

**Attitudes of school-going and unemployed youth towards agriculture as a profession in the
Eastern Cape of South Africa**

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2023

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Declaration

I, Mhlali Mnukwa, declare that this dissertation, which I hereby submit for the degree of Masters of Agriculture (Rural Development) at the University of Pretoria is my original work and has never been previously submitted by me or anyone else for a degree at this or any other tertiary institution. This is my own work in design and execution, and it has been acknowledged and referenced in accordance with departmental requirements.

Mnukwa M

December 2023

Dedication

This dissertation is dedicated to my mother, Nofikile Veliswa Mnukwa and my father Phumzile Mnukwa, and to the rest of my family, thank you for your endless support and love throughout my academic journey.

Acknowledgements

My sincere gratitude to my supervisor, Dr C.W Mostert for his moral support, guidance, efforts in supervising me throughout this research study. Thank you for always being there for me, your motivation and assistance helped me to put more effort into my work. A very special word of thanks to the high school learners and unemployed youth from the Eastern Cape, thank you for your cooperation, taking your time to answer all the questions truthfully and being patient with me. Ms Zizipho Mkhwenyana and Ms Nickelwa Ndomile, thank you for your help and time during the data collection process. To my family, thank you for always being there for me, your encouragement and never-ending support throughout my studies is highly appreciated. To my friends, your support did not go unnoticed. My deepest gratitude goes to the National Research Foundation (NRF) and the University of Pretoria for funding my masters' studies, and to the Department of Agricultural Economics, Extension and Rural Development for granting me the opportunity to further my postgraduate studies.

I thank the Good Lord for the gift of life, giving me strength and courage throughout my studies.

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Abstract

Agriculture is one of the largest contributors to the economic growth in South Africa and plays an important role in the socio-economic development of South Africa, particularly in rural regions like the Eastern Cape, however the decline in interest among youth to participate in agriculture threatens the future of agriculture in South Africa. The purpose of this study was to identify strategies that the government can use to encourage school-going and unemployed youth to consider the agricultural sector in the Eastern Cape of South Africa as a potential career. The specific objectives of the study were to identify the attitudes of school-going and unemployed youth in the Eastern Cape, addressing the barriers that youth face when entering agriculture and develop strategies that can be used to encourage youth entry to pursue agriculture as a profession. A sample of 100 respondents was selected using a simple random sampling technique to allow different groups of unemployed youth and school-going respondents to participate in this study and it helped to gather different attitudes and interests in the agricultural profession. The study used quantitative method to understand the behaviour and attitudes of the respondents. Furthermore, the study identified issues that influence the attitudes of school-going and unemployed youth respondents, barriers to entry in agricultural practice for youth were also identified and possible recommendations to encourage public policy to encourage youth participation in agriculture were developed. Descriptive statistics methods such as percentages and frequencies were adopted and used to summarise the data in an understanding way, while describing the difference between the variables of these two groups. Likert scale data was analysed and presented in tables. Open-ended responses were read through to identify similar themes and insights, noted down and thematic codes were formed to categorise and perform data analysis for open-ended responses. Diverging stacked graphs were used to compare Likert scale results and check the difference between the two groups. Descriptive statistics results revealed that majority of respondents were females in both groups. The Likert scale results revealed that school-going and unemployed respondents have differences and similarities regarding the issues that influence their attitudes towards agriculture. The diverging charts revealed that issues such as agricultural businesses taking longer to generate profit with risks and limited awareness and educational programmes about agriculture have a negative influence on both school-going and unemployed youth. The study further revealed that parent's involvement in choosing careers for their children has no negative influence on school-going and unemployed youth

attitudes. These charts further revealed that the attention required by agribusiness and its limitation to urban contact had no negative influence on school-going learners while unemployed youth attitudes were negatively influenced by it. The findings revealed that the issue of long, complicated land transfers is not a barrier that prevents youth participation in agriculture while unemployed youth believed that it prevents youth engagement in agriculture. In addition, the findings revealed that school-going and unemployed youth believed that rising inputs costs, exclusion of youth to financial assistance prevent youth entry into agricultural practices. The findings of this study contribute important information to policymakers, educators, and agricultural stakeholder in understanding the issues that influence youth participation in agriculture in Eastern Cape. Based on the findings of the study, it is recommended that public policy should include and promote more employment for educated youth in most departments of the sector, encouraging them to participate in agribusiness activities. Public policy should encourage more partnerships with the private sector for rural projects, rebranding agriculture into modern business and introduce digital technologies to attract youth to the sector. Public policy should avail state land for rentals to young people interested in utilising the land for short term period, targeting rural areas with skills development programs and establish more institutions for public funding that will fund agricultural research, conducting experiments that will assist in developing strategies to improve farming and protect produce from natural disasters. Ultimately, the study seeks to inform possible recommendations that will not only benefit the youth but contribute to the sustainable development of the agricultural sector in the Eastern Cape.

Keywords- Attitudes, Barriers, School-going learners, Unemployed youth, Policy recommendations.

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List of Abbreviations

ACEF – Agricultural Competitiveness Enhancement Fund

DAFF- Department of Agriculture, Forestry and Fisheries

EC- Eastern Cape (Province in South Africa)

ECSECC- Eastern Cape Socio-Economic Consultative Council

ERCA- Expanding Rice Credit Assistance

FAO- Food and Agriculture Organization of the United Nations

GDP- Gross Domestic Product

ICT- Information and Communications Technology

ILO- International Labour Organization

NAMC- National Agricultural Marketing Council

NRF- National Research Foundation

NYDA- National Youth Development Agency

RCEF- Rice Competitiveness Enhancement Fund

SPSS- Statistical Package for Social Science

Stats SA- Statistics South Africa

TOA- Theory of Reasoned Action

TPB- Theory of Planned Behaviour

CHAPTER 1

INTRODUCTION

1.1 Background

The attitudes of youth towards agriculture continue to be a concern for many developing countries as it puts many countries at risk of running out of food production in the future, raising food insecurity and increasing unemployment (Musa, 2020). Even the youth's limited participation in agriculture is a cause for concern. Abbas (2011) defines the agricultural profession as an occupation of science and business which involves cultivating soil, raising animals, and producing crops. Abbas (2011) further states that the agricultural sector is essential for many developing countries' economies as it participates in foreign exchange and provides food and income for many rural households. However, Yadav (2016) highlights that while agriculture is a ticket out of poverty for many rural people, some young people perceive agriculture as a poor career choice with fewer rewarding efforts, as it takes time to generate profits. According to Chipfupa and Tawagi (2021), limited access to land, capital, and other resources also discourages those who want to engage in agriculture, while others are more interested in off-farm activities. However, due to less investment in agriculture, youth prefer to look for jobs in urban areas, which looks convenient for their lifestyles. Metelerkamp *et al.*, (2019) explain that limited educational programmes and innovations in agricultural careers influence young people's attitudes and decisions when they go to higher learning institutions.

The limited interest of youth in agricultural activities leads to several issues, such as unemployment, urban migration, and food insecurity, which continue to affect many developing countries (Cheteni, 2016). Demand for food continues to rise due to population growth and limited resources to practise agriculture in many rural areas of these developing countries. Cheteni (2016) highlights that sustainable food production needs to take place to reduce hunger affecting many rural people.

Strever (2018) states that many rural households in South Africa suffer from food insecurity and hunger, as access to necessary resources such as proper running water and available land for food production is poor. Strever (2018) further mentions that due to limited access to resources in many rural areas, people use disposable income to travel to the nearest towns to buy food, affecting the types of food products they purchase and compromising their dietary food intake. Furthermore, limited access to land, capital, and other resources makes it difficult for other young farmers and beginners interested in agricultural activities (Katchova & Ahearn, 2014).

Experiences of financial programmes in developed countries

Susilowati (2014) states that developed countries such as the United Kingdom, the United States of America, and Australia have established incentive policy programmes to attract the youth to agriculture. These programmes mostly accommodate young and new farmers who want to practise agriculture. Two prominent European policy approaches involved in promoting structural adjustment in agriculture are Farmer Early Retirement programmes and New Entrance Schemes for Farmers (Susilowati, 2014).

Beneficiaries of the new entrance scheme could receive an operating capital grant for a new entrant that meets specific criteria. The Interest Subsidy Scheme focused on concerns about income and ensuring commitment to farming for a certain period (Susilowati, 2014). Susilowati (2014) further mentions that in Victoria, Australia, a Young Farmer Finance Scheme from the rural finance department caters to 40-year-old and younger farmers, providing them with loans to buy equipment, stock and even land. The One to Grow loan scheme helps young farmers who want to buy their first plot of land and operate small-scale and commercial farms. Susilowati (2014) states that the loan for purchasing stock and equipment has a 2% interest rate in the first three years, then commercial rates apply for the rest of the loan period. Murphy (2012) mentions that the One To Grow loan has a 1% discount off Rural Finance commercial interest rate in the first five years, and then commercial rates apply for the remaining years of the loan. According to Murphy (2012), France budgeted for total public expenditure between 2007 and 2013 to assist young people with a lump sum or subsidised loan for those who wanted to engage in agricultural activities. The state also helps young farmers with tax reduction that has been paid and increased over five years (Murphy, 2012).

Susilowati (2014) highlights that the United Kingdom has an incentive programme called the Young Entrants Support Scheme, which operates in Wales, helping with a once-off grant paid to young entrants who need capital expenditure to start up as a head of the business for the first time. Murphy (2012) mentions that the Young Entrants Support Scheme also allows a young entrant to access funded mentoring services from established farmers. Firstly, however, they need to submit a business plan with details of the capital investment that the grant will support before using these services.

In the United States, the government has a Farm Service Agency, which offers a direct loan programme to young people who need funds to start a business in agriculture and the Iowa Agricultural Development Authority, which is an organisation that lends products and assists smallholder young farmers and beginners through administering tax credits for them (Murphy, 2012). In China, the State Department of Agriculture released supporting policies in 2011, such as loan offers and benefits in tax to attract youth to engage in agricultural businesses and for their farms to receive training programmes on practical farming skills and farm management (Susilowati, 2014).

Experiences with financial programmes in developing countries.

Susilowati (2014) mentions that Indonesia has financial programmes such as Credit for Food Security and Energy, People's Business Credit, Credit for Cattle Breeding Programme, Services of Agricultural Financing Scheme Programme and Social Responsibility Partnership Programme, established by the Department of Agriculture to help small scale farmers and young people in agriculture. However, the government has no programmes that fund young farmers practising agriculture only (Susilowati, 2014).

Bayudan-Dacuycuy *et al.*, (2020) state that the Philippines has financial programmes that provide small farmers and commercial agribusinesses with credits and grants in the agricultural sector. The Land Bank of the Philippines is working with national agencies to offer affordable credits for smaller farmers. Bayudan-Dacuycuy *et al.*, (2020) further state that their programmes include the Agricultural Competitiveness Enhancement Fund (ACEF), Lending Programme, Expanded Rice Credit Assistance (ERCA) under Rice Competitiveness Enhancement Fund (RCEF), and Socialised Credit Programme. The beneficiaries provided with a loan by cooperatives under ERCA-RCEF experience a 0% interest rate per annum, given that the effective pass-on rate to end borrowers is not more than 6% per annum (Bayudan-Dacuycuy *et al.*, 2020).

Experiences with examples of financial programmes in Africa

Deijl *et al.*, (2017) highlight that the Kenyan government has established financial incentive programmes such as grants for women and youth engagement in the Agribusiness sector. This programme is in place to help women and youth who participate in commercial agribusiness. Eze *et al.*, (2010) state that Nigeria has several financial programmes to help young people in farming, such as the National Fadama Development Project, Agricultural Credit Guarantee Scheme Fund Pitch, Agricultural Credit Support Scheme, Supervised Agricultural Loans Board established by the government and private partners to help young smallholder and commercial farmers who want to engage and those that are participating in agriculture.

Mtombeni *et al.*, (2018) highlight that South Africa has developed financial incentive programmes to help smallholder and commercial farmers in agriculture. These programmes include an Agro-processing Scheme, Co-operative Incentive Scheme, The Black Industrialists Scheme, and the Isivande Women's Fund. Mtombeni *et al.*, (2018) further assert that the Comprehensive Agricultural Support Programme caters to smallholder and agribusiness farmers who are emerging from subsistence to smallholder farming. These are financial interventions for people starting an agriculture business and those seeking to expand their farming businesses.

Despite these programmes in place for developed countries, in Europe, youth participation in agriculture is declining because beneficiaries of the Early Retirement Programme take retirement too soon, making the programme less effective, and other incentive programmes have little literature showing their effectiveness and success (Davis *et.al.*, 2013). In Indonesia, youth participation in agriculture is also decreasing as some of these government-sponsored programmes are not bringing positive change, and the inclusion of every age group makes the youth less interested as they compete with older people for the same resources (Susilowati, 2014). In addition, Eze *et al.*, (2010) highlight that these programmes have been inefficient and less effective as the number of young people participating in agriculture is lower than the desired outcome, which influences the low participation of young people in agriculture in Nigeria.

1.2 Problem statement

Young people in many developing countries believe that the agricultural sector is the wrong career path to embark on and perceive it as an old rural business that faces many environmental challenges, such as water scarcity, which may lead to the failure of the business (Strever, 2018). Youth participation in agriculture in South Africa also needs intervention to ensure sustainable food production and food security and reduce unemployment (Cheteni, 2016). Chipfupa and Tagwi (2021) mention that the agricultural sector presents employment opportunities to school-going and unemployed youth of South Africa, especially in rural areas. Still, some young people view farming negatively, expressing that agriculture is less exciting and is for people with less education. Furthermore, the agricultural sector involves hard physical work, working with older people, and unemployment, affecting many agricultural graduates as they find it difficult to find jobs that will give them the experience needed to run a business (Cheteni, 2016).

The sector also contributes to the country's Gross Domestic Product, and it continued to grow at 18.5% in the quarter of 2020 (NAMC, 2020). However, Gwebu and Matthews (2018) state that the agricultural sector in South Africa consists of different agricultural systems with both well-developed commercial farmers and resource-lacking smallholder farmers who are usually found and operating in rural areas. People see these rural homelands as places where people suffer from food insecurity and poverty, as households use less land for agricultural products than for social security (Aliber & Hart, 2009).

According to DAFF (2013), about 20.7% of South African households engage in agricultural activities. Limpopo consists of 37.1% of households that engage in agriculture, followed by Eastern Cape at 29.3% and Western Cape was the lowest at 2.5% as their households' practise agriculture as a leisurely activity (Statistics South Africa, 2018). According to Stats SA (2020), youth unemployment in South Africa is above 50%, which is economically depressing for many young people and is one of the most pressing socio-economic issues that needs attention from the government in South Africa.

According to Metelerkamp *et al.*, (2019), previous studies have been conducted in South Africa looking at factors influencing youth participation in agriculture. Mukwedeya (2018) further mentions that these studies also looked at the barriers that affect youth participation in agriculture and how it puts many rural households at risk of food insecurity.

