaping agricultural entrepreneurship in terms of personality, behavior, and ability to make proper decisions comes with the experience. In agricultural entrepreneurship experience closes the skill gap since doing business allows one to gain hands-on experience, and it also keeps the enterprise on top of the changing environment. The result above correlates with Taormina (2007) there is a positive and significant influence of experience in motivating youths to start agricultural enterprises since it can push them with confidence.

Income had a significant effect on the participation of youth in agricultural entrepreneurship. There was a positive relationship between participation in agricultural entrepreneurship and income which means an increase in the amount of money as income will lead to a 16% increase in the odds of participating in agricultural entrepreneurship. Income helps more in agricultural entrepreneurship in terms of purchasing inputs, paying labour in terms of salary, and also buying new technology to cope with time. Youths who can access income with proper resources to run an agribusiness can employ themselves. The result is in line with research done by Ajide and Osinubi (2020) who noted the positive effects of income in driving youths to agricultural entrepreneurship. Kraton and Gazdar (2016), agree with the above findings regarding income they found that positive motivation for youths' agricultural entrepreneurship is because they provide economic growth and create employment in the nation through investing the income they have.

The marketplace ownership had a significant effect at a 10% significance level on youths participation to agricultural entrepreneurship. There was a positive relationship between participation in agricultural entrepreneurship and the number of marketplaces owned by the family, which means if the marketplace increases by one the likelihood of youth participating in agricultural entrepreneurship increases by 14%. The marketplace is a key in agricultural entrepreneurship whether title deed or renting but this place is crucial because after producing or after processing the marketplace helps to reach out to the customers with our products. There is high competition in acquiring land for business which is now making it an important asset. Arranz *et al.* (2019) supported that and said market ownership can allow youths to invest their resources in agricultural entrepreneurship with the confidence of having a place to sell them.

The credit access p-value is at 0.081 which means, credit access was significant at a 10% significance level. There was a positive relationship between participation in agricultural entrepreneurship and accessing credit, which means as the chances of accessing credit increase the odds of youth venturing into agricultural entrepreneurship increase by 18%. Credit access is very crucial in agricultural entrepreneurship because that is where resources to use such as labour, management, and financial capital comes from. The government also plays a crucial role in assisting agricultural entrepreneurs through issuing policies that are very flexible to allow youths access to loans from banks. Lack of capital is one of the most limiting factors for the youths to participate in agricultural entrepreneurship therefore it can be solved by accessibility of capital which is very significant in this study. With more financial resources youth can be able to use adaptation strategies like investing in irrigation facilities to cope with climate change hence increasing the uptake of agricultural entrepreneurship.

The training was significant at 1% of youths' participation to agricultural entrepreneurship. There was a positive relationship between participation in agricultural entrepreneurship and training, which means a unit increase in the number of pieces of training attended by the youths will lead to a 44% increase in the likelihood of being in agricultural entrepreneurship by the youths. Training equips youths with managerial skills, risk-bearing, and the ability to develop a teamwork mentality, which can make them interested in agricultural entrepreneurship. Agricultural entrepreneurship training allows youths to develop a mind of creating jobs for themselves rather than expecting to be employed by the government. Klinger and Schundeln (2014), found that agricultural entrepreneurship training significantly motivates youths to start their businesses with

the confidence of being equipped with the necessary skills. The development of the value chain in agriculture which is mostly centered on utilizing different stages needs youths to be trained on how value addition is done at the single stage for them to create opportunities that can generate income.

Family size had an insignificant effect in influencing youths to participate in agricultural entrepreneurship. Comparing results from Khoza (2019), revealed that in his findings families in Africa regarded agriculture as the occupation for the elderly people since all the youths can migrate to cities and towns for better opportunities. Furthermore Francisco and Njeri (2021) in their finding said that bigger families could provide labour for agricultural entrepreneurship and then motivate youths in those families to venture into agripreneurship. Alsos *et al.* (2011), add that household size did not drive youths to start agricultural businesses as a means to support the family, and family businesses help in developing agricultural entrepreneurship. Agrawal and Gupta (2019), said that more family members who are backed by agriculture as source of income can have significant impact in driving youths to participate in agricultural entrepreneurship. Furthermore, this research revealed that families are made up of people employed in non-agricultural occupations therefore agricultural entrepreneurship might not be that of important to these people. Other families' businesses provide entrepreneurship skills and management of business to their family members by employing them in family businesses that are not related to agriculture which made them not see the importance of agriculture. The involvement of youths in family businesses that are not related to agriculture adds more exposure, skills, and experience to run non-agricultural enterprises.

The land had the insignificant effect in driving youths to agricultural entrepreneurship. Comparing with results from Khatun and Roy (2022) they found that people with land title deeds they are investing more and participating in agricultural entrepreneurship. Given the ambiguities of acquiring land in Kenya and the increase in the population, the land becomes very expensive and scarce thereby making it difficult to access for the youths (Jayne *et al.*, 2016). The motivation of youths to do agriculture business from a land point is negatively influenced by its inaccessibility factor (Kidido *et al.*, 2017). In this research it has been noted that youths have no access to land, 70% of accessible land for agricultural entrepreneurship is through renting, leasing, buying from the city council, and inherited land which can bring family conflicts later. The fact that youths are unemployed and do not have money to access land means a bigger portion of land will demotivate them from entrepreneurship. There is a lack of government support in terms of helping the youth

access land for entrepreneurship. It has been noted that youths in rural areas are selling out their inherited land in exchange for motorbikes to do “boda boda” business

Gender had an insignificant effect in determining the driving of youths to participate in agricultural entrepreneurship. Compared with the results of Silva *et al.* (2010), they noted that gender was placed at the center of the attitude and acceptance of youths to participate in agricultural entrepreneurship. Gender also did not significantly influence youths to participate in agricultural entrepreneurship since women and men still have traditional reasons for not being fully involved in agriculture (Konavalchuk *et al.*, 2008). Díaz and Moreno (2010), indicated that men are likely to get involved in agricultural entrepreneurship in Kenya because traditionally they are the owners of the land which is also a main asset. The results conquer that of the African societies where man regarded as providers of the daily bread and then there are the ones to work also women possess more behavioral and moral etiquette that can limit them to thinking of agricultural entrepreneurship (Chen, 2009). People of the youthful age whether male or female prefer non-agricultural opportunities, especially from the government. The result above is in line with research done by Kolvovereid *et al.* (2008) where they argued that gender is not an important aspect in determining agricultural entrepreneurship motivation since they noted that youths who are women are less likely to engage in agricultural entrepreneurship even after receiving agribusiness training. Maes *et al.* (2014) opposed the results above and argued that motivation for agricultural entrepreneurship is mostly determined by and mediated by personal behavior and perceived behavioral control. Entrepreneurs’ characteristics contribute more to studying potential youths who can start agribusinesses and determine what exactly can motivate them to start.

Marital status had insignificant effect to drive youths to participate in agricultural entrepreneurship. In comparing this result is directly linked to the objective of the National Youth Policy [NYP] which is to motivate youths to do business but analysis is still saying unemployment is high (National Credit Regulator [NCR], 2020). Barba (2018) did not support the above argument because he noted that youths are attracted to the business because they want to create wealth and also be their boss and gain business profits. Further, on the same, he argues that literature proved that under good management and proper government support agricultural entrepreneurship can generate wealth and motivate youths to do business which can be also a push factor. This is because youths a bigger percentage are single and they can’t raise income to marry. Agricultural entrepreneurship is influenced by marital status in that even if people are married or in couples,

they cannot even participate in agribusiness. The scenario is like this because social and economic factors also influence youths.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

- i. The study confirms that statistically youths participating in agricultural-oriented enterprises and those not participating in agricultural-oriented enterprises are almost half to half. This means there is no greater difference between those involved in agricultural entrepreneurship and those who are not. More youths tend to be interested in non-agricultural enterprises which is an indication of underlying challenges that are more to agricultural entrepreneurship.
- ii. Major challenges that are affecting youth agricultural entrepreneurship include lack of start-up capital, high cost of starting up a business, and legal restrictions (business policies, taxes). Youth are not able to get start-up capital which involves land, labour, entrepreneurial skills, and management skills which are key resources for the success of someone in agricultural entrepreneurship. It is very costly to start up an agricultural entrepreneurship enterprise because accessing land as the first resource is very expensive and legal procedures need money for registration for one to be formally registered and yet youths are incapacitated to have funds. The failure of youth to venture into agricultural entrepreneurship is caused by these challenges and addressing them will be a plus to employment creation.
- iii. Participation in agricultural entrepreneurship was significantly driven by age, education, credit access, experience, marketplace ownership, income, and training. The analysis shows that these factors are driving youths more to agricultural entrepreneurship which is more important because as income increases more funds will be available for investing in agriculture. Age and experience allow youths to understand the nature of risks and uncertainties which are more liked to be encountered in agricultural entrepreneurship. Resources availability is more linked to credit access and the form training received so starting can be difficult if youths are well equipped. Since youth unemployment is still increasing among the youths' socioeconomic factors can allow direction in terms of innovations that are necessary to curb unemployment.