Yadav (2016) further highlights that the government needs to improve and attract youth to agriculture. The state must provide young people with equal opportunities starting with education, technology, and other necessary resources. However, arguably, there are limited studies on possible recommendations for public policy to attract school-going and unemployed youth to agricultural businesses in South Africa. Addressing policy issues may encourage school-going and unemployed youth to participate in agriculture. Therefore, the study proposes possible recommendations that the government can use to amend public policy to attract more youth to the agriculture sector in the Eastern Cape of South Africa.

1.3 Research objectives

The main objective of this study is to identify strategies that the government can use to encourage school-going and unemployed youth to consider the agricultural sector in the Eastern Cape of South Africa as a potential career.

The specific objectives of the study are:

1. To identify the attitudes of school-going and unemployed youth towards agriculture as a profession in the Eastern Cape of South Africa.
2. To identify barriers to entry into agricultural practice for school-going and unemployed youth in the Eastern Cape of South Africa.
3. To develop strategies that the government can use to encourage youth entry into the agricultural profession in the Eastern Cape of South Africa.

1.4 Research questions

Following the research objectives, this study will answer the following three research questions:

1. What are the attitudes of school-going and unemployed youth towards agriculture as a profession?
2. Which barriers do school-going and unemployed youth face when entering the agricultural profession in the Eastern Cape?
3. Which strategies can the government use to encourage youth entry into the agricultural profession in the Eastern Cape?

1.5 Chapter Summary

Chapter 1 focused on giving the background on the importance of agriculture, youth participation in agriculture, financial programmes established by developed countries to assist smallholder and commercial farmers, and financial programmes by developing African countries. The chapter further discussed the problem statement of this study, followed by the research objectives and research questions. Chapter 2 will discuss the literature review in this study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature about attitudes of school-going and youth towards agriculture as a profession worldwide and on the African continent. It also elaborates on the challenges youth face when entering the agricultural profession and further anchors on the unemployment rate of young people worldwide and on the African continent. Furthermore, the literature will review policy examples governments use worldwide and in Africa. This chapter also focuses on the ageing farmer population and the role of education in influencing youth careers towards agriculture. Finally, the chapter also dwells on constructing a conceptual framework that describes youth attitudes toward agriculture as a potential profession.

2.2 Youth attitudes towards agriculture as a profession.

Gassner *et al.*, (2019) state that participation in the agricultural sector is an essential tool to help many households, especially in developing countries, to escape poverty and improve household food security. Although youth participation worldwide is meagre, as young people possess attitudes towards agricultural activities and having a career in agriculture, their opinions differ depending on how one is educated and conscious of the sector (Yadav, 2016). Musa (2020) mentions that young people with negative views towards the sector usually lack exposure to agricultural education and farming activities. Some grew up in urban areas, so they see the sector as a place for rural people. Musa (2020) further states that some parents and families influence their children to believe that the sector is for poor people with limited resources to make a living for their lives.

Metelerkamp *et al.*, (2019) claim that young people see the sector as a profession of older people with challenges like racial discrimination, fewer employment opportunities for graduates, and limited government support programmes. Som *et al.*, (2018) highlight that young people in India believe that the agricultural sector is not a good profession for youth with higher education and relocating to urban areas is a better choice for them as they have higher chances of getting a job with stable income. Som *et al.*, (2018) further reveal that in some parts of the country, most agricultural workers are doing manual jobs, leading to some workers leaving the sector and moving to urban areas to look for other jobs. These workers believe that wages in urban areas are better than what they potentially can earn in rural agriculture, even though many of these urban employment opportunities do not guarantee income security, employment or social security. Musa (2020) highlights that there are nevertheless opportunities for students and graduates who see agriculture as a promising career, which presents opportunities for entrepreneurship in the sector.

Youth perceive the agricultural sector as one of the major sectors that have the potential for poverty reduction and can improve the food security status of many households (Musa, 2020).

2.3 Barriers youth face when entering the agricultural profession.

Agriculture has always been vital to many nations' development and remains a viable tool to eradicate poverty, contributing to economic growth and reducing unemployment (Som *et al.*, 2018). However, the sector has many challenges like any other sector, which delays the development and improvement of people's lives in rural communities. For example, Pechova (2017) states that there are young people who face difficulties when it comes to land access for agribusiness, whether for small-scale or commercial farming, due to the requirements in place for land. Pechova (2017) further mentions that youth struggle to access credits as they do not have long-term proof to make financial institutions grant them operational funding, loans or business investments.

Robbins-Thompson (2019) states that limited knowledge and exposure to agriculture is another barrier many young people face as they do not have a background in farming activities and grow up in areas where access to farm-related information is unavailable. In addition, Robbins-Thompson (2019) mentions that youth face issues when developing farm business plans, as they do not have a thorough understanding of planning a farm business, how to run finances, and record keeping, which is an essential skill for a successful farming business.

Lantz (2019) highlights that young farmers who are new to farming and some emerging farmers face a challenge regarding market access and struggle to get retailers to supply, forcing them to sell directly to the consumers and farmers' markets which usually take place in urban areas. In addition, Lantz (2019) states that some smaller farmers do not have transport or enough money to hire vehicles that will help them sell in towns and cities, leading to a loss as some of their products are perishable. Yadav (2016) posits that countries such as India face multiple issues beyond production, including limited government intervention, more competition in the market for customers leading to low profits made by the sellers, food insecurity, and lack of gender equality in the field. Finally, Robbins-Thompson (2019) highlights that changes in climatic conditions also influence youth participation in agriculture, as weather conditions are unpredictable and affect multiple industries in the sector.

Gassner *et al.*, (2019) suggest that developing countries must develop more than just structural strategies to eliminate these problems and present a systems approach allowing everyone to access resources and help deliver outcomes that will improve rural areas. Pechova (2017) states that increasing access to skills development programmes for smallholder farmers and assigning more extension officers will increase their ability to perform well and expand their businesses, leading to employment opportunities for more people in the field.

Gassner *et al.*, (2019) mention that smallholder and emerging farmers need resources for production and advanced technology to help them adjust to farming and use the latest ways of agriculture that developed farmers use to produce enough food. In addition, Gassner *et al.*, (2019) state that African countries need to create and implement these technologies and provide better equipment and seeds to improve the agricultural sector in Africa with policies that support these implementations. According to Mulema *et al.*, (2021), limited access to resources affects youth participation in agriculture and critical marketing factors that make it difficult for youth to participate in the agro-processing industry.

Diao *et al.*, (2010) highlight that although many young people regard the sector as a traditional field, it provides more labour and food to the industrialisation process. Therefore, the sector needs further transformation to a modern state with solid institutions for rural development to ensure more diverse development. Mtombeni *et al.*, (2018) state that young smallholder and emerging farmers have a role and ability to offer more to rural development. However, international competition and growing complications in supply chains in domestic and international markets make them seem less viable.

2.4 Youth unemployment

Youth unemployment is a severe and challenging socio-economic issue to overcome globally and is higher than adult unemployment in developed and developing countries. A report by ILO (2020) states that many young women and men in Asia and the Pacific region have been facing several challenges when it comes to securing stable and decent jobs, and Covid-19 has made the situation more difficult for job seekers as economic activities were put on hold to prevent the spread of the virus. The ILO (2020) further reveals that the youth unemployment rate in 2020 was around 14.1% in both Asia and the Pacific region, with young women facing a lower unemployment rate of 12.1% than young men at 15.0%. In parts of Eastern and Southern Asia, unemployment has been increasing, caused by the lack of proper education and training skills required mainly in the job market for stable and good-paying jobs (ILO, 2020). According to Torres and McKenzie (2020), Uruguay experienced an increase in youth unemployment, from 9% in 2014 to nearly 27% at the end of 2018, which is higher than adult unemployment. Torres and McKenzie (2020) further state that most job opportunities offered to young people are temporary, and some are seasonal contracts in the informal sector, which end as soon as the project finishes. They often work under vulnerable conditions with little legal or social protection and employment benefits, especially in the agriculture and hospitality industries. O'Higgins (2017) highlights that youth tends to be more dominant in the labour of informal markets, working under vulnerable conditions in many low and middle-income countries.

Economic growth is not increasing enough to offer better jobs in such countries compared to high-income countries where youth have enough access to resources for self-employment opportunities (O'Higgins, 2017).

Young people in African countries face many challenges, and the high unemployment rate is one of them, which becomes a problem as it affects the economic development of these countries. In addition, Adekoya *et al.*, (2018) contend that many West African countries, such as Nigeria and Gambia, are also facing the issue of youth unemployment, which threatens the economic growth of these countries. More criminal activities are taking place, and youth unemployment encourages illegal immigration to other African countries and the world as they are looking for better living conditions.

The ILO (2020) report highlights that Northern Africa has the highest unemployment rate, which is sitting at 29.6% compared to the Sub-Saharan region at 8.7%, and young people from both genders face unemployment equally. In addition, the ILO (2020) report asserts that there has been an improvement in accommodating women in the labour market, getting more job opportunities in different sectors like men. However, the ILO (2020) report states that young women between 15 and 24 mostly work in the informal market, which is not a stable job and does not require advanced education, hard skills, and experience.

South Africa is also no exception when it comes to youth unemployment issues. Stats SA (2021) highlights that unemployment increased by 0.6% to 43.2% in the first quarter of 2021 compared to the final quarter of 2020, putting the youth unemployment rate at 46.3% in the first quarter of 2021, where 9.3% are university graduates. Strever (2018) states that youth unemployment in South Africa continues to dominate more than any other age group, and in 2016, it was in third place as part of countries facing an unemployment rate. Strever (2018) further mentions that some young people are looking for jobs with less education and do not have the necessary skills and work experience that employers are looking for, which puts them at a disadvantage in the labour market.

In South Africa, job opportunities need people with the necessary skills and experience, which reduces the chances of many young people looking for employment, ultimately leading to some losing hope in finding a job. Youth participation in the economy is crucial to advancing South Africa's development (Strever, 2018). Eastern Cape has the highest unemployment rate in South Africa, with 45.8% in the third quarter of 2020 (Stats SA, 2021). The province was at the top of the high unemployment in 2019 in the country, with 34.7%, which shows that the number of employed people continues to decline, and youth unemployment is above 50% (ECSECC, 2019). Young people are the most affected group and migrate to other provinces such as Western Cape and Gauteng (ECSECC, 2019). Furthermore, ECSECC (2019) states that many sectors in the region experienced job losses, especially the construction industry, while the agricultural sector was the only industry that gained about 6 632 jobs which shows the potential the sector has in terms of reducing unemployment for young people despite the different perspectives people have towards the industry.

2.5 Policy incentive programmes used to promote youth engagement in agriculture.

Policy incentive programmes contribute an essential role towards policy issues, encouraging youth participation in agriculture for many developing and developed countries, even though some do not consider the heterogeneity of young people. For example, Susilowati (2014) reveals that Canada has programmes that provide funds to young farmers, including beginners, and help them with loans, innovative lending products with protected interest rates and education and training. In addition, Susilowati (2014) mentions that their investment does not cover purchasing, renting, or leasing of land and livestock, and for contracting activities, they use the Single Payment Scheme. Murphy (2012) states that Canada's Agriculture Financial Service Corporation programme does not look at someone's age but their net worth to determine whether they qualify. It has a 1.5% interest rate for the first five years for those new to farming. Another programme example is Manitoba Agricultural Services Corporation, which caters to people under 39 years with an interest rate of 2% for the first five years. These programmes are suitable for countries where potential participants already have equity.

Some African countries have programmes to assist those who want to be involved in the sector. For example, according to Rutta (2012), Tanzania has a National Agricultural and Livestock policy of 1997 from the Ministry of Agriculture, working with the Cooperative Development Division to establish and implement rural savings and credit societies. These programmes offer credit to smallholder farmers at a 1% interest rate in the first three years of the credit and cooperative banks for commercial farmers at a 2% interest rate in the first five years of the loan. Another policy example is the National Land Policy of 1997, which does not cater to youth mainly, and includes everyone who wants access to land. (Rutta, 2012). According to Deijl *et al.*, (2017), Kenya has agricultural policies and programmes such as the Medium-Term Investment Plan, which is for smallholder farmers, women, and young people to improve the development of agriculture in the country, providing them with infrastructure and equipment for farming activities. A National Agricultural Sector Extension policy also targets young people doing subsistence farming, giving them farm-related information and other extension services.

In South Africa, policy programmes have been in place to support new and older farmers in the agricultural profession. The state implemented the Comprehensive Agricultural Support Programme from 2004-2005 to fill the gap where African farmers could not access resources such as credit from commercial banks (DAFF, 2019).

DAFF (2019) further highlights that the implementation of this programme was to improve the accessibility of African farmers to infrastructure, to participate in improving the rural economy, create more job opportunities, contribute to household and national food security and promote ecologically sustainable farming activities. It was open to many groups of smallholder and emerging farmers from youth, men, women, and people living with a disability. The Land Care Programme is another government programme that supports community initiatives and is available in all provinces of South

Africa. This programme targets smallholder farmers, including 55% of women, 40% of youth, and 2% of people with disabilities. It provides a once-off Land Care Conditional Grant to these farmers doing different farming projects (DAFF, 2019).

DAFF (2019) highlights that the implementation of this programme was to assist in developing the capacity and skills of those who intend to join the agricultural sector using land through education, awareness, and providing information to those who need the education to access and manage resources. In addition, DAFF (2019) shares that the Junior Care Programme focuses on funding school gardens that practise sustainable natural resources management principles. According to NYDA (2021), the South African government has an agricultural youth fund programme that aims at providing youth who meet the requirements and intend to grow, expand and diversify their businesses in the farming enterprise. NYDA (2021) states that the programme offers grants to qualifying youth with projects that farm a few commodities, such as vegetables. Still, it will expand and add more projects with more commodities later, and this programme is under the Landbank and National Youth Development Agency. However, the programme caters to those who have previously worked or trained at the farm, possessing the land for agricultural practice with a registered company and other farming-related resources (NYDA, 2021).

2.6 Ageing farmer population

According to Brown *et al.*, (2019), the agricultural sector is perceived as a profession of older people, and youth participation in farming activities continues to decrease, which exposes countries to a risk of facing food shortages in the future. Pouncgchompu and Tsuneo (2012) advance that rural areas in Japan and Thailand have more older people practising agriculture than the youth because young people move to urban areas to look for office employment. Pouncgchompu and Tsuneo further state that relocation of young people to urban areas reduces the labour force in farming and will affect agricultural production output. Kamondetdacha (2021) highlights that there is also a programme called the Young Smart Farmer Programme in Thailand, and it was introduced by the Department of Agricultural Extension in 2014, aiming to target young people who are interested in joining agriculture. Yeboa and Jayne (2020) highlight that most older people participating in agriculture are between 32 and 45 in Uganda, Nigeria, and Zambia. Farming is the primary employment for many rural people in these countries. Grain SA (2018) states that the South African farming population is ageing as the mean age for grown farmers is around 62 years which is older than other leading food-producing countries such as the United States of America.

2.7 Education's role in influencing youth careers towards Agriculture.

Ninh (2021) states that education allows people to access areas and resources that help improve their lives while improving their skills in responding to uncertain economic and social activities. In addition, people use their savings to obtain advanced education for better opportunities. Ninh (2021) hints that education is necessary for exposing agriculture to youth, and it can expose the value chain to young people from an early age. In addition, youth would receive lessons about agriculture through a partnership between secondary schools, higher education institutions and government departments involved in the value chain (Ninh, 2021).

The agricultural field has not been introduced to some young people, affecting the youth participation in the agricultural profession since some see it as a field for rural people (Ninh, 2021). Osuntade *et al.*, (2021) share that limited access to relevant information is an issue young people face, making them believe that the sector is for old and poor people. In addition, Osuntade *et al.*, (2021) mention that many young rural people struggle to get proper education and training due to a lack of resources and development in rural areas, which affects their chances of getting adequate employment compared to those living in urban areas.

Ikuemonisan *et al.*, (2022) highlight that the quality of education plays an essential role in developing young people's careers, and the environment also influences their academic performance. Monyai (2018) posits that a good education is necessary to improve people's lives and develop communities in South Africa. In addition, education is also used as mental and physical guidance to prepare young people to be able to communicate, develop critical thinking and have career development. Access to education for many young people in rural areas, whether for personal or societal development, is based on the availability of resources their government provides in the region (Monyai, 2018). In addition, Monyai (2018) asserts that education systems have the potential for sustainable development in many rural areas and significantly higher education learning since young people receive the latest information, can conduct more research before making decisions and can use technology. Therefore, the government must restructure education systems and introduce a curriculum relating to the country's current issues (Monyai, 2018).

2.8 Gaps in Literature

From the above- literature reviewed, the study has established that possible recommendations for public policy to influence youth attitudes towards engaging in agriculture have not been appropriately addressed in the Eastern Cape. Previous studies show that the agricultural sector has the potential for developing and improving rural economies, poverty reduction, and unemployment for many developing countries, especially in Africa, should the current challenges be resolved. However, there is no proper follow-up when implementing solutions to fix a particular problem in some government projects. Government intervention and the private sector are needed to provide resources and modern

infrastructure to the agricultural industry to be attractive while securing more sustainable food production and endless food supply. The existing literature in the Eastern Cape has addressed barriers that unemployed youth face when joining the profession and those already farming, youth attitudes towards agriculture. However, there is limited information regarding the attitudes of school-going and unemployed youth towards agriculture and possible recommendations for existing public policy in agriculture to attract young people to agriculture in the Eastern Cape.

2.9 Theoretical framework

A theory is a collection of affiliated definitions, concepts, and propositions that foresee or explain situation or conditions by specifying the correlation between the variables (Akintunde, 2017). The Theory of Planned Behaviour (TPB) is a theory used to predict the intention of someone to engage in a behaviour at a particular time and place. It explains that the behaviour intentions drive the behaviour of the individual, and those intentions are a function of three determinants such as individual attitudes, subjective norms and perceived behavioural control (Ajzen, 2011). This psychometric theory was attained and improved from the theory of reasoned action, TRA (Fishbein & Ajzen, 1975). The study used this theory to assess the attitudes of school-going and unemployed youth towards agriculture.

The Theory of Planned Behaviour suggests that the type and amount of information available influences someone's attitude, beliefs, intentions, and behaviour. This theory predicts that attitudes, subjective norms, and perceived behavioural control influence the intended result, determining the actual behaviour (Ajzen, 1991). Furthermore, it shows someone's readiness and preparedness to do the said behaviour. In the psychology of humans, intention is perceived as the correct predictor to foresee a person's behaviour (Umar, 2019). In addition, Umar (2019) states that the Theory of Planned Behaviour shows that people decide to act in a particular behaviour or not after logically reviewing the information available to them in a structured way.

Robledo *et al.*, (2015) mention that the Theory has successfully anticipated entrepreneurial intentions among young people in different studies in various contexts, like the study of students in a particular university in Spain. Zaremohzzabieh *et al.*, (2016) highlighted that young people in Malaysia believe that Information and Communication Technologies (ICT) among rural entrepreneurs can offer more opportunities to unemployed youth to build their livelihoods and participate in agriculture.

2.10 Conceptual framework

Figure 2.1 Conceptual framework of the study

Figure 2.1 Conceptual framework of School going and unemployed youth attitudes and intention towards agriculture as a profession in Eastern Cape, SA (Source: Modified from Ajzen, 1991).

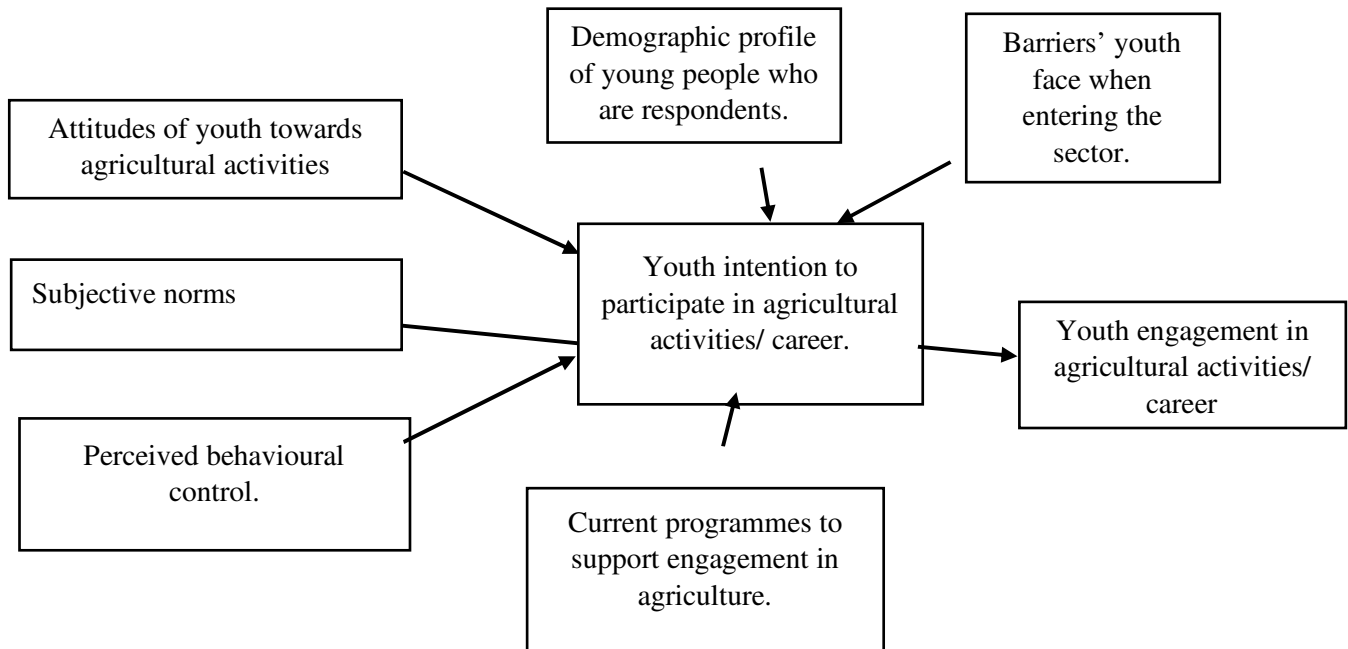


Figure 2.1 presents a conceptual framework of a study based on the Theory of Planned Behaviour (TPB) to assess the attitudes, subjective norms, and perceived behavioural control towards agriculture as a profession. The framework shows the demographic profile, such as gender or location, which can influence youth attitudes and intention to take agriculture as a profession and engage in agricultural activities. Taib *et al.*, (2019) state that studies conducted in the past revealed that attitudes, perceived behavioural control, and subjective norms can influence people's intention to choose a career in the agricultural sector. Furthermore, Taib *et al.*, (2019) highlight that reviewed studies state that demographic profiles such as education, location, and gender can influence youth attitudes and intention to engage in agricultural-related programmes.

2.11 Chapter Summary

Chapter 2 focused on reviewing the literature regarding youth attitudes towards agriculture and barriers that limit youth participation in agriculture, such as land access by youth, access to funding opportunities, and continuous increase of inputs used in farming. The chapter further looked at the youth unemployment rate from a global space and in South Africa at large. Some policy examples used by governments were also reviewed and included programmes that are no longer effective, while other programmes that accommodate all people from different age groups. The ageing farmer population was also highlighted by the associated stigma of a sector dominated by older people. The role of education in influencing youth careers in agriculture was also discussed. Lastly, the literature gap was identified, which forms the reason for this study. Chapter 3 will discuss the research methodology used in this study.

CHAPTER 3

METHODS AND PROCEDURES

3.1 Introduction

This chapter presents the methodology and analytical procedures used to obtain the study's data and describes the study area. This section thoroughly explains the data collection process and the methods for data analysis. In addition, the details of the analysis tool used for this study will be presented for each research question.

3.2 Description of the study area

The study was conducted in the communities of the Eastern Cape Province in South Africa. The Eastern Cape province is on the south-eastern South African coast, It has various towns that fall under six different districts and two metropolitan municipalities, and the capital city is Bisho. The area is 168 966 km² big, has a population of 6 508 000 people living in 1 685 000 households, and most people living in the province speak isiXhosa, followed by Afrikaans and English (Stats SA, 2018).

There are agricultural activities in Eastern Cape, such as livestock, crop production, and fishery. The province has fertile land, making it easier to practise farming activities, and agriculture contributes 13,6% to the province's economy (ECSECC, 2019). Two valleys, Sunday River Valley and Langkloof Valley, contribute to the country's citrus industry. The agricultural sector from Sunday River Valley contributes 0,74% to the GDP of the province, while Langkloof Valley contributes 0.56 % to the GDP of the province (ECSECC, 2021). Most former Transkei households mainly practise livestock and crop farming in their backyards or fields, producing for household consumption and generating extra income. Coastal parts of the province have good potential for forestry as those parts receive good summer rainfall and moderate climatic conditions. However, the climate in some northwest parts of the province get subtropical rainfall.

Figure 3.1 Map of the Eastern Cape Province



(Source: Rooms for Africa, 2021)

3.3 Research method

Research methods are used when conducting research on a particular subject, including quantitative, qualitative, and mixed methods. For example, Goundar (2012) suggests that the study can use the quantitative approach in a study that aims to understand individuals' behaviour, attitudes, and performance. Goundar (2012) further advises that this method uses surveys and statistical analysis. This makes it easy to compare groups and present the results in percentages that are not difficult to interpret. On the other hand, the qualitative method is necessary in a study that looks at a deeper understanding of the problem, aims to reason, uses words to get respondents' opinions and uses case studies and focus group discussions for data gathering (Goundar, 2012). Kabir (2016) describes the mixed method approach as involving multifaceted approaches that strengthen the research and increase the validity and credibility of the research outcomes. Kabir (2016) further states that this method is necessary for highlighting complicated research problems and helps develop creative ways to single design approaches in research and evaluation.

The study uses the quantitative method because it can be used to understand the behaviour and attitudes of respondents. The quantitative method uses surveys with predetermined questions that are not difficult to answer, do not take long and provide diverse responses from respondents. Furthermore, this method allows using random sampling, where everyone has an equal chance to participate in a study and answer the survey as individuals when available, not as a group. Apuke (2017) mentions that the quantitative method involves research with descriptive analysis, and data are analysed using statistical tools such as R and Statistical Package for Social Sciences (SPSS). Apuke (2017) further opines that the quantitative research method involves quantifying and analysing data to get results using statistical techniques and helps to gather information from groups and analyse it to understand the behaviour or characteristics of respondents. Therefore, the study uses descriptive design as a research design. Descriptive design gets appropriate and accurate information regarding the status of a problem or circumstance and, whenever possible, forms a general logical conclusion from the facts found (Kothari & Gaurav, 2014).

3.4 Sampling technique

Research requires a sampling method that a study will use to select representatives of the group or population. Etikan and Bala (2017) advise that one can choose different sampling techniques for a study, such as probability and non-probability. Etikan and Bala (2017) propose that probability sampling includes simple random sampling, stratified random sampling, and multistage sampling. Non-probability sampling includes convenience, quota, purposive, and snowball sampling.

Datta (2018) claims that simple random sampling provides an equal opportunity for every respondent in the population to be part of the study. Datta (2018) further highlights that stratified random sampling occurs when the population is divided into subgroups, a random sample is taken from each subgroup, and multistage sampling is done to move the sample from broad to narrow sample step by step and to select samples that concentrate on few geographic regions.

According to Taherdoost (2016), convenience sampling is a technique that selects available respondents and ready to participate in a study, and quota sampling chooses respondents based on predetermined features so that the total sample can have similar features as the larger population. Purposive sampling selects respondents with important information about the subject that cannot be attained from random choices (Taherdoost, 2016). Snowball sampling selects small populations where the previous respondents refer the researcher to other respondents and encourages similar populations to participate in the study (Taherdoost, 2016). This study used a simple random sampling technique because it allowed unemployed youth and learners from different high schools in the province to participate in the research and helped to get different attitudes and interests in the agricultural profession.

This technique enables respondents from different backgrounds to share their views and knowledge about agriculture since some are from rural areas and others are from semi-urban areas. Additionally, this sampling technique allows youth from different municipalities from former Transkei and former Ciskei to share their attitudes towards the agricultural sector. Simple random sampling was used to sample 100 selected young people in Eastern Cape for data collection, where 50 were high school learners while another 50 were unemployed young people. Uttej *et al.*, (2020) suggest that young people have different views, perceptions, and attitudes when choosing a career in agriculture. In addition, some know about agricultural activities and the challenges youth face when joining the sector. For such reasons, this sampling method was used to select respondents to avoid a biased sample and get views from different young people across the province.

3.5 Data collection method

Research involves more than reviewing existing information and writing descriptions. Information collection from certain targeted groups also takes place, followed by analysis to answer the study's research questions (Showkat & Parveen, 2017). Jupp and Sapsford (2006) mention that data collection involves collecting relevant information for that subject carefully, with less possible bias so that the results may provide credible answers and solutions to the research questions. There are different data collection methods, from primary to secondary data collection methods.

Showkat and Parveen (2017) present that primary data involves data collected by the researcher first-hand, it has not been available to the public, not altered by other people, and the researcher will use it for the first time.

Showkat and Parveen (2017) further submit that primary data collection methods include different instruments such as experiments, surveys, questionnaires, observations, and interviews. Kabir (2016) mentions that secondary data refers to data collected and used by someone else for different purposes, accessible to the public. Secondary data are collected from different sources such as government reports, internet articles, data archives, and research articles by other researchers.

Kabir (2016) moves that survey is often used to evaluate the thoughts, attitudes, and opinions of someone. The survey further helps describe and compare the attitudes of different groups chosen for the study. Therefore, this study used a questionnaire instrument because the questionnaire allows the use of prepared questions, does not take too much time to respond, does not require a lot of money and can be sent electronically (Annexure 2). The questionnaire includes closed-ended questions, scale questions and open-ended questions. Kabir (2016) expresses that a good questionnaire is necessary as it helps gather data that is appropriate for the research goals.