5.2 Recommendations

- i. Policymakers could amend their policies in a way that resource distribution to youths to participate in agricultural entrepreneurship can be easy. Provision of land to youths for projects can be done by the government through a leasing program so that payment can be made later. Since youth are participating in agricultural-oriented enterprises support can be provided from both government and non-governmental organizations by providing them with training, seminars, and workshops because the majority have basic education which normally does not include agricultural entrepreneurship training.
- ii. An evaluation system can be implemented for every youth who is willing to start an agricultural entrepreneurship enterprise. If the suggested eligibility is met then youths can access capital from banks and other financial institutions without collateral security but they can use those evaluation methods to see the validity of the enterprise to pay back the funds after receiving credit. The government may provide tax holidays and low-interest rates to enterprises that are still starting from the youth's side as a way to reduce the burden of the high cost of setting up a business and legal restrictions. For all these challenges to be controlled robust approach is very important which can be provided by the government and non-governmental organizations with resources like skills, inputs for farming, and also additional machines.
- iii. As noted, Kenya is experiencing youths' high unemployment therefore the government must shift from traditional means of employment to the adoption of sustainable means of employment which is agricultural entrepreneurship but the process must be guided by observing significant factors which can drive agricultural entrepreneurship and give assurance of future enterprise establishment after supporting them. There is a need for follow-up with the youths in terms of workshops, seminars, and training so that the government and non-governmental organizations can equip the youths with the necessary skills for agribusiness development. The development of rural areas through good road networks and electrification can allow youths to fulfill this objective of agribusiness.

5.3 Suggestions for future research

While this research focused on the factors influencing rural youths' participation in agricultural-oriented enterprises in Njoro Sub-County, Kenya, further research can also look at the effectiveness of government policies that support agricultural entrepreneurship among the youths.

Furthermore, other research can look at the perception of youths to use agricultural entrepreneurship as a mechanism for curbing unemployment and the role of government, and financial institutions in supporting youth agricultural entrepreneurship.

REFERENCES

- Adeyanju, D. F. (2019). *Impact of Agricultural Training Programmes on Youth Agripreneurship Performance and Empowerment in Nigeria* (Publication No. 11295/108201) [Masters Thesis, University of Nairobi]. PQDT Open.
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&isAllowed=y
- Ajzen, I. (2006). *Attitudes, Personality, and Behavior*. Second edition. Open University Press, Berkshire, England.
<https://psicoexperimental.wordpress.com/wp-content/uploads/2011/03/ajzeni-2005-attitudes-personality-and-behaviour-2nd-ed-open-university-press.pdf>
- Anyanwu, J. (2013). Characteristics and macroeconomic determinants of youth employment in Africa. *African Development Review*, 25 (2), 107–129.
https://www.researchgate.net/publication/264270036_Characteristics_and_Macroeconomic_Determinants_of_Youth_Employment_in_Africa
- Aktar, I., & Ozturk, L. (2009). Can Unemployment be cured by Economic Growth and Foreign Direct Investment, in Turkey. *International Research Journal of Finance and Economics*, (5)27, 203-2011. <https://dergipark.org.tr/en/download/article-file/289261>
- Allen, A., Howard, J., Jamison, A., Jayne, T., Kondo, M., Snyder, J., & Yeboah, F. (2016). *Youth Employment and Engagement Study*. Michigan State University: East Lansing, MI, USA.
https://www.isp.msu.edu/files/4814/7249/7008/AgYees_Report_FINAL_web.pdf
- Aliyu, R. S. (2012). *Macroeconomic Policy, Output, and Unemployment Dynamics in Nigeria: Evidence of Jobless Growth*, Nigerian Economic Society.
<https://www.researchgate.net/publication/251336872>
- Altman, M., Hart, T., & Jacobs, P. (2009). Household food security status in South Africa. *Agrekon*, 48(4), 345-361. <https://journal.umy.ac.id/index.php/ag/article/view/11451>
- Arranz, N., Arroyabe., F., & Arroyabe, J. (2019). Entrepreneurial intention and obstacles of undergraduate students: The case of the universities of Andalusia. *Studies in Higher Education*, 44(11), 2011-2024.

- https://www.researchgate.net/publication/325834776_Entrepreneurial_intention_and_obstacles_of_undergraduate_students_the_case_of_the_universities_of_Andalusia
- Ajide, F. M. (2020). Financial inclusion in Africa. *Journal Financial Economic Policy*, 13(12), 687–706. <https://ideas.repec.org/a/eme/jfeppp/jfep-08-2019-0159.html>
- Alsos, G. A., Carter, S., & Ljunggren, E. (2011). *The Handbook of Research on Entrepreneurship in Agriculture and Rural Development*. Edward Elgar Publishing.
https://books.google.com/books/about/The_Handbook_of_Research_on_Entrepreneur.html?id=wmE5c_KiOCsC
- Anne, D. (2014). *Entrepreneurship in Farming*. Food and Agriculture Organization of the United Nations, Rome. <https://www.fao.org/uploads/media/5-EntrepreneurshipInternLores.pdf>
- Audet, J., Berger-Douce, S., & St-Jean, E. (2007). Perceptual barriers preventing small business owners from using public support services, Canada. *International Journal of Entrepreneurship*, 11(6), 27-47.
https://www.researchgate.net/publication/242285011_Perceptual_barriers_preventing_small_business_owners_from_using_public_support_services_evidence_from_Canada
- Basu, A., & Virick, M. (2008). Assessing entrepreneurial intentions amongst students: A comparative study. *Proceedings of the Annual Conference*. Brisbane, QLD, Australia 45(10), 206-208.
<https://www.semanticscholar.org/paper/Assessing-Entrepreneurial-Intentions-Amongst-A-Basu-Virick/aad43e54fa61b1b47ed171695e924dadb1a5d9f1>
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial Intention Among Academy of Engineering Students: *European Research on Management and Business Economics*, 24(1), 53-61. <https://www.sciencedirect.com/science/article/pii/S2444883417300220>
- Bell, D.F., & Blanchflower, D.G. (2011a). Young People and the Great Recession. *Oxford Review of Economic Policy*, 27(2), 241–267. <https://ftp.iza.org/dp5674.pdf>
- Ben-Akiva, M., Bradley, M., Morikawa, T., Benjamin, J., Novak, T., Oppewal, H., & Rao, V. (1985). Combining Revealed and Stated Preferences Data. *Marketing Letters*, 5(10), 335-349. [https://doi.org/10.1016/0148-2963\(91\)90033-T](https://doi.org/10.1016/0148-2963(91)90033-T)
- Bertola, G., Blau, F.D., & Kahn, L.M. (2007). “Labour market institutions and demographic employment patterns”. *Journal of Population Economics*, 20 (4), 833–867.
<https://ideas.repec.org/a/spr/jopoec/v20y2007i4p833-867.html>

- Bouichou, E.H., Abdoulaye, T., Allali, K., Bouayad, A., & Fadlaoui, A. (2021). Entrepreneurial Intention among Rural Youth in Moroccan Agricultural Cooperatives, Morocco, *The Future of Rural Entrepreneurship*, 13(4), 9247-9266.
<https://www.mdpi.com/2071-1050/13/16/9247>
- Biradar, S.S. (2015). Development of agriculture in India through agripreneurs. *International Journal of Applied Research*, 1(9), 1063-1066.
<https://www.allresearchjournal.com/archives/?year=2015&vol=1&issue=9&part=P&ArticleId=716>
- Biyase, M., & Bonga-Bonga, L. (2010). *South Africa's Growth Paradox*, University of Johannesburg, South Africa.
https://www.researchgate.net/publication/4861607_South_Africa's_Growth_Paradox
- Bird, M. (2014). The Impact of the Family on Entrepreneurial Outcomes: *The Role of Social Embeddedness*. Working Paper No. 07/14. <https://ex.hhs.se/dissertations/740322-FULLTEXT02.pdf>
- Blanchflower, D.G., & Freeman, R. (2007). *Youth Employment and Joblessness in Advanced Countries*. Chicago, IL, University of Chicago Press and NBER.
<https://press.uchicago.edu/ucp/books/book/chicago/Y/bo3615605.html>
- Brioxiová, Z., & Kangoye, T. (2013). *Youth employment in Africa: New evidence and policies from Swaziland*, African Development Bank Group Working Paper No. 175.
https://www.afdb.org/sites/default/files/documents/publications/working_paper_175_-_youth_employment_in_africa_-_new_evidence_and_policies_from_swaziland.pdf
- Burger, R., & Von Fintel, D. (2009). Determining the Causes of the Rising South African Unemployment Rate in South Africa: *An Age, Period and Generational Analysis*, *Economic Research Southern Africa*, Working Papers Number 158.
<https://resep.sun.ac.za/wp-content/uploads/2017/10/wp-24-2009.pdf>
- Bureau for Economic Research. (2016). *The Small, Medium, and Microenterprise Sectors of South Africa*. University of Stellenbosch, South Africa.
<https://www.seda.org.za/Publications/Publications/The%20Small,%20Medium%20and%20Micro%20Enterprise%20Sector%20of%20South%20Africa%20Commissioned%20by%20Seda.pdf>