Joshi *et al.*, (2015) state that the Likert scale is a rating scale that researchers find necessary when assessing the attitudes and perceptions of respondents. The Likert scale includes statements or questions followed by a series of five or seven answer statements which participants choose from to answer how they feel about the question or statement. The study used a five-point Likert scale to assess participants' attitudes. It gives respondents fewer options to select how they feel about the statements without using more time to read other options. It also provides various options that are not too different from the seven-point Likert scale and does not force people to explain their choices if they do not have an explanation like other Likert scale categories (Annexure 2).

Data were collected using a WhatsApp online platform. Questionnaires were distributed by the researcher via WhatsApp to unemployed youth and two assistants for high school learners, and questions were well explained to the unemployed respondents. Before answering the questionnaire, the assistants explained the question to high school learners. The study opted to use WhatsApp because it is a media app that uses less data to communicate, people are often available on it compared to other communication apps, and young people use it to share information.

Some respondents could not print out the questionnaires, so they recorded their answers, took pictures, and sent their responses to the researcher using WhatsApp. Gibson (2022) claims that WhatsApp allows multimedia communication and sharing of necessary data using different means, such as pictures and videos, which can significantly benefit the research conducted on young people.

Muvhandu-Mudzusi *et al.*, (2022) further mention that WhatsApp provides a safe environment for people to share their opinions freely. It is affordable and convenient for people unwilling to participate in face-to-face interviews. Moreover, surveys with open-ended and closed-ended questions help understand people's thoughts, experiences, and beliefs in that situation and allow the collection of opinions from respondents (DeJonckheere & Vaughn, 2019).

3.5.1 Questionnaire pilot

The proposed data collection instrument has been developed using Microsoft Word, where closed and open-ended questions were designed. After the questionnaire was developed and approved, pilot testing was done in October 2021 using 10% of the respondents. Five respondents were unemployed youth, and five were high school learners from the total number (of 100) selected respondents. The questionnaires were sent to the unemployed youth using WhatsApp and to the two assistants for high school learners. The questions were well explained to the participants before answering questions. The assistants understood the questionnaire and explained it to the learners before answering it, and all respondents provided different answers and feedback. The high school respondents' feedback differed from the unemployed youth as they highlighted how less exposed and less educated, they were regarding some open-ended questions in the instrument. They could not answer some open-ended questions due to limited knowledge regarding policy issues and the absence of agriculture programmes in their areas. However, the unemployed youth managed to answer questions and express how they feel about the sector and what can be done by the government and parents to encourage youth participation in agriculture. A few questions were revised because some respondents did not understand what the questions were trying to achieve and were re-phrased in a more straightforward form for the survey after ethical clearance.

3.6 Data analysis method

Data were coded and entered in the Statistical Package for Social Science (SPSS) version 28 software programme for descriptive data analysis. Kaur *et al.*, (2018) mention that descriptive statistics is necessary for summarising raw data to find an average for the data collected. It helps to summarise the variables before performing another statistical analysis. The descriptive statistics adopted are percentages and frequencies, and the results are presented in tables and charts for interpretation. The study uses these descriptive statistics to summarise the data in an understanding way while describing the difference between the variables of these two groups. Descriptive statistics provide a foundation for comparing the Likert scale results to check the difference between the results of the two groups, looking at their attitudes and views on barriers that influence youth participation in agriculture in the Eastern Cape.

Data analysis of open-ended responses started with reading the responses to identify similar themes and insights. The next step was noting down the titles identified from responses. Thematic codes were formed manually to categorise open-ended responses to perform the analysis. Microsoft Excel created diverging stacked graphs to compare Likert scale results and check the differences between the two groups.

3.7 Ethical consideration

Kabir (2016) highlights that ethical consideration is necessary for research, promoting necessary values such as accountability, mutual respect, and fairness in a study that involves different parties. Additionally, ethical considerations should be observed during data collection, including handling data with confidentiality, and preserving anonymity.

Ethical clearance was obtained from the Faculty of Natural and Agricultural Sciences at the University of Pretoria as a form of permission to conduct the survey, and parents of high school participants were asked for permission by assistants before the survey took place (Annexure 1).

This study strictly and entirely adhered to some ethical principles of conducting research, such as informed consent from participants and parents of high school learners. They were informed that participation was voluntary and there were no direct benefits to them after participating in the study. Anonymity was preserved, and the data from participants were treated with confidentiality during the process. Their names were not recorded anywhere on the questionnaire, and numbers were assigned to them. Respondents took the survey in their own time in comfort places, no harm was done to them, and they observed Covid-19 regulations.

3.8 Chapter summary

This chapter discussed the study area followed by the research method, sampling technique, data collection and data analysis method. Ethical consideration was also discussed in this chapter. Finally, chapter 4 presents data analysis, interpretation of the results and discussion.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

Chapter 4 presents the results of attitudes of school-going and unemployed youth towards agriculture as a profession in Eastern Cape Province. High school learners and unemployed youth were selected to gather data using a questionnaire. The instrument collected data on the demographics of school-going and unemployed youth, attitudes of school-going and unemployed youth towards agriculture, and barriers young people face when entering the agricultural sector. The instrument also collected data on possible recommendations for public policy to encourage youth participation in agriculture.

This chapter consists of four sections, and the first section focuses on the demographics of the respondents. The second section focuses on respondents' attitudes towards activities in the sector. The third section looks at barriers young people face when entering the agricultural profession and its practices, and the fourth presents possible actions that the government can take to encourage youth participation in agriculture.

4.2 Demographic characteristics of school-going and unemployed youth.

This section presents the demographic characteristics results of school-going and unemployed youth respondents that were analysed using descriptive statistics. The first respondents were high school learners from grades 10 to 12 in the Eastern Cape. The second group of respondents were unemployed youth from the Eastern Cape. Section 4.3 presents demographic characteristics of school-going respondents and section 4.4 presents demographic characteristics of unemployed youth in the study area.

4.3 Demographic characteristics of school-going learners.

This section used descriptive statistics to analyse the demographic characteristics of the school-going learner respondents in this study. Table 4.1 presents the demographic characteristics of school-going respondents who are high school students from grades 10 to 12, including the frequency and percentage of each variable. The number of years respondents faced unemployment and unemployment categories did not apply to school-going respondents as they were learners during the data collection period.

Table 4.1 Demographic characteristics of school-going respondents

Variable	Frequency	Percentage (%)
Respondent's gender		
Male	22	44.0
Female	28	56.0
Respondent's age		
15-18	35	70.0
19-20	15	30.0
21-29	0	0.0
30-35	0	0.0
Level of education achieved		
Primary school	0	0.0
High school	50	100.0
Technical college diploma	0	0.0
University diploma	0	0.0
University degree	0	0.0
Advanced degree (master's or equivalent)	0	0.0
Number of years unemployed	Not applicable	
Unemployment group	Not applicable	

4.3.1 Gender

The gender of respondents was used to identify gender differences and attitudes towards taking up agriculture as a profession and participating in agricultural activities. The study discovered that 56% of respondents were females and 44% were males in this group.

4.3.2 Age

The age variable was used to determine a group that dominated this study and was willing to share their attitudes towards agriculture. Table 4.1 shows that 70% of respondents were between 15 and 18, while 30% were between 19 and 20.

4.3.3 Level of education achieved.

The level of education variable was used to compare the difference in knowledge about agriculture and its activities among school-going respondents. Table 4.1 presents that all respondents were secondary school-going children. The highest respondents were 44% of grade 12, 30% of grade 11, and 26% of grade 10.

4.4 Demographic characteristics of unemployed youth

This section describes the demographic characteristics of unemployed youth in the Eastern Cape Province. Descriptive statistics were used to analyse the respondents' demographic characteristics, and the results are on table 4.2. Table 4.2 presents the demographic characteristics of unemployed youth interviewed in the study area, and the table shows the frequency and percentage of each variable.

Table 4.2 Demographic characteristics of unemployed youth

Variable	Frequency	Percentage (%)
Respondent's gender		
Male	23	46.0
Female	27	54.0
Respondent's age		
15-18	0	0.0
19-24	24	48.0
25-29	20	40.0
30-35	6	12.0
Level of education achieved		
Primary school	0	0.0
High school	6	12.0
Technical college diploma	9	18.0
University diploma	6	12.0
University degree	19	38.0
Advanced degree (master's or equivalent)	10	20.0
Number of years unemployed		
None	0	0.0
1-3 years	30	60.0
4-6 years	17	34.0
7 and above	3	6.0
Unemployment group		
Still searching for employment	26	52.0
No longer searching for employment	0	0.0
Voluntary worker	14	28.0
Other	10	20.0

4.4.1 Gender of unemployed youth

The variable was used to identify gender differences and attitudes respondents have towards agriculture as a profession and practice. Table 4.2 shows that (54%) of respondents were females, and 46% were males in the group.

4.4.2 Age of unemployed youth

The age variable was used to look at the age group that dominated among unemployed youth who participated in the study. The study discovered that the majority (48%) of respondents were the youngest in the group, aged between 19 and 24, 40% between 25 and 29, and 12% were respondents aged 30 to 35.

4.4.3 Level of education achieved.

The level of education variable was used to check the level of knowledge and understanding of agriculture and the activities in the sector. The study found that most (38%) respondents hold a bachelor's degree. In comparison, 20% hold an advanced degree obtained at postgraduate level, 18% have a technical college diploma, 12% have a university diploma, and another 12% have a matric certificate.

4.4.4 Number of years unemployed

This variable was used to determine how long the respondents had been unemployed after leaving school. Table 4.2 shows that most (60%) respondents had been unemployed for 1 to 3 years, while 34% were unemployed for 4 to 6 years, and 6% were unemployed for 7 years and above.

4.4.5 Unemployment group

This variable was used to determine the activities unemployed youth do while looking for employment and whether they have given up on looking for jobs. The study found that the majority (52%) of respondents were currently looking for jobs, while 28% were volunteering, and 20% were assisting in family and friends' small businesses and helping school children by tutoring them.

4.5 Attitudes towards agriculture as a profession

This section addresses the attitudes of respondents towards agriculture as a profession. The study used the Likert scale to measure the respondents' attitudes towards agriculture as a profession. The Likert scale results are presented in tables with percentages for each statement. Table 4.3 shows the results of school-going learners' attitudes towards the agricultural profession, and Table 4.4 presents the results of unemployed youth's attitudes towards the agricultural profession.

4.5.1 Attitudes of school going learners towards agriculture.

Table 4.3 presents the percentage results of school-going respondents' attitudes towards agriculture as a profession in the study area.

Table 4.3 Attitudes of school-going learners towards agriculture

Issues	Very low	Low	Moderate	High	Very high
Agricultural jobs are labour intensive	18%	22%	20%	24%	16%
A business in the agricultural sector takes a long time to generate the desired profit with a lot of risks	2%	12%	24%	38%	24%
The dominance of older people who mostly use traditional ways to conduct business in agriculture	28%	34%	16%	18%	4%
Less inclusion of black people in South African commercial farming	10%	28%	34%	26%	2%
Parents choose careers they desire for their children without enough information about other fields	40%	32%	10%	16%	2%
Growing up in a community where the agricultural sector is labelled a field for poor, uneducated people	40%	30%	18%	10%	2%
Limited awareness and educational programmes about the diversity of the	0%	4%	38%	28%	30%

agricultural sector at secondary school level					
Limiting women's access and participation in agribusiness to household activities	6%	18%	36%	32%	8%
Agribusiness requires all attention which limits urban contact and recreational enjoyment	22%	36%	16%	18%	8%
There are not enough opportunities for career development in agriculture	24%	44%	18%	12%	2%

The study found that most respondents (38%, 24%) had a high attitude towards agri-businesses taking longer to generate desired the profit and the risks involved. Table 4.3 further shows that (28%, 34%) had a low attitude towards the dominance of older people, who mostly use traditional ways to conduct business in agriculture.

We discovered that most respondents (10%, 28%) showed a low attitude towards less inclusion of black people in South African commercial farming. The study found that most respondents (40%, 32%) had a low attitude towards parents choosing careers for their children with no proper research on other fields.

We found that the issue of communities undermining the agricultural sector has a low influence on school-going respondents as most (30%, 40%) respondents had a low attitude towards the issue. The study further shows that most respondents (32%, 8%) had a high attitude towards limited access and involvement of women in agriculture due to household activities.

The study found that most (22%, 36%) respondents presented a low attitude towards the belief that agribusiness requires more attention and limits urban contact and recreational enjoyment. The study further discovered that most (24%, 44%) respondents had a low attitude towards the issue of limited opportunities to develop a career in agriculture.

4.5.2 Attitudes of unemployed youth towards agriculture as a profession

Table 4.4 presents the percentage results of unemployed youth attitudes towards agriculture in the study area.

Table 4.4 Attitudes of unemployed youth towards agriculture

Issues	Very low	Low	Moderate	High	Very high
Agricultural jobs are labour intensive	6%	24%	22%	28%	20%
A business in the agricultural sector takes a long time to generate the desired profit with a lot of risks	2%	8%	22%	40%	28%
The dominance of older people, who mostly use traditional ways to conduct business in agriculture	16%	32%	30%	14%	8%
Less inclusion of black people in South African commercial farming	2%	16%	32%	38%	12%
Parents choose careers they desire for their children without enough information about other fields	10%	46%	22%	16%	6%
Growing up in a community where the agricultural sector is labelled a field for poor, uneducated people	22%	26%	22%	22%	8%
Limited awareness and educational programs about the diversity of the agricultural sector at secondary school level	4%	4%	12%	44%	36%
Limiting women's access and participation in agribusiness to household activities	6%	22%	40%	26%	6%
Agribusiness requires all attention which limits urban contact and recreational enjoyment	12%	20%	24%	30%	14%

There are not enough opportunities for career development in agriculture	12%	32%	26%	18%	12%
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We discovered that most (28%, 20%) respondents had a high attitude towards agriculture being labour-intensive. The study further found that most respondents (40%, 28%) showed a high attitude towards agriculture taking longer to generate profit and the risks involved in the business.

The study found that most respondents (38%, 12%) had a high attitude towards less inclusion of black farmers in commercial farming in South Africa. We found that most (10%, 46%) unemployed youth respondents have a low attitude towards parents who choose careers for their children without doing proper research about other disciplines.

The study discovered that most respondents (44%, 36%) had a high attitude towards the issue of limited awareness and educational programmes about agriculture in secondary.

We discovered that most respondents (30%, 14%) showed a high attitude towards the belief that agribusiness requires all attention and limits urban contact and recreational enjoyment for those running agribusiness. The study further found that most (12%, 32%) respondents had a low attitude towards the implication that there is no career development in agriculture.

4.5.3 Unemployed youth views on steps that can be made towards a public policy to influence attitudes towards the agricultural profession amongst youth in Eastern Cape

Figure 4.1 presents views of unemployed youth on steps that the government can take to attract young people to the agricultural sector.

Figure 4.1 Views on steps that can be made towards a public policy to influence youth attitudes towards agriculture.

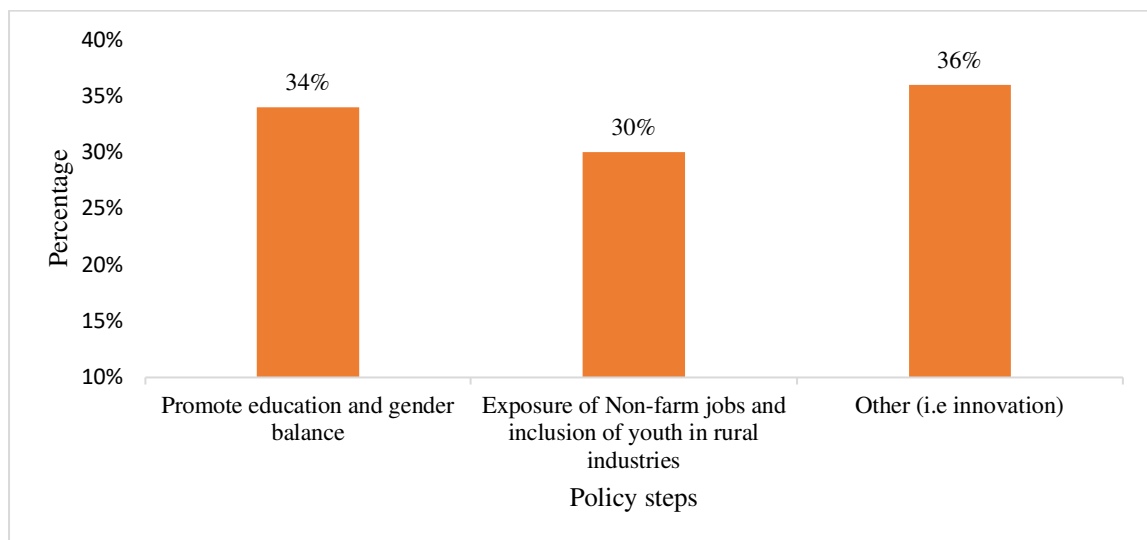


Figure 4.1 presents different categories of views and explanations of respondents (unemployed youth) from open-question answers that were asked on steps and suggestions that can be made towards a public policy to influence young people's attitudes and attract them to participate in agriculture. The above chart shows that the first category with the most (36%) respondents had different suggestions, such as innovation and supporting the adoption of modern technology to help distribute information to everyone. Different views from open-ended answers further included a suggestion of investing in state academies that specialise in agriculture to allow young people to improve their skills and talent to contribute to the sector in the future.

Figure 4.1 represents a second category of open-ended answers, and 34% of unemployed youth suggested promoting education and gender equality. The open-ended responses indicated that making the agriculture curriculum part of secondary school grades might influence youth participation in agriculture. In addition to promoting education, the respondents added a few suggestions, such as marketing, using different advertising outlets, and awareness campaigns. The respondents highlighted that using the abovementioned strategies to promote agriculture will expose the value chain in the sector and inform youth interested in agriculture about market requirements and product standards required in the market. Furthermore, the open-ended answers expressed that gender balance needs to occur in the sector with more young women in agricultural jobs. The government and private sector must ensure equal opportunities for both genders in agriculture, especially in businesses based in rural areas.

Lastly, the respondents provided an open-ended suggestion in this category, stating that the government should support small businesses at the early implementation stage and promote policy programmes that will be efficient for small businesses. Support from the government can help youth discover new skills and techniques and promote more entrepreneurial opportunities for young people.

Figure 4.1 shows a third category with different views of open-ended answers, where 30% of respondents suggested that non-farm jobs and activities in the sector must be exposed. The respondents' open-ended answers further included that the industry is mostly known for farming, so the government and private sector should avail more non-farm jobs. Exposing non-farm positions will contribute to the industry's growth and provide more employment opportunities for young people who want to participate in agriculture. The open-ended answers from the respondents further suggested that young people must be allowed to participate in export and import businesses. Young people should be given more financial support and resources to those who want to own businesses in the sector and prioritise youth for jobs in the industry such as manufacturing, sales, engineering, and administration jobs.

4.6 Barriers to entry into the agricultural profession for youth in EC

This section presents barriers that affect youth participation in agriculture in the Eastern Cape. The study used a Likert scale structure to measure the respondents' views towards young people's barriers to entering the agricultural profession. The results of the respondents are presented in two different tables. Table 4.5 displays the results of school-going respondents towards the barriers to entry into the agriculture profession for youth in the Eastern Cape. Table 4.6 presents the results of unemployed youth's attitudes towards the barriers that young people face when entering the agriculture profession in the Eastern Cape.

4.6.1 Barriers to entry into the agricultural profession for youth in Eastern Cape (School-going learners)

Table 4.5 presents the percentage results of school-going learners on barriers that young people face when entering the agricultural profession in the Eastern Cape.

Table 4.5 Barriers to entry into the agricultural profession for youth in Eastern Cape (school-going)

Issues	Not important	Somewhat important	Neither important/unimportant	Important	Very important
Rural young women have minimal chances to access advanced information, including agricultural skills, as part of education.	8%	20%	32%	30%	10%
There is limited provision of agricultural training for all graduates after finishing school to meet labour market standards.	8 %	10%	26%	36%	20%
Long, complex land transfer process for those who inherited land for entrepreneurship purposes.	8%	34%	38%	16%	4%
There is an increase in input costs such as fertilizer, seeds, and fuel.	6%	28%	28%	30 %	8%
Due to requirements in place, young people	0 %	12%	34%	36%	18%

are less included in financial opportunities such as funding, loans, and agribusiness insurance.					
Insufficient mentoring programmes that encourage youth to form club savings to start businesses in the sector.	12%	24%	38%	26%	0%
There are limited job opportunities for those who are interested in Agro-processing jobs.	4%	20%	28%	34%	14%
Young people are less included in local and international markets to engage in different agricultural ventures.	10%	26%	30%	24%	10%
There is less investment in modern infrastructure as many young people use technology for other businesses.	2%	24%	24%	32%	18%
Youth ideas and suggestions about improving the rural economy are not considered and included in decision-making.	2%	22%	26%	36%	14%

We found that rural women's access to advanced information about agricultural skills is an essential barrier to school-going learners since the majority (30%, 10%) indicated that it limits youth participation in the sector.

The study discovered that the majority (36%, 20%) of school-going learners view less provision of agricultural training to graduates as an essential barrier that limits youth participation in agriculture. The findings further showed that most (34%, 8%) school-going respondents do not view long problematic processes for land transfers as a barrier that negatively influences youth participation in agriculture.

The study found that rising input costs such as fertilizers, seeds, and fuel are significant barriers, as the majority (30%, 8%) of respondents indicated that the barrier negatively influences youth participation in agriculture. We further found that limited job opportunities in agro-processing are a significant barrier, and most (34%, 14%) respondents highlighted that this barrier limits youth participation in the sector.

The study discovered that the majority (26%, 10%) of school-going respondents view less inclusion of young people in markets as a barrier that is unimportant and has less negative influence on youth participation in agriculture. The findings showed that less investment in modern infrastructure is a significant barrier, and most (32%, 18%) respondents highlighted that it limits youth participation in agriculture.

4.6.2 Barriers to entry into the agricultural profession for youth in the Eastern Cape (Unemployed youth).

Table 4.6 presents the percentage results of unemployed youth on barriers that young people face when entering the agricultural profession in the Eastern Cape.

Table 4.6 Barriers to entry into the agricultural profession for youth in the Eastern Cape (Unemployed youth)

Issues	Not important	Somewhat important	Neither important/unimportant	Important	Very important
Rural young women have minimal chances to access advanced information, including agricultural skills, as part of education.	6%	22%	18%	36%	18%
There is limited provision of agricultural training for all graduates after finishing school to meet labour market standards.	0%	0%	16%	44%	40%
Long, complex land transfer process for those who inherited land for entrepreneurship purposes.	12%	20%	30%	26%	12%

There is an increase in input costs such as fertilizer, seeds, and fuel.	4%	8%	26%	44 %	18%
Due to requirements in place, young people are less included in financial opportunities such as funding, loans, and agribusiness insurance.	0 %	18%	32%	26%	24%
Insufficient mentoring programmes that encourage youth to form club savings to start businesses in the sector.	4%	22%	36%	26%	12%
There are job opportunities for those who are interested in Agro-processing jobs.	6%	6%	20%	32%	36%
Young people are less included in local and international markets to engage in different agricultural ventures.	4%	12%	28%	46%	10%
There is less investment in modern infrastructure as many young people use technology for other businesses.	0%	10%	36%	40%	14%
Youth ideas and suggestions about improving the rural economy are not considered and included in	0%	12%	16%	38%	34%

decision-making.					
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The study found that most (40%, 44%) unemployed youth respondents highlighted that less provision of agricultural training to graduates is a significant barrier, and it limits youth participation in agriculture in the province. We further discovered that a longer complex land transfer process is an important barrier as the majority (26%, 12%) of unemployed youth indicated that it also limits participation in agriculture.

The findings showed that the majority (26%, 24%) of unemployed youth indicated that less inclusion of young people from finance opportunities such as grants, loans and insurance based on the requirements is a significant barrier, and it negatively influences youth participation in agriculture. We found that less inclusion of young people in domestic and international markets is a significant barrier, as the majority (46%, 10%) of unemployed youth expressed that this issue limits youth participation in the sector.

The study found that the majority (40%, 14%) of unemployed youth respondents expressed that poor investment towards modern infrastructure is a significant barrier and negatively influences youth participation in agriculture. The findings further showed that most (38%, 34%) respondents highlighted that disregarding youth ideas about agriculture is an important issue and limits youth involvement in agriculture.

4.6.3 Unemployed youth views on steps that can be made towards a public policy to enable youth entry into the agricultural profession in the Eastern Cape.

Figure 4.2 presents views of young people on steps that can be made towards a public policy to enable youth entry into the agricultural profession in the study area.

Figure 4.2 Views on steps that can be made towards a public policy to enable youth entry into agriculture.

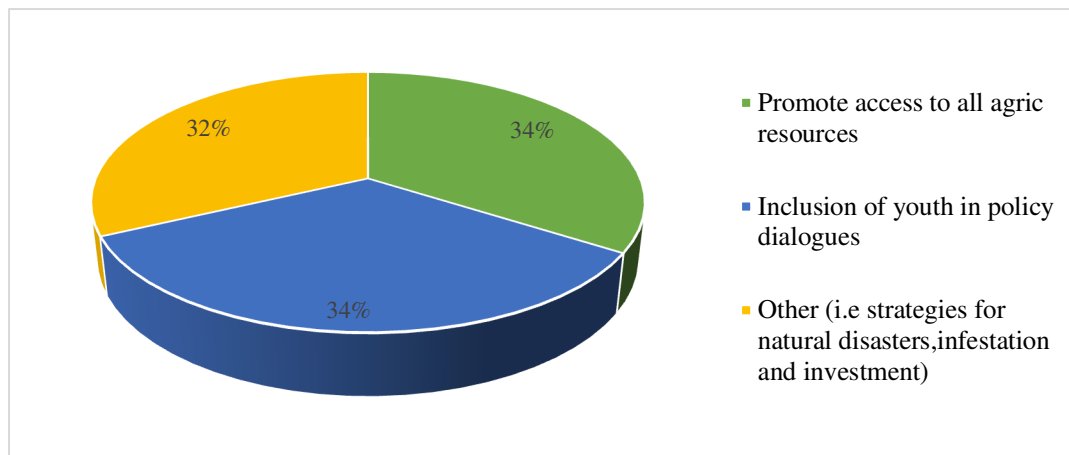


Figure 4.2 represents different views and explanations on different categories of unemployed youth on open-ended questions that were asked on steps that can be made towards a public policy to address barriers that limit youth entry into the sector. Figure 4.2 shows three different categories, and the first category has 34% of respondents who had a view of promoting agricultural resources. They further highlighted that a programme should be in place to provide younger farmers with the resources, such as equipment and capital needed to start a business in the industry. The respondents explained that the state should have a policy in place and work with financial institutions to lower the requirements for funding opportunities for people who have a business plan and have started working on their business. Open-ended answers from respondents further suggested that the government should also propose more subsidies for farm inputs, especially pesticides and seeds. In addition, respondents highlighted that there should be funding for youth to improve the current infrastructure and introduce markets that young people will supply.

The respondents explained that the state needs to provide equipment to young farmers who do not have access to markets to change their perishable products into processed goods to penetrate and compete in the market without losing their produce. Figure 4.2 presents a second category where 34% of respondents provided open-ended explanations on including young people in policy dialogues. We found that unemployed youth suggested that the public and private sectors should include youth ideas that can work, invite them to policy-related meetings and involve them in implementing those programmes. Lastly, Figure 4.2 represents 32% of respondents with different suggestions from open-ended questions, and the respondents explained that the government needs to invest in strategies that can be used as precautions to protect farmers' produce from climate change events and infestations that threaten the food industry. The respondents explained that the government must encourage farmers to join insurance to cover their produce. The respondents also suggested in open-ended answers that the government and private sector should invest in a programme to help young people with information on how to grow more food while spending less on farm inputs. In addition, the unemployed youth

suggested that there should be more investment events and finding private investors for rural infrastructure and all rural agricultural-related projects, such as fisheries in the province.

4.7 Possible recommendations for public policy to encourage youth entry into the agriculture profession in the Eastern Cape of South Africa.

This section presents the views of school-going and unemployed youth on possible recommendations for a public policy to encourage youth participation in agriculture. Table 4.7 shows the results of school-going learners' views towards public policy and parents in the Eastern Cape. Table 4.8 presents the results of unemployed youth's views towards public policy and parents in the Eastern Cape.

Table 4.7 Attitudes towards public policy and parent support for youth in agriculture (school-going learners)

Attitudes towards public policy and parents	Yes	No
I would prefer it if young people were prioritised for employment in agriculture	58 %	42%
I find it easy to relate to potential employers in the sector	40 %	60%
I do not intend to search for employment anymore in agriculture	38%	62%
I believe that career orientation can help prepare young people for employment in the sector	64%	36%
I believe that entrepreneurship is the best way to practice agriculture	44%	56%
I believe that young people can be attracted to the agriculture profession through digital technologies	64%	36%
I believe our local councillors do not take youth matters seriously	62%	38%
I believe parents play a crucial role in motivating the choice of agriculture profession at the school level	48%	52%
I believe schoolteachers play a crucial role in motivating the choice of agriculture profession at the school level	64%	36%
I believe the government has a significant role to play in motivating youth participation in the agricultural sector	68%	32%
I believe that youth are better placed to influence other youth to participate in the agriculture profession	60%	40%
I believe that entry requirements for youth to enter employment are exclusionary	60%	40%

The study found that 58% of school-going learners believe prioritising young people for employment in agriculture can improve youth participation in agriculture. We further discovered that most respondents (62%) intend to seek employment in the agricultural sector. The findings showed that most (64%) school-going learners believe that career orientation can help prepare the youth for agricultural employment.

In addition, the study found out that 56% of respondents believe that entrepreneurship is not the best way to practise agriculture, and most (64%) school-going respondents believe that digital technologies such as ICT, smart irrigation systems, sensors, digital farming equipment can play an essential role in attracting youth to the sector.