- Caroleo, F.E., & Pastore, F. (2007). *The Youth Experience Gap: Explaining Differences Across EU Countries*, University of Perugia, Perugia.
https://www.researchgate.net/publication/23536623_The_Youth_Experience_Gap_Explaining_Differences_across_EU_Countries
- Carlsson, Bo., Pontus, B., Christer, O., Lars P., & Håkan, Y. (2013). The evolving domain of entrepreneurship research. *Small Business Economics*, 41(33), 913–30.
<https://link.springer.com/article/10.1007/s11187-013-9503-y>
- Chappelow, J. (2020). Guide to Unemployment. INVESTOPEDIA.
https://www.researchgate.net/publication/344641992_What_Is_Unemployment
- Chaudhary, R. (2017). Demographic factors, personality, and entrepreneurial inclination: A study among Indian university students. *Education and Training*, 59(2), 171–187.
<https://www.emerald.com/insight/content/doi/10.1108/ET-02-2016-0024/full/html>
- Chaudhry, M.T., Marelli, E., & Signorelli, M. (2012). Youth unemployment rate and impact of financial crises, in *International Journal of Manpower*, 33 (1), 76–95.
<https://www.emerald.com/insight/content/doi/10.1108/01437721211212538/full/html>
- Chou. (2011). The influence of entrepreneurial self-efficacy on entrepreneurial learning behavior using entrepreneurial intention as the mediator variable. *International Business and Management Journal*, 3(2), 7-11.
<http://cscanada.net/index.php/ibm/article/viewFile/j.ibm.1923842820110302.4Z0145/2052>
- Chutel, L. (2016). The record of unemployment affects these South Africans the most. *Internet: nandtheyouth*
<https://qz.com/844825/southafricasunemploymentrateisata13yearhighmostaffectingwome>
- Cornia, G., Deotti, L., & Sassi, M. (2016). Sources of food price volatility and child malnutrition in Niger and Malawi. *Food Policy*, 60(3), 20–30,
https://www.researchgate.net/publication/292671042_Sources_of_food_price_volatility_and_child_malnutrition_in_Niger_and_Malawi
- Cotula, L. (2011). *The Outlook on Farmland Acquisitions*. International Institute for Environment, and Development (IIED), *Policy Brief*, 6(4), 44–45,
https://www.shareweb.ch/site/Agriculture-and-Food_Security/focusareas/Documents/land_policy_brief_cotula.pdf

- Chido, E., & Diane, E. (2013). *A Regional Approach to Security, Stability, and Development in Sub-Saharan Africa*. Strategic Studies Institute and U.S. Army War College Press, USA, 2(3), 8-16. <https://www.loc.gov/item/2013464155/>
- Davidsson, P., Steffens, P., & Fitzsimmons, J. (2009). Growing profitable or growing from profits. *Journal of Business Venturing*, 24(6), 388-406. <https://www.coursehero.com/file/p4e214qh/Davidsson-P-Steffens-P-Fitzsimmons-J-2009-Growing-Profitable-or-Growing-from/>
- Douglas, E., & Busenitz, L. (2018). Reconstruction entrepreneurial intent to identify predisposition for growth. *Journal of Business Venturing*, 28(20), 633-651. <https://ideas.repec.org/a/eee/jbvent/v28y2013i5p633-651.html>
- Ditimi, A., & Ichukwu, N. P. (2013). The impact of Unemployment rate on Productivity Growth, Abuja, Nigeria. *International Journal of Economic and Management Sciences*, 2(8), 01-13. <https://core.ac.uk/download/pdf/234645979.pdf>
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programs: A new methodology. *Journal of European Industrial Training*, 30(9), 701-720. <https://www.emerald.com/insight/content/doi/10.1108/03090590610715022/full/html>
- FAO. (2012). *Food Insecurity: When People Must Live with Hunger and Fear Starvation*. The State of Food Insecurity in the World, 2002. FAO, United Nations, Rome, Italy. <ftp://ftp.fao.org/docrep/fao/005/y7352e/y7352e00.pdf>
- Fong, E. Y., Jabor, M. K. B., Zulkifli, A. H., & Hashim, M. R. (2020). Challenges Faced by New Entrepreneurs and Suggestions How to Overcome Them. International Conference on Student and Disable Student Development. (ICoSD 2019) (pp. 223-227). https://www.researchgate.net/publication/346200904_Challenges_Faced_by_New_Entrepreneurs_and_Suggestions_How_to_Overcome_Them
- Forti, D., & Maina, G. (2012). The danger of Marginalization: An analysis of Kenya Youth and their Integration into Political, Socio-Economic Life Nairobi, Kenya. *African Centre for the Constructive Resolution of Disputes*, 20(12), 55-86. <https://library.fes.de/pdf-files/bueros/kenia/09859.pdf>

- Fox, O.O. (2019). Graduate entrepreneurial intention in South Africa: Motivations and Obstacles. *International Journal of Business and Management*, 5(9), 87-98. <https://www.scirp.org/journal/paperinformation.aspx?paperid=113089>
- Fiet, J.O., & Patel, P.C. (2008). *Firm Founding and Systematic Search*. Paper presented at USASBE 2008 proceedings. <https://business.louisville.edu/bizprod/wp-content/uploads/James-Fiet-Vita-2021-Sept.pdf>
- Fini, R., Grimaldi, R., & Sobrero, M. (2010). Factors Fostering Academics to Start-up New Ventures: An Assessment of Italian Founders' Incentives, Italy. *Journal of Technology Transfer*, 13(2), 24-33. https://www.researchgate.net/publication/226817574_Factors_Fostering_Academics_to_Start_up_New_Ventures_An_Assessment_of_Italian_Founders'_Incentives
- Fitzsimmons, J.R., & Douglas, E.J. (2005). *Entrepreneurial Attitudes and Entrepreneurial Intent: A Cross-Cultural Study of Potential Entrepreneurs in India, China, Thailand and, Australia*. Paper presented at the Babson-Kauffman Entrepreneurial Research Conference in June 2005, Wesley. https://www.researchgate.net/publication/27467565_Entrepreneurial_Attitudes_and_Entrepreneurial_Intentions_A_CrossCultural_Study_of_Potential_Entrepreneurs_in_India_China_Thailand_and_Australia
- Frankel, J. R., Wallen, N. E., & Hyun, H. H. (2000). *How to Design and Evaluate Research in Education (Volume 7)*. McGraw-Hill, New York, USA, 2(5), 65-71 <https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1046940>
- Friedman, M. (1937). The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *Journal of the American Statistical Association*, 32(45), 675-701. <https://www.semanticscholar.org/paper/The-Use-of-Ranks-to-Avoid-the-Assumption-of-in-the-Friedman/c369d4807adef168a6fef1dd7986d62fc150a78>
- Fuller, B. (2018). Examining how the personality, self-efficacy, and anticipatory cognitions of potential entrepreneurs shape their entrepreneurial intent. *Journal of Economics and Sustainable Development*, 23 (8), 120-125. https://www.researchgate.net/publication/324140758_Examining_how_the_personality_selfefficacy_and_anticipatory_cognitions_of_potential_entrepreneurs_shape_their_entrepreneurial_intentions