The study found that most (64%) school-going respondents believe that schoolteachers are crucial in motivating children to choose agricultural professions and can motivate them to make good career choices. We further found that most (68%) school-going learners believe that the government has a significant role in motivating youth participation in the agricultural sector.

The study found that 60% of school-going learners believe that youth already participating in agriculture have a better chance to influence other young people to join the agricultural profession. We further found that 60% of school-going respondents believe that entry requirements for youth to enter employment in the sector are exclusionary.

Table 4.8 Attitudes towards public policy and parent support for youth in agriculture (Unemployed youth)

Attitudes towards policy issues	Yes	No
I would prefer it if young people were prioritised for employment in agriculture	64 %	36%
I find it easy to relate to potential employers in the sector	62 %	38%
I do not intend to search for employment anymore in agriculture	52%	48%
I believe that career orientation can help prepare young people for employment in the sector	82%	18%
Entrepreneurship is the best way to practice agriculture	64%	36%
I believe that young people can be attracted to the agriculture profession and practice through digital technologies	78%	22%
I believe our local councillors do not take youth matters seriously	86%	14%
Parents play a crucial role in motivating the choice of agriculture profession at the school level	68%	32%

I believe schoolteachers play a crucial role in motivating the choice of agriculture profession at the school level	72%	28%
I believe the government has a significant role to play in motivating youth participation in the agricultural sector	88%	12%
I believe that youth are better placed to influence other youth to participate in the agriculture profession and practices	80%	20%
I believe that entry requirements for youth to enter employment are exclusionary	58%	42%

The study discovered that the majority (64%) of unemployed youth believe that young people should be the priority for employment in agriculture to attract more youth to the profession. The study found that 52% of unemployed youth respondents do not intend to seek job opportunities in the agricultural sector. We found that most (82%) unemployed youth respondents believe that career orientation can help prepare youth for employment in the agricultural sector.

Furthermore, the study found that 64% of the respondents believe entrepreneurship is the best way to practise and attract more youth to agriculture. Most (86%) unemployed youth respondents believe local councillors do not take youth matters seriously.

The study discovered that the majority (72%) of unemployed youth believe that schoolteachers play a vital role in motivating children to choose the agricultural profession. The findings showed that 80% of unemployed youth believe that those already participating in agriculture have a better chance to influence other young people to join the agricultural profession. In addition, we found that 58% of unemployed youth believe that the employment entry requirements for youth in agriculture are exclusionary.

4.8 The role parents can play in encouraging their children to pursue a career in the agricultural sector.

This section presents views of school-going and unemployed youth about the role parents can play in encouraging their children to pursue a career in the agricultural sector. Figure 4.3 presents the results of school-going learners on the role parents can play in supporting their children to join agriculture. Figure 4.4 presents the results of unemployed youth on the role parents can play in supporting their children to join agriculture.

Figure 4.3 Role parents can play to encourage their children who want to join the agricultural sector (School-going learners).

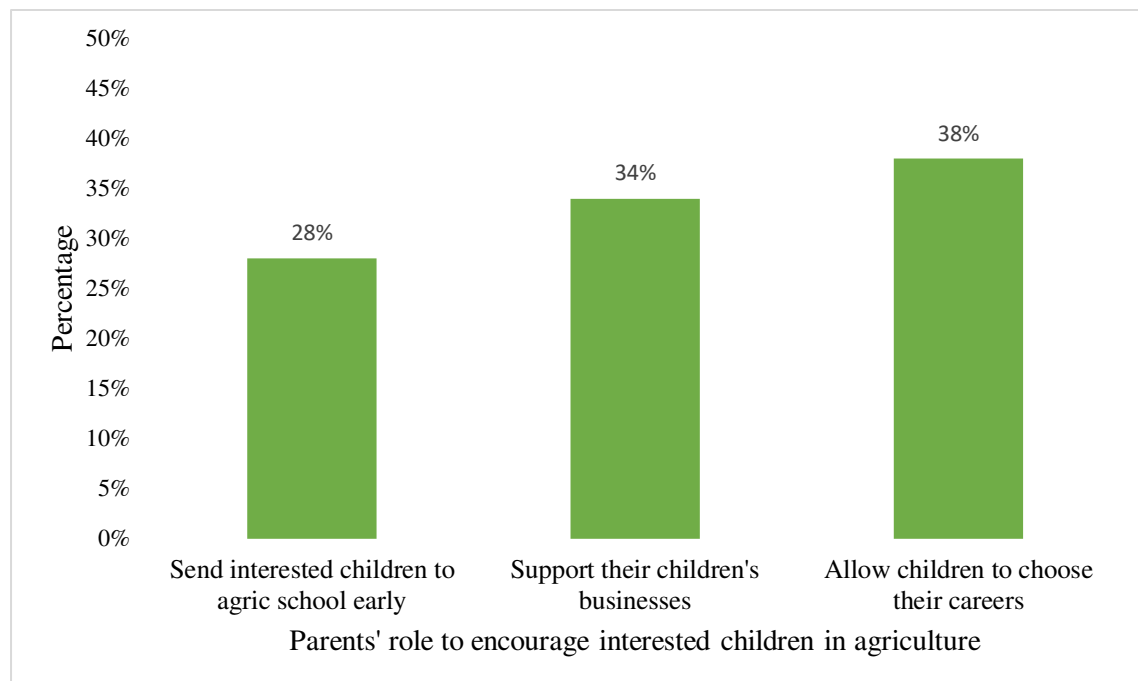


Figure 4.3 represents the views of school-going respondents from an open-ended question about parents' role in encouraging their children who want to join agriculture. Respondents expressed different explanations, and most (38%) school-going learners shared that parents should allow their children to choose their careers while supporting them with a list of essential careers after their children have told them about the field of interest, their skills, and values. The respondents further explained that parents should ensure that they take their children to career expos and reach out to people who have achieved higher education in their communities to seek information about careers with job opportunities.

Figure 4.3 presents a second open-ended explanation from 34% of respondents, and they shared that parents should support new businesses of their children and allow them to use family land to practise agriculture. The respondents further said that parents should teach their children traditional skills for more produce, assist them with funds and help to market their businesses in their saving clubs and church gatherings. School-going learners also expressed that parents should help their children run the

business and apply on their behalf for opportunities where the children do not meet the requirements. Lastly, Figure 4.3 presents that 28% of school-going learners explained that parents should take their children to schools that specialise in agriculture at an early age so that they learn basic farming at an early stage and enrol them in extra programmes that offer advanced skills and training.

Figure 4.4 Role parents can play to encourage their children who want to join the agricultural sector (Unemployed youth)

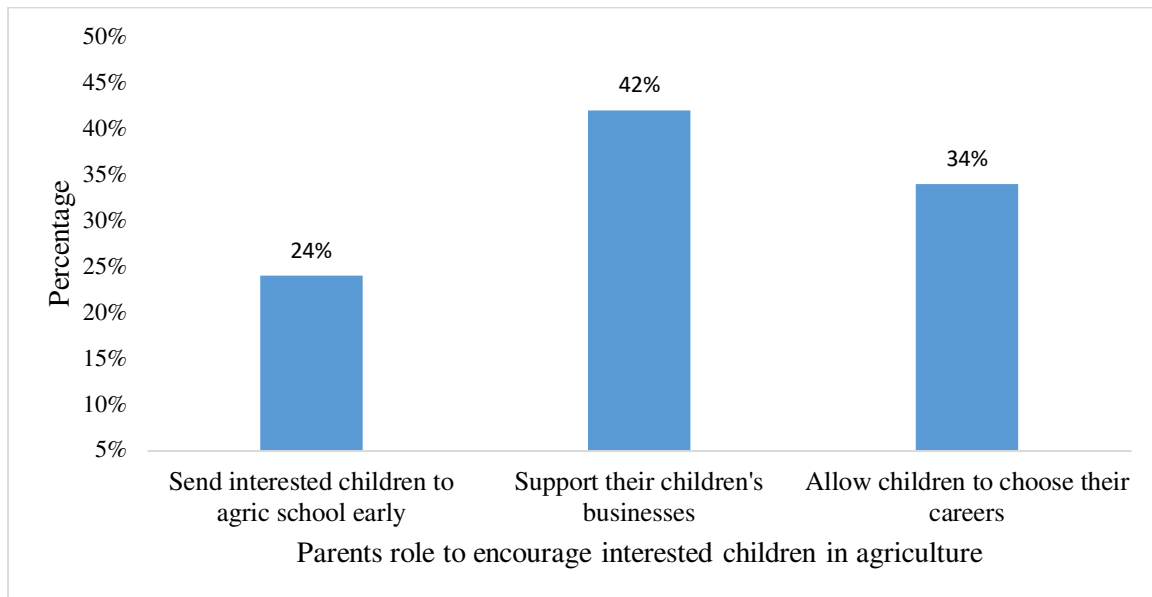


Figure 4.4 represents different explanations of unemployed youth from an open-ended question about parents' role in encouraging their children to pursue agriculture careers. The majority (42%) of unemployed youth explained that parents should support their children's businesses, find suitable mentors who have experience in the type of business, and assist them in the application regarding papers needed for funding opportunities. Figure 4.4 shows that 34% of unemployed youth indicated that parents should allow children to choose their careers, only guide and provide relevant information regarding the path they want to take and find them extra activities that will help boost their interest in the careers. Figure 4.4 expresses that 24% of respondents indicated that parents should take their children to agricultural schools when interested in the agricultural sector. Parents should not shame their careers if they choose farm-based practice over an office job in agriculture, involving them in home-based agricultural activities to increase their skills and practical knowledge.

4.9 The sufficiency of governmental support for youth in agriculture in Eastern Cape (Unemployed youth)

Figure 4.5 presents the results of unemployed youth on the sufficiency of governmental support for youth to participate in the agricultural profession.

Figure 4.5 The sufficiency of governmental support for youth in agriculture in the study area.

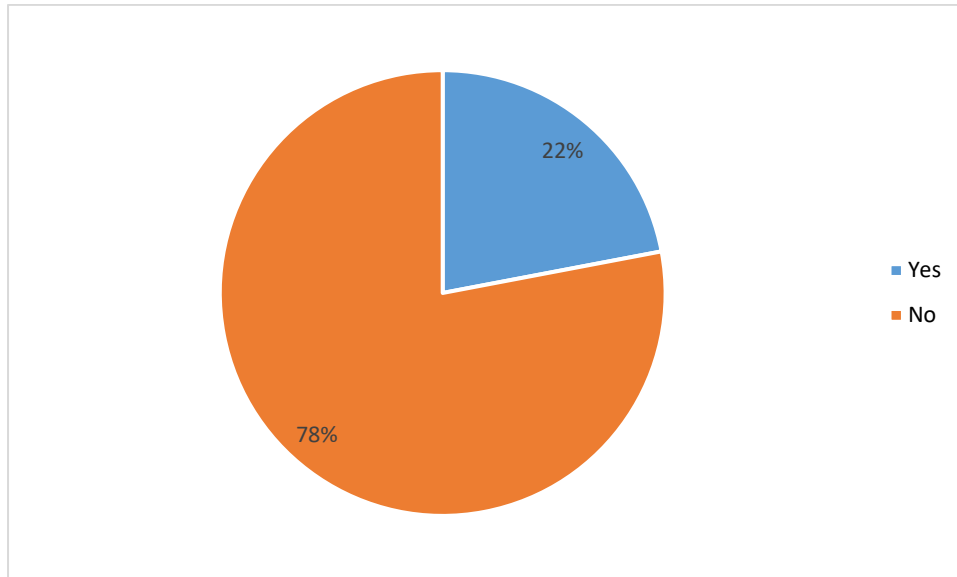


Figure 4.5 represents the results of open-ended answers about the government's current support. The study found that the majority (78%) of respondents explained that the current support youth receive from the government is insufficient, and young rural farmers struggle to access resources such as markets. The respondents further stated that the support youth receive from the government through employment are short-term opportunities such as six months of entry-level jobs or internships, and the departments do not absorb them for longer. Additionally, the respondents explained that the government offers little support to young people's businesses, especially infrastructure and finance opportunities. Figure 4.5 shows that 22% of respondents explained that the support from the government is enough. Young people should take charge of their businesses, make their businesses and produce known to a larger audience and use social media to get more potential buyers. The respondents further expressed that young people should use their resources to research climate change precautions and not rely on the government. Youth must apply for private sector opportunities and attend informative business conferences to see and learn how the existing businesses are performing in the market. Unemployed youth also shared that young people must form cooperatives to share experiences and strategies for a successful business.

4.10 Possible recommendations towards public policy and existing programmes to improve youth participation in agriculture in the Eastern Cape

Figure 4.6 presents the results of unemployed youth's views towards possible recommendations for a public policy to improve youth participation in the agricultural profession.

Figure 4.6 Adjustments policymakers can make in existing programmes to improve youth participation in agriculture.

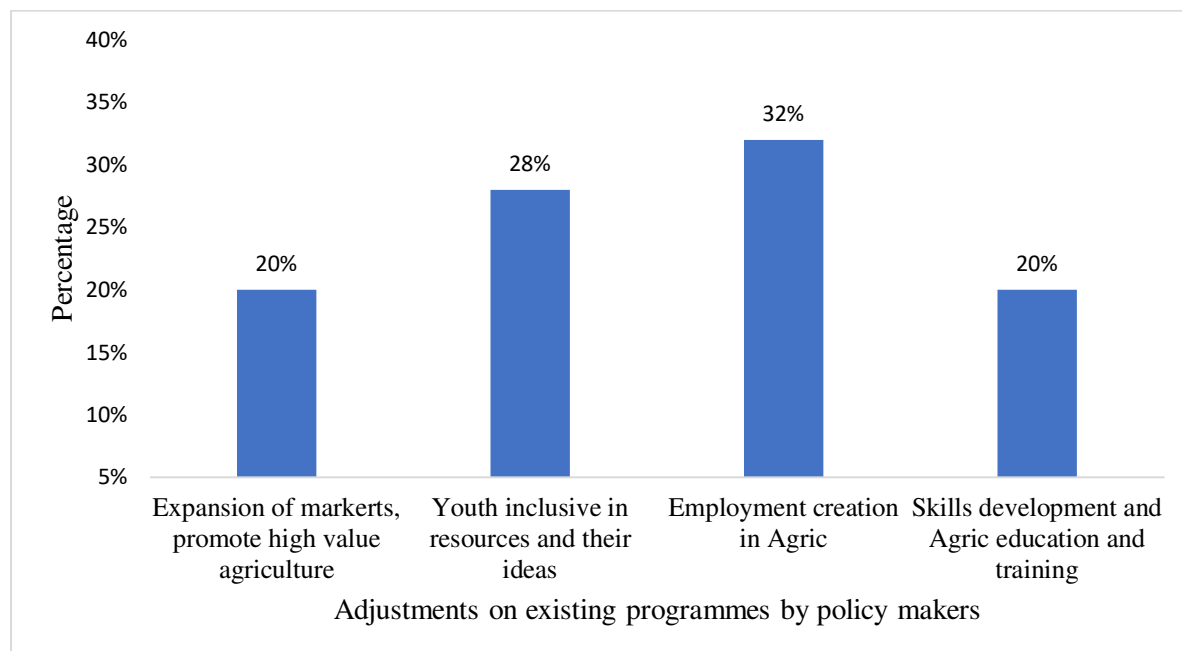


Figure 4.6 represents different suggestions from open-ended questions about adjustments that policymakers can make in existing programmes to improve youth participation in agriculture. The study found that 32% of respondents explained in their open-question response that the current programmes should involve more employment creation for youth and improve communication channels to communicate with the government. In addition, the respondents stated that agriculture should collaborate with industries such as forestry and fisheries to increase youth employment and collaborate with established farmers and agricultural-related businesses to employ more youth to receive more field experience. Figure 4.6 presents that 28% of respondents shared that youth needs to be included in programmes that provide resources such as operational infrastructure and advanced technology with excellent access to the internet. They further explained that young people deserve more access to farm inputs and equipment to run the business. The respondents expressed that youth ideas about agriculture should be taken seriously and put some of them on trial to check if they will be successful.

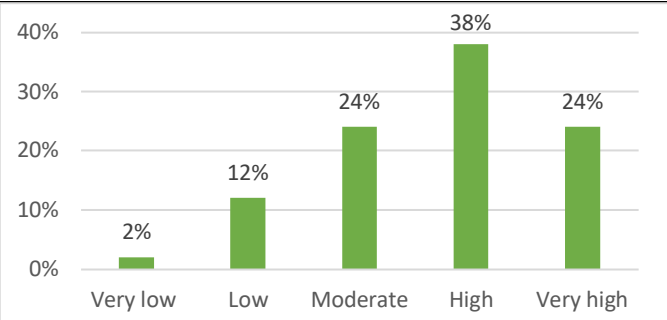
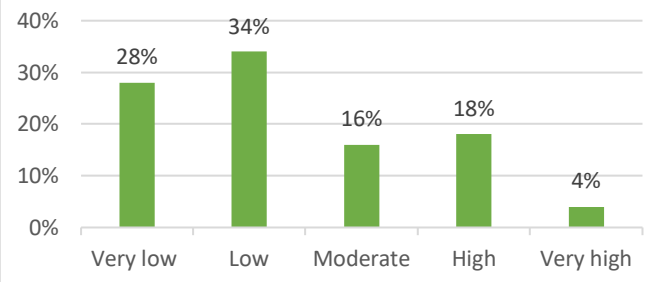
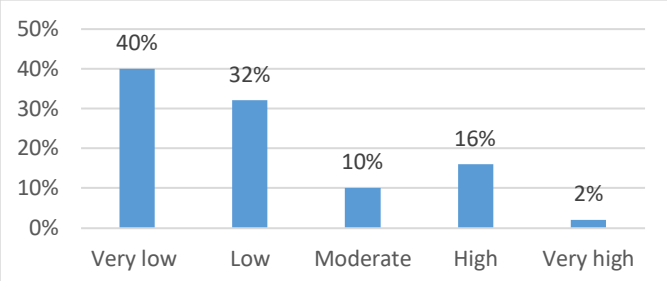
Furthermore, Figure 4.6 presents that 20% of respondents explained that expansion of markets is needed to assist in opening space for smallholders and commercial producers without competing for fewer available markets. The respondents further stated that the government should have programmes introducing more secondary cities in the province to expand markets for young people in business.

Secondary cities will connect farmers and processors involved in the value chain from rural to urban, leading to economic growth and development in the province. Lastly, Figure 4.6 presents that 20% of respondents expressed that programmes concerning skills development, agricultural education and training need new changes to accommodate people without qualifications. These changes will allow them to participate in practical training programmes and learnerships for various skills required in the sector. The respondents further explained that agricultural education needs to be updated and provide business-related lessons to everyone, including the youth who did not finish school.

4.11 Summary of descriptive analysis in Likert scale data for High school students and Unemployed youth

Table 4.9 presents a summary of descriptive analysis of Likert scale data on school-going learners' attitudes towards agriculture. The table presents visual results that support the survey findings and shows the issues that negatively and positively influence school-going learners' attitudes towards agriculture in the study area. The study uses tables to categorise respondents' responses by their demographic groups.

Table 4.9 Summary of school-going children on issues that influence youth attitudes.

The findings	Results that support the findings	Visual results												
Based on the findings, agricultural businesses taking longer to generate profit with risks negatively influence youth involvement in the sector.	The majority (62%) of respondents expressed a high attitude, as 38% had a high attitude and 24% had a very high attitude.	 <table border="1"> <caption>Attitude Distribution for Agricultural Businesses</caption> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>2%</td> </tr> <tr> <td>Low</td> <td>12%</td> </tr> <tr> <td>Moderate</td> <td>24%</td> </tr> <tr> <td>High</td> <td>38%</td> </tr> <tr> <td>Very high</td> <td>24%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	2%	Low	12%	Moderate	24%	High	38%	Very high	24%
Attitude	Percentage													
Very low	2%													
Low	12%													
Moderate	24%													
High	38%													
Very high	24%													
The findings reveal that the dominance of older people in the sector positively influences youth attitudes towards the sector.	The majority (62%) of respondents have low attitudes, as 34% had low attitudes and 28% had very low attitudes.	 <table border="1"> <caption>Attitude Distribution for Older People</caption> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>28%</td> </tr> <tr> <td>Low</td> <td>34%</td> </tr> <tr> <td>Moderate</td> <td>16%</td> </tr> <tr> <td>High</td> <td>18%</td> </tr> <tr> <td>Very high</td> <td>4%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	28%	Low	34%	Moderate	16%	High	18%	Very high	4%
Attitude	Percentage													
Very low	28%													
Low	34%													
Moderate	16%													
High	18%													
Very high	4%													
The findings further show that parents' involvement in choosing careers for their children has no negative influence on youth attitudes.	The majority (72%) of respondents have low attitudes, as 40% have very low, and 32% have a low attitude.	 <table border="1"> <caption>Attitude Distribution for Parents' Involvement</caption> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>40%</td> </tr> <tr> <td>Low</td> <td>32%</td> </tr> <tr> <td>Moderate</td> <td>10%</td> </tr> <tr> <td>High</td> <td>16%</td> </tr> <tr> <td>Very high</td> <td>2%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	40%	Low	32%	Moderate	10%	High	16%	Very high	2%
Attitude	Percentage													
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Moderate	10%													
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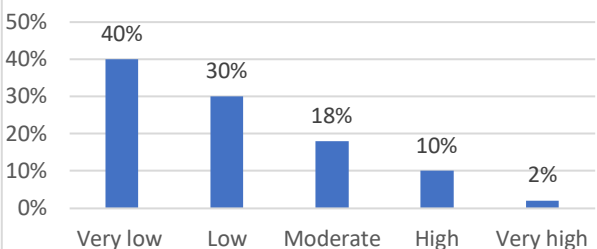
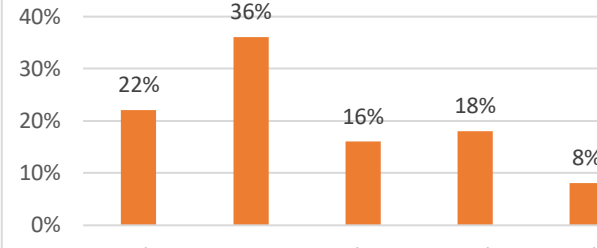
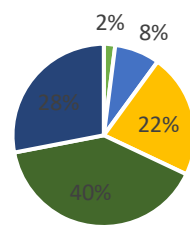
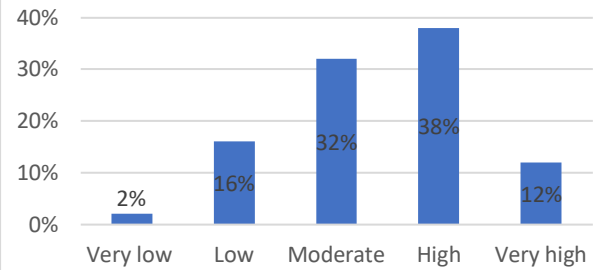
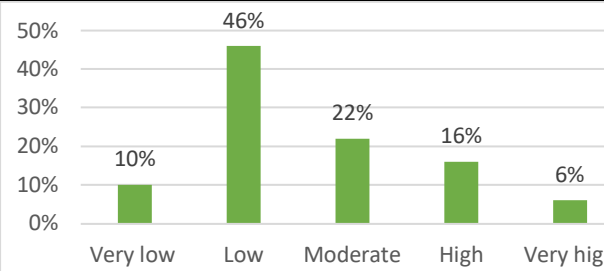
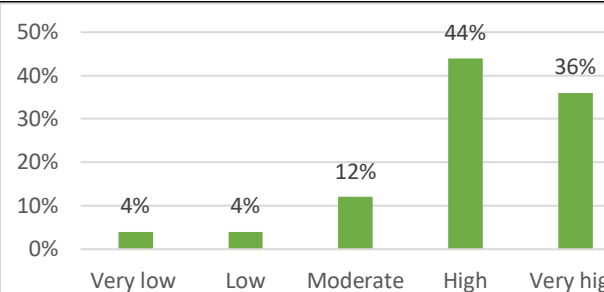
<p>Communities seeing agriculture as a field for the poor and uneducated has no negative influence on youth attitudes.</p>	<p>The majority (70%) of respondents expressed a low attitude, 40% had a very low attitude, and 30% had a low attitude.</p>	 <table border="1"> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>40%</td> </tr> <tr> <td>Low</td> <td>30%</td> </tr> <tr> <td>Moderate</td> <td>18%</td> </tr> <tr> <td>High</td> <td>10%</td> </tr> <tr> <td>Very high</td> <td>2%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	40%	Low	30%	Moderate	18%	High	10%	Very high	2%	
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<p>The findings show that businesses in agriculture requiring all attention, limiting urban contact and recreational enjoyment have no negative influence on youth attitudes.</p>	<p>The majority (58%) of respondents expressed low attitudes, as 36% had a low attitude, and 22% had a very low attitude.</p>	 <table border="1"> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>22%</td> </tr> <tr> <td>Low</td> <td>36%</td> </tr> <tr> <td>Moderate</td> <td>16%</td> </tr> <tr> <td>High</td> <td>18%</td> </tr> <tr> <td>Very high</td> <td>8%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	22%	Low	36%	Moderate	16%	High	18%	Very high	8%	
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Table 4.10 presents a summary for descriptive analysis of Likert scale data on unemployed youth attitudes towards agriculture. The table presents visual results that support the survey findings and shows the issues that negatively and positively influence unemployed youth attitudes towards agriculture in the study area.

Table 4. 10 Summary of unemployed youth on issues that influence youth attitudes.

The findings	Results that support the findings	Visual results												
Agribusinesses taking longer to generate profit with risks negatively influence youth participation in the sector.	The majority (68%) of respondents expressed high attitudes, as 40% had a high attitude, and 28% had a very high attitude.	 <table border="1"> <caption>Attitude Distribution for Agribusinesses</caption> <thead> <tr> <th>Attitude Level</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>2%</td> </tr> <tr> <td>Low</td> <td>8%</td> </tr> <tr> <td>Moderate</td> <td>22%</td> </tr> <tr> <td>High</td> <td>40%</td> </tr> <tr> <td>Very high</td> <td>28%</td> </tr> </tbody> </table>	Attitude Level	Percentage	Very low	2%	Low	8%	Moderate	22%	High	40%	Very high	28%
Attitude Level	Percentage													
Very low	2%													
Low	8%													
Moderate	22%													
High	40%													
Very high	28%													
The presence of fewer black people in commercial farming in South Africa has a negative influence on youth attitudes.	The majority (50%) of respondents had a high attitude, as 38% had a high attitude, and 12% had a very high attitude.	 <table border="1"> <caption>Attitude Distribution for Fewer Black People</caption> <thead> <tr> <th>Attitude Level</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>2%</td> </tr> <tr> <td>Low</td> <td>16%</td> </tr> <tr> <td>Moderate</td> <td>32%</td> </tr> <tr> <td>High</td> <td>38%</td> </tr> <tr> <td>Very high</td> <td>12%</td> </tr> </tbody> </table>	Attitude Level	Percentage	Very low	2%	Low	16%	Moderate	32%	High	38%	Very high	12%
Attitude Level	Percentage													
Very low	2%													
Low	16%													
Moderate	32%													
High	38%													
Very high	12%													
Parents' involvement in choosing careers for their children does not negatively influence youth attitudes.	The majority (56%) of respondents expressed a low attitude, with 46% having a low and 10% having a very low attitude.	 <table border="1"> <caption>Attitude Distribution for Parents' Involvement</caption> <thead> <tr> <th>Attitude Level</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>10%</td> </tr> <tr> <td>Low</td> <td>46%</td> </tr> <tr> <td>Moderate</td> <td>22%</td> </tr> <tr> <td>High</td> <td>16%</td> </tr> <tr> <td>Very high</td> <td>6%</td> </tr> </tbody> </table>	Attitude Level	Percentage	Very low	10%	Low	46%	Moderate	22%	High	16%	Very high	6%
Attitude Level	Percentage													
Very low	10%													
Low	46%													
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The findings show that limited awareness and educational programmes negatively influence youth attitudes.	The majority (80%) of respondents have a high attitude, with 44% having a high attitude and 36% having a very high attitude.	 <table border="1"> <caption>Attitude Distribution for Limited Awareness</caption> <thead> <tr> <th>Attitude Level</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>4%</td> </tr> <tr> <td>Low</td> <td>4%</td> </tr> <tr> <td>Moderate</td> <td>12%</td> </tr> <tr> <td>High</td> <td>44%</td> </tr> <tr> <td>Very high</td> <td>36%</td> </tr> </tbody> </table>	Attitude Level	Percentage	Very low	4%	Low	4%	Moderate	12%	High	44%	Very high	36%
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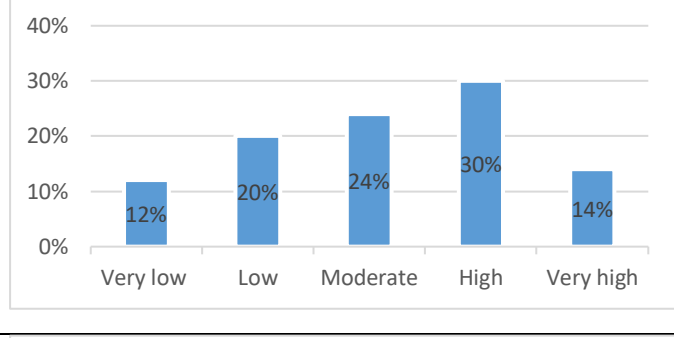
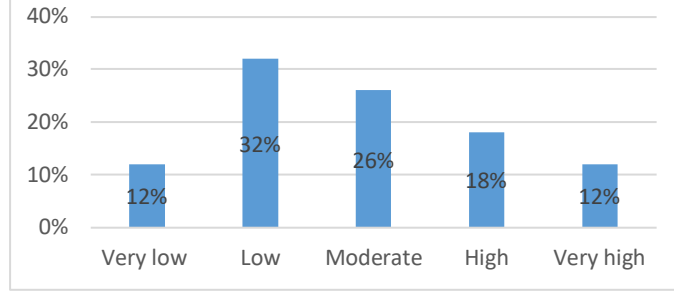
<p>Agribusiness restricting people to urban areas and recreational activities negatively influences youth attitudes.</p>	<p>The majority (44%) of respondents have a high attitude, with 30% having a high attitude and 14% having a very high attitude.</p>	 <table border="1"> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>12%</td> </tr> <tr> <td>Low</td> <td>20%</td> </tr> <tr> <td>Moderate</td> <td>24%</td> </tr> <tr> <td>High</td> <td>30%</td> </tr> <tr> <td>Very high</td> <td>14%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	12%	Low	20%	Moderate	24%	High	30%	Very high	14%
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Very low	12%													
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<p>Less career development in agriculture does not influence youth attitudes negatively.</p>	<p>The majority (44%) of respondents have a low attitude, with 32% having a low and 12% having a very low attitude.</p>	 <table border="1"> <thead> <tr> <th>Attitude</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Very low</td> <td>12%</td> </tr> <tr> <td>Low</td> <td>32%</td> </tr> <tr> <td>Moderate</td> <td>26%</td> </tr> <tr> <td>High</td> <td>18%</td> </tr> <tr> <td>Very high</td> <td>12%</td> </tr> </tbody> </table>	Attitude	Percentage	Very low	12%	Low	32%	Moderate	26%	High	18%	Very high	12%
Attitude	Percentage													
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Table 4.9 and table 4.10 summarise school-going and unemployed youth attitudes towards agriculture as a profession. The study uses these tables to present visual results and show the differences and similarities in variables that negatively and positively influence unemployed youth and school-going attitudes in the study area. In addition, Tables 4.9 and 4.10 shows that the belief about agricultural businesses taking longer to generate profit negatively influences youth participation in the sector. Table 4.9 further shows that the dominance of older people in agriculture positively influences high school learners' attitudes towards the sector. Table 4.10 shows that fewer black people in commercial farming in South Africa negatively influence unemployed youth's attitudes towards agriculture.