- Gitonga. (2008). *State of Youth Unemployment, Kenya*. Brookings Institution.
<https://www.brookings.edu/articles/state-of-youth-unemployment-in-kenya/>
- Gieure, C., Benavides-Espinosa, M.D.M., & Roig-Dobón, S. (2019). Entrepreneurial intentions in an international university environment. *International Journal of Entrepreneurial Behavior & Research*, 40(12), 12-19.
<https://ideas.repec.org/a/eee/jbrese/v112y2020icp541-548.html>
- Government of Kenya (GoK). (2013). *Nakuru County First County Integrated Development Plan, (2013-2017), Kenya Vision 2030: Nakuru County, Kenya*.
<https://www.kpda.or.ke/documents/CIDP/Nakuru.pdf>
- Golghamat Raad, N. (2019). A strategic approach to tourism development barriers in Iran. *Journal of Tourism and Hospitality*, 8(410), 2167-2269.
<https://www.longdom.org/open-access-pdfs/a-strategic-approach-to-tourismdevelopment-barriers-in-iran.pdf>
- Gorgievski, M. J., Stephan, U., Laguna, M., & Moriano, J. A. (2018). Predicting entrepreneurial career intent: Values and the theory of planned behaviour. *Journal of Career Assessment*, 26(3), 457–475. <https://journals.sagepub.com/doi/abs/10.1177/1069072717714541>
- Gautam, M. (2015). Entrepreneurship education: concept, characteristics, and implications for teacher education. *An International Journal of Education*, 8 (1), 21-35.
<https://ir.ucc.edu.gh/xmlui/bitstream/handle/123456789/4308/ENTREPRENEURSHIP%20EDUCATION.pdf?sequence=1&disAllowed=y>
- Gurel, E. A. (2010). Tourism students' entrepreneurial intent. *Annals of Tourism Research*, 37(3), 646–669.
https://www.researchgate.net/publication/223124164_Tourism_students'_entrepreneurial_intentions
- Gwija, S.A., Eresia-Eke, C., & Iwu, C.G. (2014). Challenges and prospects of youth entrepreneurship development in a designated community in the Western Cape, South Africa. *Journal of Economics and Behavioural Studies*, 6(1), 10–20.
https://www.researchgate.net/publication/260750340_Challenges_and_Prospects_of_Youth_Entrepreneurship_Development_in_a_Designated_Community_in_the_Western_Cape_South_Africa

- Grundstén, H. (2004). Entrepreneurial Intent and the Environment: A study of technology-based new ventures. *Journal of Economics and Sustainable Development*, 6(5), 208-220
- Guerrero, M., Lavín, J., & Álvarez, M. (2009). *The Role of Education on Start-up Intent: A Structural Equation Model of Mexican University Students*. Proceedings of the Association for Small Business and Entrepreneurship, USA, 116(47), 23499–23504. <https://www.ajol.info/index.php/sabr/article/view/104672/94723>
- Hanna, A. (2014). *The Global Youth Unemployment Crisis*: Duke University, Durham. <https://dukespace.lib.duke.edu/items/bc0a0d15-5dbf-4062-8742-a2620e04ed3b>
- Hanapi, Z., & Mohd. N. (2013). Unemployment among Malaysia graduates: Graduates' attributes lecturers' competency and quality of education. *Procedia-Social and Behavioural Sciences*, 112 (8), 1056-1063. <https://www.scirp.org/reference/referencespapers?referenceid=3316933>
- Herrington, M., Kew, J., & Kew, P. (2010). Global Entrepreneurship Monitor [online]. Available at: <http://www.gsb.uct.ac.za/files/GEM2010Report.pdf>
- Hirsch, E. (2007). Dual Labour Market Theory: A Sociological Critique. *Sociological Inquiry*, 50(2), 133-145. https://www.researchgate.net/publication/229488499_Dual_Labor_Market_Theory_A_Sociological_Critique
- Higgins, N.H., & Ryan, M.J. (2007). Determinants of entrepreneurial intentions of secondary school learners in Mamelodi, South Africa. *Academy of Entrepreneurship Journal*, 25(2), 1-10. <https://journal.universidadean.edu.co/index>
- International Labour Office. (2020). *Global Employment Trends for Youth and Special Issue on the Impact of the Global Economic Crisis on Youth*. Geneva, Switzerland. https://webapps.ilo.org/wcmsp5/groups/public/dgreports/dcomm/publ/documents/publication/wcms_737648.pdf
- Ismail, H. (2012). Entrepreneurial dimensions in transitional economies: A review of relevant literature and the case of Kyrgyzstan. *Journal of Developmental Entrepreneurship*, 13(2), 185-203. <https://ftp.iza.org/dp4805.pdf>
- Jacob, O. (2011). *Causes of unemployment among the Youth*. Makerekere University: Kampala, Uganda. <https://www.studymode.com/essays/Causes-Of-Unemployment-Among-The-Youth-1826500.html>

- Jaetzold, S., & Schmit, B. R. (2010). Gender and Entrepreneurial Orientation: A multi-country study. *International Journal of Commerce*, 11(10), 122–138. <https://www.semanticscholar.org/paper/Gender-and-entrepreneurial-orientation%3A-a-study-Lim-Envick/540b9107b401c928a6fab2ef863e93390a5543b3>
- Jayne, T. S., Mason, N. M., Burke, W. J., & Ariga, J. (2018). Taking Stock of Africa's Second-Generation Agricultural Input Subsidy Programs. *Food Policy*, 75(88), 1-14. <https://doi.org/10.1016/j.foodpol.2018.01.003>
- Jongh, J., Meyer, N. (2017). An investigation into the factors affecting young people's entrepreneurial inclination. *International Journal of Business and Management Studies*, 13(9),69-86. https://www.sobiad.org/eJOURNALS/journal_IJBM/arhieves/IJBM_2017_2/j-d-jongh.pdf
- Junaid, M., Durrani, M., Mehboob-ur-Rashid & Shaheen, N. (2015). Entrepreneurship as a Socially Constructed Phenomenon: Importance of Alternate Paradigms Research. *Journal of Managerial Sciences*, 9(1), 35–48. https://www.qurtuba.edu.pk/jms/default_files/JMS/9_1/JMS_January_June2015_35-48.pdf
- Kautonen, T., & Jenni, P. (2010). The impact of a necessity-based start-up on subsequent entrepreneurial satisfaction. *International Entrepreneurship and Management Journal*, 6 (3), 285–300. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2271618
- Kenya National Bureau of Statistics [KNBS]. (2019). *Population Projections: Analytical Report on Population Projections*. Nairobi, Kenya. <https://new.knbs.or.ke/wp-content/uploads/2023/09/2019-Kenya-population-and-Housing-Census-Summary-Report-on-Kenyas-Population-Projections.pdf>
- Keats S., & Wiggins, S. (2016). Population changes in the rural developing world: Making the Transition. *Overseas Development Institute*. 18(7), 64-66. <https://www.odi.org/sites/odi.org.uk/files/resource-documents/10374>
- Kristiansen, S., & Ryen, A. (2008). Enacting their business environment: *Asian Entrepreneurs in East Africa*. *African and Asian Studies*, 1(3), 165-186. https://www.researchgate.net/publication/249600079_Enacting_Their_Business_Environments_Asian_Entrepreneurs_in_East_Africa

- Kolvereid L., Bullvåg E., & Åmo B.W. (2008). *Global Entrepreneurship Monitor*. 6(8), 66-99.
https://www.researchgate.net/publication/277191492_The_Global_Entrepreneurship_Monitor_United_Kingdom_2008_Executive_Report
- Klinger, B., & Schündeln, M. (2011). 'Can Entrepreneurial Activity be Taught? Quasi Experimental Evidence from Central America', *World Development*, 39(9), 1592 – 1610.
<https://www.wiwi.uni-frankfurt.de/profs/schuendeln/staff/TeachingEntrepreneurs.pdf>
- Kratou, H., & Gazdar, K. (2016). Addressing the effect of workers' remittance on economic growth. *International Journal of Social Economics*. 3(43), 51–70.
<https://ideas.repec.org/a/eme/ijsepp/v43y2015i1p51-70.html>
- Kidido, J., Drennan, J., Renfrow, P., & Watson, B. (2017). Situational factors and entrepreneurial intentions. *Proceedings of the 16th Annual Conference of the Small Enterprise Association of Australia and New Zealand*. Ballarat. https://www.researchgate.net/profile/Judy-Drennan/publication/43464881_Situational_Factors_and_Entrepreneurial_Intentions/link/s/02e7e51c380828ba38000000/Situational-Factors-and-Entrepreneurial-Intentions.pdf
- Kim, J., Chan, L., & Quah, W.B. (2012). Start-up factors for small and medium-sized accommodation businesses at the University of Malaysia. Sabah, Malaysia: *School of Business and Economics*, 6(2), 49–62.
https://www.researchgate.net/publication/233365698_Startup_Factors_for_Small_and_Mediumsized_Accommodation_Businesses_in_Sabah_Malaysia_Push_and_Pull_Factors
- Kinuthia, G. K., Afolayan, F., Ngure, V., & Anjili, C. (2012). Selected Practices Among Rural Residents Versus the Prevalence of Amoebiasis and Giardiasis in Njoro District, Kenya. *African Journal of Health Sciences*, 20(2), 11-20.
<https://www.ajol.info/index.php/ajhs/article/view/201485/190005>
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(5), 866-885.
<https://ideas.repec.org/a/eee/jbvent/v21y2006i6p866-885.html>
- Kompoand, G., & Tromp, C. (2013). Impacts of Urbanization on Land Use Planning, Livelihood, and Environment in the Nairobi Rural-Urban Fringe, Kenya. *International Journal of Science Technology Research*, 2(8), 70-79.
<https://www.intosaicommunity.net/document/articlelibrary/Impacts-Of-Urbanization-On->

[Land-Use-Planning-Livelihood-And-Environment-In-The-Nairobi-Rural-urban-Fringe-Kenya.pdf](#)

- Kobia, M. (2010). Research for the meaning of entrepreneurship. *Journal of European Industrial Training*, 34(2), 110-127. <https://core.ac.uk/download/pdf/234624378.pdf>
- Korenman, S., & Neumark, D. (1997). *Cohort crowding and youth labour markets: A cross-national analysis*, NBER Working Paper No. 6031. https://www.nber.org/system/files/working_papers/w6031/w6031.pdf
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques (2nd Edition)*: New Age International in Delhi, India, 45(7), 29-31. <https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1285422>
- Khuong and Nguyen, (2016). The factors affecting entrepreneurial intention of the students of Vietnam National University, Vietnam. *Journal of Economics, Business, and Management*, 4(3), 104-111. <https://www.semanticscholar.org/paper/The-Factors-Affecting-Entrepreneurial-Intention-of-KhuongHuu/e35fe7886bd7f887d4ef97c7b48d7c3f9dc39685>
- Krueger, N. (2009). The Micro-Foundations of Entrepreneurial Learning and Education: *The experiential essence of entrepreneurial cognition and implications for entrepreneurial pedagogies*. USASBE 2009 conference proceedings, January 8-11, Anaheim, CA. https://ideas.repec.org/h/elg/eechap/12826_4.html
- Kuratko, D. (2008). Entrepreneurship-Theory, process, and practice. *Journal of Economics, Business, and Management*, 7(1), 43-57. https://www.researchgate.net/profile/Howard-Frederick/publication/305328636_Entrepreneurship_theory_process_practice/links/5e20ab6e92851cafc38a85cd/Entrepreneurship-theory-process-practice.pdf
- Kuwornu, J. K. M., Bashiru, M., & Dumayiri, M. (2014). Farm households' livelihood diversification into agroprocessing and non-agro-processing activities: Empirical evidence from Ghana. *Information Management and Business Review*, 6(4), 191–199. <https://ojs.amhinternational.com/index.php/imbr/article/view/1114>
- Khatun, D., & Roy, B. C. (2020). Rural livelihood diversification in West Bengal: Determinants and constraints. *Agricultural Economics Research Review*, 25(1), 115–124. <https://ageconsearch.umn.edu/record/126049/files/12-Dilrub.pdf>

- Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177–194. <https://www.sciencedirect.com/science/article/pii/S0883902605000388>
- Lin, E., & Ho, H. (2008). An Empirical Study on Logistics Service Providers' Intention to Adopt Green Innovations. *Journal of Technology Management Innovations*, 3(7), 18–26. <https://www.jotmi.org/index.php/GT/article/view/art69>
- Lorenzini, J., & Macro, G. (2012). Employment status, social capital, and political participation: *A comparison of unemployment and employed youth in Geneva*. *Swiss Political Science Review*, 18(3), 332-351. <https://access.archive-ouverte.unige.ch/access/metadata/fc596fc0-6557-4aae-ba19-c270973c818d/download>
- Luthje, E., & Franke, N. (2019). The ‘making’ of an entrepreneur: *Testing a model of entrepreneurial intent among engineering students at MIT*, *Rand D Management*. Cape Town, South Africa, 33(2),135-147. <https://www.scirp.org/reference/referencespapers?referenceid=685171>
- Maina, G. (2012). Africa Dialogue - Opportunity or Threat: The Engagement of Youth in Societies: An analysis of Kenya Youth and their integration into political, socio-economic life Nairobi, Kenya. *African Centre for the Constructive Resolution of Disputes*, 7 (4), 55-86. https://www.files.ethz.ch/isn/146635/africa_dialogue_Monograph_1-2012.pdf
- Maes, J., Leroy, H., & Sels., L. (2014). Gender Differences in Entrepreneurial Intentions: A Theory of Planned Behaviour Multi-group Analysis at Factor and Indicator Level. *Procedia-Social and Behavioural Sciences*, 32(8), 784–794. <https://www.scirp.org/reference/referencespapers?referenceid=3133630>
- Malebana, M. J., & Swanepoel, E. (2015). Graduate entrepreneurial intentions in the rural provinces of South Africa. *Southern African Business Review*, 19(44), 189-111. <https://www.ajol.info/index.php/sabr/article/view/116952>
- Malebana, M. (2012). Entrepreneurial Intent of Final Year Commerce Students in the Rural Provinces of South Africa. *European Journal of Research and Reflection in Management Sciences*, 15(20), 133-199. <https://core.ac.uk/download/pdf/43171292.pdf>
- Mapiye, C., Chimonyo, M., Muchenje, V., Dzama, K., Marufu, M. C., & Raats, J. G. (2007). Potential for value-addition of Nguni cattle products in the communal areas of South

- Africa: A review. *African Journal of Agricultural Research*, 2(10), 488–495.
<https://academicjournals.org/journal/AJAR/article-full-text-pdf/9B69D2034003>
- Marire, E. (2015). *A Comparison of Entrepreneurial Intent of Generation in South Africa and Zimbabwe* [Masters Dissertation in Commerce, University of Zimbabwe]. University of Zimbabwe, Harare, Zimbabwe. <https://www.semanticscholar.org/paper/A-comparison-of-entrepreneurial-intentions-of-Y-inMarire/25a5a043dda14a8727217b931350fbaefee11420>
- Marivate, S.P. (2014). The relationship between growth in small business and cash flow: A study of small business in Tshwane, South Africa. *European Journal of Research and Reflection in Management Sciences*, 2(2), 19–36. <https://www.idpublications.org/wp-content/uploads/2014/09/THE-RELATIONSHIP-BETWEEN-GROWTH-IN-SMALL-BUSINESSES-AND-CASHFLOW-A-STUDY-OF-SMALL-BUSINESSES-IN-TSHWANE.pdf>
- Moore, P.E. (2003). *Global Entrepreneurship Monitor, GEM*. Babson College, London Business School: Ewing Marion Kauffman Foundation.
<https://www.babson.edu/media/babson/assets/global-entrepreneurship-monitor/gem-2018-2019-global-report.pdf>
- Moreno, M., Zarrías, J.L., & Barbero, J. (2014). The relationship between growth and volatility in small firms. *Journal of Management Decision*, 52(8), 1516–1532.
<https://www.emerald.com/insight/content/doi/10.1108/MD-10-2013-0509/full/pdf?title=the-relationship-between-growth-and-volatility-in-small-firms>
- Mkubukeli, Z., & Cronje, J. (2018). Pull and Push Elements of Entrepreneurship in South Africa. *Journal of Entrepreneurship Organization Management*, 7(4), 252-264.
<https://www.hilarispublisher.com/open-access/pull-and-push-elements-of-entrepreneurship-in-south-africa-a-small-scale-mining-perspective-2169-026X-1000252.pdf>
- Mubeena, M., & Sunitha, N. (2017). Entrepreneurial Behaviour Components of Rural Women of Podupu Laxmi Ikya Sangem. *International Journal of Pure and Applied Bioscience*, 5(5), 816-820. <http://www.ijpab.com/form/2017%20Volume%205,%20issue%205/IJPAB-2017-5-5-816-820.pdf>

- Mudiwa B, (2018). A Review of the Entrepreneurial Behaviour of Farmers: An Asian-African Perspective. *Asian Journal of Agricultural Extension, Economics & Sociology*, 22(3), 1-10. <https://journalajaees.com/index.php/AJAEES/article/view/82>
- Munyao, C. (2019). *Youth Unemployment and its Implication on Development in Africa*: University of Nairobi, Kenya. <https://www.collegesidekick.com/study-docs/2326598>
- Mukhopadhyay, B.R., & Mukhopadhyay, B.K. (2020). What is Agripreneurship, and why India needs it. *The Sentinel, Editorial*, 19(2), 248-255. <https://www.sentinelassam.com/more-news/editorial/why-india-needs-agripreneurship>
- Murimi, B.M. (2014). *Factors affecting the success of start-up of youth enterprises in Nairobi County, Kenya*. [Master of Art Dissertation, University of Nairobi, Kenya]. https://www.businessperspectives.org/index.php/journals?controller=pdfview&task=download&item_id=7642
- Murray, B.C. 2016. African entrepreneurs: An analysis of their motivation for starting their own business. *South African Journal of Economic and Management Sciences*, 6(4), 724-743. <https://sajems.org/index.php/sajems/article/view/1514>
- Mmbengwa, V. M., Ramukumba, T., Groenewald, J. A., Van Schalkwyk, H. D., Gundidza, M. B., & Maiwashe, A. N. (2011). Evaluation of essential capacities required for the performance of farming small, micro and medium enterprises (SMEs) in South Africa. *African Journal of Agricultural Research*, 6(6), 1500–1507. http://www.scielo.org.za/scielo.php?script=sci_nlinks&ref=5480199&pid=S0301-603X202000020001300023&lng=en
- National Credit Regulator (NCR). (2011). Literature Review on Small and Medium Enterprises' Access to Credit and Support in South Africa. <https://www.smallbusinessinstitute.co.za/wp-content/uploads/2019/12/NCRLiterature>.
- Nafukho, F. M., & Muyia, M. A. H. (2010). Entrepreneurship & Socioeconomic Development in Africa: A reality or myth. *Journal of European Industrial Training*, 34(2), 96-109. https://www.academia.edu/17680096/Entrepreneurship_and_socioeconomic_development_in_Africa_a_reality_or_myth
- Nesoba, D. (2010). University Graduates' Employability Skills' Mismatch and the Labour Market Demands in Kenya. *EPH-International Journal of Business and Management Science*, 1(1), 18-23.

- Nedeljkovic, V. (2004). Brain drains in the European Union Facts and figures: University of Crete, Greece. http://eprints.bournemouth.ac.uk/28702/1/Chapter.ID_47546_6x9-1-edited.pdf
- Nieman, G., & Nieuwenhuizen, C. (2014). *Entrepreneurship in South African Perspective. 3rd Edition, Pretoria.* <https://www.worldcat.org/title/entrepreneurship-a-south-african-perspective/oclc/871068011>
- Njongeri, W. (2015). Influence of entrepreneurship education in developing entrepreneurs in Kenya: The case study of Jomo. *Kenyatta University of Agriculture and Technology.* <https://ojs.amhinternational.com/index.php/jeps/article/view/2921>
- Obonyo, R. (2014). Reducing Youth Unemployment in Kenya. *International Journal of Managerial Studies and Research*, 5(8), 12-17. <https://doi.org/10.20431/2349-0349.0508002>
- Oduwole, T. A. (2015). Youth unemployment and poverty in Nigeria. *International Journal of Sociology and Anthropology Research*, 1(8), 23–39. <https://www.eajournals.org/wp-content/uploads/Youth-Unemployment-and-Poverty-in-Nigeria.pdf>
- Ogeto, R. M., Cheruiyot, E., Mshenga, P., & Onyari, C. N. (2013). Sorghum Production for Food Security: A Socio-Economic Analysis of Sorghum Production in Nakuru County, Kenya. *African Journal of Agricultural Research*, 8(47), 655-667. <https://www.semanticscholar.org/paper/Sorghum-production-for-food-security%3A-A-analysis-of-Ogeto-Cheruiyot/140481daff94a80d4e34ea4b0e8e51da25759e39>
- O'Higgins, N. (2012). Youth labour markets during the Great Recession. *Comparative Economic Studies*, 54(2), 395–412. <https://ideas.repec.org/a/pal/compes/v54y2012i2p395-412.html>
- Organization for Economic Co-operation and Development (OECD). (2017). Youth Unemployment Rate. <https://data.oecd.org/unemp/youth-unemploymentrate.htm>
- Othman, H. (2009). Attitude Towards Choosing a Career in Entrepreneurship Amongst Graduates. *European Journal of Social Sciences*, 14(3), 42-67.
- Palamida, E. (2016). Determinants of Entrepreneurial Intention: The Interrelated Role of Background, Situational and Psychological Factors. *European Journal of Social Sciences*. 10(3), 234-252. <https://core.ac.uk/download/pdf/153780344.pdf>

- Packham, G., Jones, P., Miller, C., Pickernell, D., & Brychan, T. (2010). Attitudes Towards Entrepreneurship Education: A Comparative Analysis. *Education and Training*, 52(8/9), 568-586. <https://eprints.glos.ac.uk/2250/>
- Pandit, J. (2010). The Analysis of Variance in Anaesthetic Research. *Asian Journal of Empirical Research*, 65(12), 1212-1220. <https://pubmed.ncbi.nlm.nih.gov/21182603/>
- Prior D. (2012). The Effects of Buyer–Supplier Relationships on Buyer Competitiveness. *Journal of Business and Industrial Marketing*, 27(2), 100–114. <https://ijecm.co.uk/wp-content/uploads/2015/06/3626.pdf>
- Perugini, C., & Signorelli, M. 2010. Youth labour market performance in European regions Washington, DC. *Economic Change and Restructuring*, 43(2), 151–185. <https://www.researchgate.net/publication/225812249>
- Pissarides, C.A. (1986). Unemployment and vacancies in Britain. *Economic Policy*, 1(3), 500–559. <https://www.semanticscholar.org/paper/Unemployment-and-Vacancies-in-Britain-Pissarides/6c9eb5fabac5ea54b78a00bcf86cdf8851e8d88b>
- Porchezhiyan, S., Sudharshan, A., & Umamageswari, M. (2016). Entrepreneurial behavioural index of dairy farmers in the Northern districts of Tamil Nadu. *Indian Journal of Economics. Development*, 4(1), 2320-9828. <https://www.i-scholar.in/index.php/ijed/article/download/93646/83003>
- Phillips, M., Moos, M., & Nieman, G. (2014). The impact of government support initiatives on the growth of female businesses in Tshwane, South Africa. *Mediterranean Journal of Social Sciences*, 5(15), 85–92. https://www.researchgate.net/publication/271104938_The_Impact_of_Government_Support_Initiatives_on_the_Growth_of_Female_Businesses_in_Tshwane_South_Africa
- Primentas, A. (2008). *Entrepreneurship Courses at the Technical Education Institutes of Greece*. 53rd International Council for Small Business World Conference on 22-25 June, Halifax, Nova Scotia, Canada. <https://icsb.org/wp-content/uploads/2017/03/ICSB-08-Program-FINAL.pdf>
- Rajasha, G., Talang, H., & Kumar, R. (2016). *Avenues for Entrepreneurship Development Through the Agri-Horti Ecosystem for Farmers and Rural Youth in Zambia*. [https://www.cell.com/heliyon/fulltext/S2405-8440\(23\)00512-1](https://www.cell.com/heliyon/fulltext/S2405-8440(23)00512-1)

- Republic of Kenya, (2008). *Kenya Vision 2030: First medium-term plan (2008–2012)*, in Nairobi, Kenya.
https://vision2030.go.ke/wp-content/uploads/2018/06/kenya_medium_term_plan_2008-2012-1.pdf
- Republic of Kenya, (2010). *The Constitution of Kenya, 2010*, Nairobi: Republic of Kenya.
http://www.parliament.go.ke/sites/default/files/2023-03/The_Constitution_of_Kenya_2010.pdf
- Ritsila, J., & Tervo, H. (2002). Effects of unemployment on new firm formation: Micro-level panel data evidence from Finland. *Small Business Economics*, 19(3), 31–40.
<https://link.springer.com/article/10.1023/A:1015734424259>
- Roxas, G., Cayoca, P., Rhowenna, K., & de Jesus, R. M. (2008). Entrepreneurial knowledge and its effects on entrepreneurial intent: development of a conceptual framework. *Asia-Pacific Social Science Review*, 8(2), 61-77.
<https://research.usq.edu.au/item/9zvww/entrepreneurial-knowledge-and-its-effects-on-entrepreneurial-intentions-development-of-a-conceptual-framework>
- Rwigena. (2008). *Entrepreneurship theory and practice*. Oxford university press, Cape Town, South Africa.
<https://search.worldcat.org/title/Entrepreneurship-:-theory-in-practice/oclc/276976219>
- Ryan, C. (2007). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 13(4), 1-16.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2486713
- Sambo, W., & Chiloane, E. (2015). Challenges faced by small automotive businesses in Tshwane, South Africa. *Problems and Perspectives in Management*, 13(3), 189–198.
<https://core.ac.uk/download/201415918.pdf>
- Segal, G., Borgia, D., & Schoen field, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurship Behaviour and Research*, 11(1), 42–57.
<https://www.scirp.org/reference/referencespapers?referenceid=2019132>
- Sean, B. (2020). How Many Startups Fail and Why. *Journal of Economics and Sustainable Development*, 3(12), 18-28.

<https://www.investopedia.com/articles/personal-finance/040915/how-many-startups-fail-andwhy.asp#:~:text=In%202019%2C%20the%20failure%20rate,70%25%20in%20their%2010th%20year>

- Sepulveda, J. (2014). *Determinants of the risk attitude in entrepreneurship*. Evidence from Latin America. <https://ideas.repec.org/p/dsr/pastwp/18.html>
- Schoof, N., & Moos, M. (2014). *Networking and Support of Youth Entrepreneurship: A South African Perspective, 3rd Edition*. Pretoria: Van Schaik Publishers. <https://www.worldcat.org/title/entrepreneurship-a-south-african-perspective/oclc/871068011>
- Sharma, N. (2016). Determining growers' participation in contract farming in Punjab. *Economic and Political, Weekly*, 51(2), 58–64. <https://www.epw.in/journal/2016/2/special-articles/determining-growers-participation-contract-farming-punjab.html>
- Shimer, R. (2012). Reassessing the Ins and Outs of Unemployment, *A Review of Economic Dynamics*, 15(2), 127–148. <https://www.sciencedirect.com/science/article/pii/S1094202512000063>
- Skosana, B. (2012). A study of entrepreneurial intent of students at FET colleges in South Africa. [Research submitted in Wits business school], 15(2), 127–148. <https://core.ac.uk/download/pdf/39671362.pdf>
- Sutha, A. (2016). Entrepreneurial Intention and Social Entrepreneurship Among University Students in Chennai City. *International Journal of Engineering Studies*, 8(1), 93- 106. https://www.ripublication.com/ijes16/ijesv8n1_08.pdf
- Stephan, H. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy, and start-up success. *Entrepreneurship and Regional Development*, 24(9), 917-945. https://research.aston.ac.uk/files/8937843/Influence_of_socio_cultural_environments_on_the_performance_of_nascent.pdf
- Swanepoel, E. (2008). *The Effect of the Interventions of the South African Breweries' Kickstart Youth Entrepreneurship Programme on Entrepreneurial and Small Business Performance in South Africa*. University of South Africa, 24(3), 91-94. <https://uir.unisa.ac.za/bitstream/10500/1875/1/thesis.pdf>

- Taormina, G., Harhoff, D., & Weber, R. (2007). The effects of entrepreneurship education. *Journal of Economic Behavior and Organization*, 76(1), 90–112. <https://www.econstor.eu/bitstream/10419/93962/1/sfb-tr15-dp269.pdf>
- Tang, J., Tang, Z., Marino, L.D., Zhang, Y., & Li, Q. (2008). Exploring an inverted u-shape relationship between entrepreneurial orientation and performance in Chinese ventures. Benjin, China. *Entrepreneurship Theory and Practice*, 32(1), 219–239. <https://scirp.org/reference/referencespapers?referenceid=2594127>
- Tarekegn, K. (2020). An exploratory and quantitative assessment of the sustainable competitiveness of supply chain: evidence from India sugar industry. *Journal of Public Affairs*, 10(1002), 2514-2530. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10987908/>
- Tarawali, G., Iyangbe, C., Udensi, U. E., Ilona, P., Osun, T., Okater, C., & Asumugha, G. N. (2012). Commercial Scale Adoption of Improved Cassava Varieties: A baseline study to highlight constraints of large-scale cassava-based agro-processing industries in Southern Nigeria. *Journal of Food, Agriculture & Environment*, 10(4), 689–694. <https://cgspace.cgiar.org/items/2ae2ecea-8dd6-4382-b759-889dd4b40d91>
- Timmons, J. C. (2009). University training for entrepreneurial competencies: its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 14(6) 1–16. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2486713
- Türker, D., & Senem, S. (2009). Factors affecting the entrepreneurial intention of university students. *Journal of European Industrial Training* 33(3), 142–59. <https://www.scirp.org/reference/referencespapers?referenceid=2019141>
- Tervo, H., & Haapanen, M. (2010). “The nature of self-employment: how does gender matter?” *International Journal of Entrepreneurship and Small Business* 9(3), 349-371. <https://www.scribd.com/document/532414040/fulltext-dt-sss>
- Utami, C. (2017). Attitudes, subjective norms, perceived behaviour, entrepreneurship education and self-efficacy toward entrepreneurial intention university student in Indonesia. *European Research Studies Journal*, 2(1) , 475-495. <https://ideas.repec.org/a/ers/journal/vxxy2017i2ap475-495.html>
- Uche, C., & Familusi, L. (2018). The adoption of agripreneurship as a mitigating measure to unemployment in Abuja, Nigeria. *Global Journal of Management and Business Research*, 18(2), 25–31. <https://journalofbusiness.org/index.php/GJMBR/article/view/2528>

- United Nations. (2015). Unemployment and Entrepreneurship: Intentions, Institutional and Process. *Journal of Entrepreneurship, Management And Innovation*, 11(2), 117-119
- Young, U. R. (2011). Instant Grass for Virgin Unite. *Journal of Agribusiness in Developing and Emerging Economies*, 8(3), 426–453. <https://doi.org/10.1108/JADEE-03-2016-0014>
- Van Praag, M. (2003). Business survival and success of young small business owners. *Small Business Economics*, 21(1), 1–17. <https://link.springer.com/article/10.1023/A:1024453200297>
- Van Rensburg, L. J. (2010). National Report into the state of entrepreneurship. Available at: <http://www.ideate.co.za/2010/10/20/canentrepreneurship-be-taught/learned/>
- Venter, A. (2014). *An analysis of the influence of entrepreneurial orientation on business success in selected small and medium-sized enterprises*. [Dissertation and Thesis in Business Administration, Northwest University, Washington, DC]. https://dspace.nwu.ac.za/bitstream/handle/10394/10814/Venter_A.pdf?isAllowed=y&sequence=1
- Verheul, I., Thurik, R., Hessels., J., & Van der Zwan, P. (2010). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Enterprise Information Management Research*, 20(11), 1–24. <https://link.springer.com/article/10.1007/s40821-016-0065-1>
- Verd, J.M., Barranco, O., & Bolívar, M. (2019). Youth unemployment and employment trajectories in Spain during the Great Recession. *Journal of Labour Market*, 5(4)53-94. <https://labourmarketresearch.springeropen.com/articles/10.1186/s12651-019-0254-3>
- Vijay, S. (2017). Importance of entrepreneurship in the modern world. Personal and career development. *Small Business Economics*, 21(1), 1–17. <https://ojs.amhinternational.com/index.php/jeps/article/view/2428>
- Wosense, S. V., Ritter, L., & Lois, A. (2018), Designing and developing the survey instrument: conducting online surveys. *Thousand Oaks*, 1(1), 59-88. https://books.google.com/books/about/Conducting_Online_Surveys.html?id=4_3aX2A2S98C
- World Bank. (2009). *Youth and Employment in Africa: the Potential, the Problem, the Promise*. Africa Development Indicators 2008/09. Washington, DC. <https://econpapers.repec.org/RePEc:wbk:wbpubs:12350>

- Youth Enterprise Development Fund. (2011). Retrieved February 20, 2011, from <http://www.youthfund.go.ke/index.php/about-us/fund-objectives-mainmenu-28.html>
- Zhang, Z., Van, M. J., Narayanan, J., Arvey, R. D., Chaturvedi, S., Avolio, B. J., Lichtenstein, P., & Larsson, G. (2006). The Genetic Basis of Entrepreneurship: Effects of Gender and Personality. *Organizational Behavior and Human Decision Processes*, 110(45), 93–107. https://web2-bschool.nus.edu.sg/wp-content/uploads/media_rp/publications/TogzV1422939540.pdf
- 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. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=902a0fab12595be4d6e621b60daa623cd331d664>

APPENDICES

Appendix A: QUESTIONNAIRE

Entrepreneurial intent: Youth responds on intention to be entrepreneurs.

This study is being undertaken by Navison Nyakapene from Egerton University, Department of Agricultural Economics to understand entrepreneurial intent among rural youths in Njoro Sub-County, proportion, challenges, and, motivating factors of those interested in entrepreneurship. All information that will be gathered will be treated as confidential and will be used for academic purposes. No reference to the respondent's name will be made. Kindly assist me in honestly completing this questionnaire as much as possible.

Do you kindly agree to participate in this survey? 1 = Yes 2 = No

Questionnaire number..... Ward.....

Enumerator name..... District.....

SECTION A: YOUTH DEMOGRAPHIC INFORMATION					
A1	Gender of the youth (select appropriate)	1 = Male	0 = Female		
A2	Age of Youth: 18-20 <input type="checkbox"/> 21-25 <input type="checkbox"/> 26-30 <input type="checkbox"/> 31-35 <input type="checkbox"/>				
A3	Marital status	1 = Single	2 = Married	3 = Widowed	4 = Divorced
A4	Highest level of education	0 = None	1 = Primary	2 = Secondary	3 = Tertiary
A5	Are you interested in entrepreneurship?		1 = Yes	0 = No	
A6	Have you received any training about entrepreneurship?		1=Yes	0= No	
A6.1	If Yes, Training status: Government <input type="checkbox"/> NGOs <input type="checkbox"/> Schools <input type="checkbox"/> Other (Specify)				
A7	Do you have any entrepreneurship experience			Yes <input type="checkbox"/>	No <input type="checkbox"/>
A7.1	If yes, mention years of experience				
A8.1	Household size?				
A8.2	Among the mentioned household members, how many are between 18-35 years old?				

SECTION B: LIVELIHOOD DIVERSIFICATION

B1	What are the main sources of livelihood for your household? (Tick appropriately)		
	1 = Livestock production	2 = Crop production	3 = Remittances
	4 = Trading	5 = Self-employment	6 = Formal employment
	7 = Other (specify)		
B2	What other economic activities do you do apart from the main source of livelihood?		
	1 = Livestock production	2 = Crop production	3 = Remittances
	4 = Trading	5 = Self-employment	6 = Formal employment
	7 = Other (specify)		
B3	Estimated annual household income _____		
	Do you access credit from Bank 1=yes/0=no		

SECTION C: ASSET OWNERSHIP AS FAMILY		
C1	Livestock assets	
C1.1	Livestock type	Number owned
	Cattle	
	Goats	
	Sheep	
	Chicken	
	Pigs	
	Other (specify)	
C2	Physical assets	Number owned
	Car	
	Tractor	
	Shop	
	Motorbike	

	Do you own a market place 1=yes/0=no	
	Other specify	
C2.1	What is your total plot size?acres

SECTION D: USE OF ENTREPRENEURSHIP FOR CURBING UNEMPLOYMENT

Questions (TICK IN THE BOX)

D1. Have you heard about entrepreneurship as a method to reduce unemployment? YES NO

D2. If yes to question B1, where do you get this information about entrepreneurship (referring to sources)

Source	Type of Information
Government	
NGOs	
Schools	
Other Sources (Specify)	

D3. What is your perception about the use of entrepreneurship as a method to reduce unemployment among the youths?

1. Very positive 2. positive 3. neutral 4. negative 5. very negative

D4. Have you established any business to date or now? YES NO

D5. If yes to D4, Mention types of business

D6. If you intend to start a business, now or soon what could you say are the main challenges that can prevent you from starting your own business? Please indicate the level of every challenge and how it can limit you.

D6.1	To what extent do the following challenges prevent you from starting your own business or project?
------	--

Variable	1-Very high	2-High	3-Moderate	4-Low	5-Very Low
Lack of start-up capital					
High cost of starting up a business					
High risks to the business environment					
Legal/restrictions (business policies, taxes)					
Lack of entrepreneurship training					
Poor market access					
Lack of suitable resources for business (human and physical)					
No access to land					
Lack of suitable technology					
Political instability					
Other challenges (specify)					

SECTION E: MOTIVATING FACTORS BEHIND ENTREPRENEURSHIP

E1. If you are intending to start entrepreneurship, can you rank the following Pull and Push factors towards your desire to start a business?

E1.1	To what extent do you agree with the following pull factors that can motivate you to venture into entrepreneurship?					
	Variable (Pull Factors)	1-Strongly agree	2-Agree	3-Neutral	4-Disagree	5-Strongly Disagree
	More opportunities in the business environment					

	I will start my own business because I want to achieve something					
	I will start my own business because I want personal development					
	I will start my own business because I want to generate my wealth					
	I will start my own business because of advancements in technology					
	I will start my own business because of the high return on business					
	Others Pull factors (specify)					

E1.2	To what extent do you agree with the following push factors that can motivate you to venture into entrepreneurship?					
	Variable (Push Factors)	1-Strongly agree	2-Agree	3-Neutral	4-Disagree	5-Strongly Disagree
	I will start my own business because I am unemployed					
	I will start my own business because of job security					
	I will start my own business because of retrenchment					
	I will start my own business because skill mismatch					

	I will start my own business because low salaries in available jobs					
	I will start my own business because poverty and hunger					
	I will start my own business overpopulation					
	I will start my own business because no alternative					
	I will start my own business because of marriage					
	Others Push factors (specify)					

Appendix B: Ethical Clearance

EGERTON

TEL: (051) 2217808
FAX: 051-2217942



UNIVERSITY

P. O. BOX 536
EGERTON

**EGERTON UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS
REVIEW COMMITTEE**

EU/RE/DVC/009

Approval No. *EUISERC/APP/199/2022*

30th September, 2022

Navison Nyakapene
P.O.Box 536-20115
Egerton
Telephone: +254113222820/ +263785891642
E-mail: navisonnyakapene@gmail.com

Dear Navison,


**RE: ETHICAL APPROVAL: AN ANALYSIS OF ENTREPRENEURIAL INTENT
AMONG RURAL YOUTHS IN NJORO SUB-COUNTY, KENYA**

This is to inform you that *Egerton University Institutional Scientific and Ethics Review Committee* has reviewed and approved your above research proposal. Your application approval number is *EUISERC/APP/199/2022*. The approval period is *30th September, 2022 –1st October, 2023*.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by *Egerton University Institutional Scientific and Ethics Review Committee*.

Appendix C: Research Permit (NACOSTI)



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref No: **451313**



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Date of Issue: **23/February/2023**


RESEARCH LICENSE



This is to Certify that Mr. navison Nyakapene nyakapene of Egerton University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: ANALYSIS OF ENTREPRENEURIAL INTENT AMONG RURAL YOUTHS IN AGRI-ENTERPRISE WARDS OF NJORO SUB-COUNTY, KENYA for the period ending : 23/February/2024.

License No: **NACOSTI/P/23/23744**

451313
Applicant Identification Number



Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix E: Research Paper Abstract

International Journal of Managerial Studies and Research (IJMSR)

Volume 11, Issue 6, June 2023, PP 01-10

ISSN 2349-0330 (Print) & ISSN 2349-0349 (Online)

<https://doi.org/10.20431/2349-0349.1106001>

www.arcjournals.org



Analysis of Entrepreneurial Intent among Rural Youths in Njoro Sub-County, Kenya

Navison Nyakapene^{1*}, Dr. Jackson K Langat¹, Prof. Edward Mutandwa²

¹Department of Agricultural Economics and Agribusiness Management, Egerton University, Egerton-Njoro, KENYA

²Department of Agricultural Economics and Extension, University of Zimbabwe, Mount Pleasant, Harare, ZIMBABWE

***Corresponding Author:** Navison Nyakapene, Department of Agricultural Economics and Agribusiness Management, Egerton University, Egerton-Njoro, KENYA

Abstract: Currently, youth unemployment is a major challenge on the African continent. The Kenyan economy is suffering the same problem with more than 70% of youths being jobless. Entrepreneurship was identified and supported as an option to solve this problem but unemployment is still increasing. This study aims to analyze the entrepreneurial intent of rural youths in the Njoro Sub-County. Specifically, the study determines the proportion of youths intending to start a business and ascertains challenges hindering the translation of business ideas into viable projects. A multistage sampling method was adopted for this study and 246 respondents were selected. The descriptive statistics results showed that 93.9% of the youths were intending to start a business to curb the unemployment problem. The results from the Friedman test ranked that the most limiting challenges were lack of capital, high cost of business set-up, legal restrictions, high risks to the business environment, and no access to land were significant in hindering youths' entrepreneurship. Therefore, there is a need for support from government and private institutions in terms of training workshops, capital resources, and also tax holidays or discounts for new small firms.