Tables 4.9 and 4.10 express that parents' involvement when children choose their careers has no negative influence on school-going learners' and unemployed youth's attitudes towards agriculture. Table 4.9 further shows that communities that see agriculture as a field for low-income people have no negative influence on school-going respondents' attitudes. Table 4.9 illustrates that agribusiness requiring all attention and limiting urban contact does not negatively influence high school learners' attitudes. In addition, Table 4.10 confirms this variable negatively influences unemployed youth attitudes. Table 4.10 confirms that limited awareness and educational programmes about agriculture negatively influence youth attitudes. Table 4.10 displays that less career development has no negative influence on youth attitudes towards agriculture.

Table 4.11 represents a summary for the descriptive analysis of Likert scale data of barriers that affect young people entering the agricultural profession in the study area. Table 4.11 shows the visual results of a survey conducted on school-going respondents in the study area. The study uses tables to categorise respondents' responses by their demographic groups.

Table 4.11 Summary of school going learners on barriers that limit youth participation.

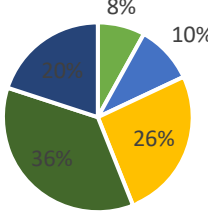
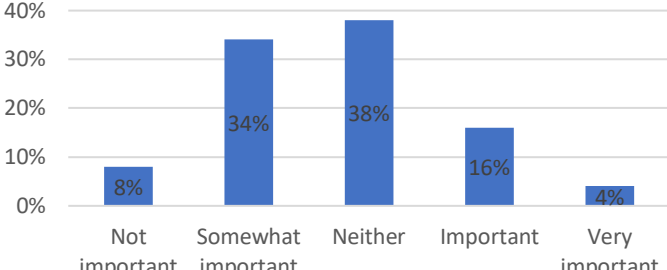
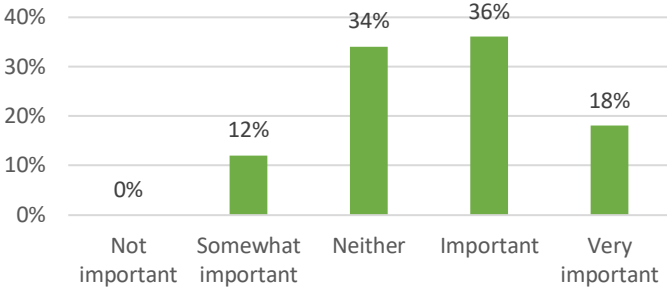
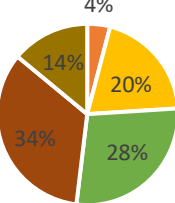
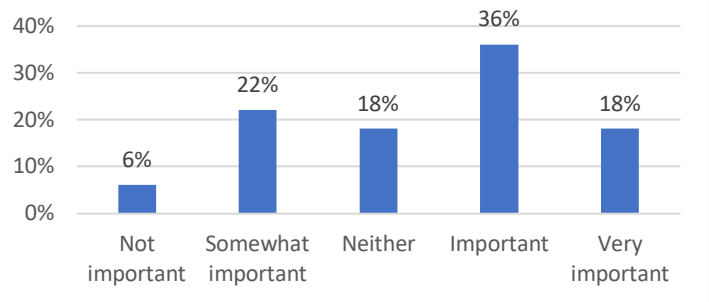
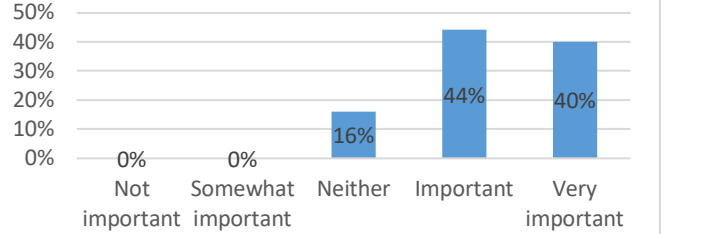
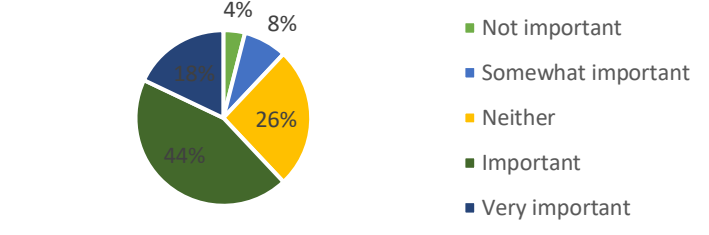
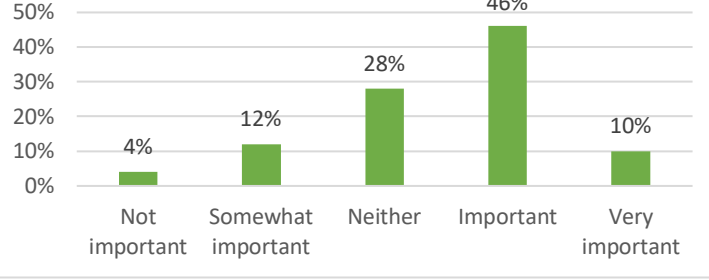
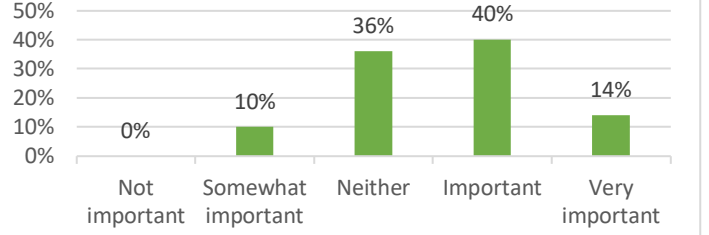
The findings	Results that support findings	Visual results
Findings reveal that less provision of training to graduates is a barrier to youth participation in agriculture.	The majority, 36%, 26% (62%) of respondents expressed this as necessary.	 <ul style="list-style-type: none"> ■ Not important ■ Somewhat important ■ Neither ■ Important ■ Very important
The land transfer process is not a barrier that delays youth participation in agriculture.	The majority, 34%, 8% (42%) of participants expressed that this is unimportant.	
Based on the findings, exclusion of young people who do not meet requirements for funding opportunities plays a negative role in youth participation in agriculture.	The majority, 36%, 18%, (54%) of respondents expressed that this is important.	
The findings further show that limited job opportunities in the Agro-processing industry contribute to lower youth participation in agriculture.	The majority, 34%, 14%, (48%) of respondents expressed that this is important.	 <ul style="list-style-type: none"> ■ Not important ■ Somewhat important ■ Neither ■ Important ■ Very important

Table 4.12 presents a summary of descriptive analysis of Likert scale data of barriers that affect young people entering the agricultural profession in the study area. In addition, table 4.12 shows the visual results of a survey conducted on unemployed youth respondents in the study area.

Table 4.12 Unemployed youth summary on barriers that limit youth participation in agriculture.

The findings	Results that support findings	Visual results												
The findings show that less access to advanced information by young women limits youth participation in agriculture.	The majority, 36%, 18%, (54%) of respondents answered that it is necessary.	 <table border="1"> <caption>Bar chart data: Less access to advanced information</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>6%</td> </tr> <tr> <td>Somewhat important</td> <td>22%</td> </tr> <tr> <td>Neither</td> <td>18%</td> </tr> <tr> <td>Important</td> <td>36%</td> </tr> <tr> <td>Very important</td> <td>18%</td> </tr> </tbody> </table>	Response	Percentage	Not important	6%	Somewhat important	22%	Neither	18%	Important	36%	Very important	18%
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Neither	18%													
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Very important	18%													
Less provision of training to graduates negatively influences youth participation in agriculture.	The majority, 44%, 40% (84%) of respondents expressed that it is a significant barrier.	 <table border="1"> <caption>Bar chart data: Less provision of training</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>0%</td> </tr> <tr> <td>Somewhat important</td> <td>0%</td> </tr> <tr> <td>Neither</td> <td>16%</td> </tr> <tr> <td>Important</td> <td>44%</td> </tr> <tr> <td>Very important</td> <td>40%</td> </tr> </tbody> </table>	Response	Percentage	Not important	0%	Somewhat important	0%	Neither	16%	Important	44%	Very important	40%
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Important	44%													
Very important	40%													
According to the findings, rising input costs are a barrier that hinders youth participation.	The majority, 44%, 18% (62%) of respondents said this barrier is essential.	 <table border="1"> <caption>Pie chart data: Rising input costs</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>4%</td> </tr> <tr> <td>Somewhat important</td> <td>8%</td> </tr> <tr> <td>Neither</td> <td>26%</td> </tr> <tr> <td>Important</td> <td>44%</td> </tr> <tr> <td>Very important</td> <td>18%</td> </tr> </tbody> </table>	Response	Percentage	Not important	4%	Somewhat important	8%	Neither	26%	Important	44%	Very important	18%
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Very important	18%													
The findings show that limited access to markets by smallholder farmers limits youth participation in agriculture.	The majority, 46%, 10%, (50%) of respondents expressed that this is an important issue.	 <table border="1"> <caption>Bar chart data: Limited access to markets</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>4%</td> </tr> <tr> <td>Somewhat important</td> <td>12%</td> </tr> <tr> <td>Neither</td> <td>28%</td> </tr> <tr> <td>Important</td> <td>46%</td> </tr> <tr> <td>Very important</td> <td>10%</td> </tr> </tbody> </table>	Response	Percentage	Not important	4%	Somewhat important	12%	Neither	28%	Important	46%	Very important	10%
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Based on the finding poor infrastructure with no investment also limit youth involvement	The majority, 40%, 15%, (54%) of respondents expressed that this is an important issue.	 <table border="1"> <caption>Bar chart data: Poor infrastructure</caption> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>0%</td> </tr> <tr> <td>Somewhat important</td> <td>10%</td> </tr> <tr> <td>Neither</td> <td>36%</td> </tr> <tr> <td>Important</td> <td>40%</td> </tr> <tr> <td>Very important</td> <td>14%</td> </tr> </tbody> </table>	Response	Percentage	Not important	0%	Somewhat important	10%	Neither	36%	Important	40%	Very important	14%
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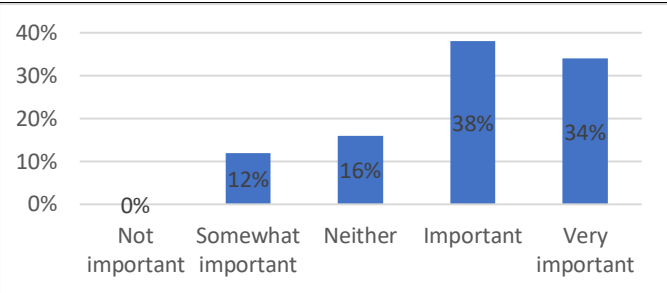
<p>The findings further reveal that less inclusion of youth ideas and suggestions negatively influences youth involvement in the sector.</p>	<p>Most respondents (38%) and 34% (72%) expressed that this barrier is essential.</p>	 <table border="1" style="margin: auto;"> <caption>Barrier Importance Data</caption> <thead> <tr> <th>Importance Level</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Not important</td> <td>0%</td> </tr> <tr> <td>Somewhat important</td> <td>12%</td> </tr> <tr> <td>Neither</td> <td>16%</td> </tr> <tr> <td>Important</td> <td>38%</td> </tr> <tr> <td>Very important</td> <td>34%</td> </tr> </tbody> </table>	Importance Level	Percentage	Not important	0%	Somewhat important	12%	Neither	16%	Important	38%	Very important	34%
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Table 4.11 and table 4.12 summarise school-going and unemployed youth results on barriers that limit youth participation in agriculture in the study area. The tables used in this section provide visual results and highlight similarities and differences in variables that influence school-going and unemployed youth participation negatively or positively towards agriculture in the study area. In addition, Table 4.11 and 4.12 show that fewer training opportunities for graduates negatively influence youth participation in agriculture. Table 4.11 further demonstrates that land transfer processes are not a barrier that limits youth participation in agriculture in the study area.

Table 4.11 shows that less inclusion of young people from funding opportunities negatively impacts youth participation in agriculture. In addition, Table 4.11 presents that limited exposure to job opportunities in the Agro-processing industry negatively influences youth participation in agriculture. Table 4.12 further highlights that rising input costs negatively influence youth participation in agriculture. Table 4.12 shows that limited access to markets for smallholder farmers limits youth participation in agriculture. Furthermore, Table 4.12 illustrates poor infrastructure with no investment limits youth involvement in agriculture. Table 4.12 presents that less inclusion of youth ideas and suggestions in policy dialogues discourages youth participation in agriculture in the study area. Finally, Table 4.12 displays that less access to advanced information by young women in rural areas limits youth participation in agriculture.

4.12 Summary of unemployed youth views on possible steps towards a public policy to attract youth to agriculture.

Table 4.13 shows the summary of findings on unemployed youth views on possible steps that can be made towards a public policy to influence the attitudes and attract young people to agriculture in the study area.

Table 4.13 Possible steps towards a public policy to influence youth attitudes towards participating in agriculture.

Findings on possible steps towards public policy	Results that support the findings
The findings reveal that youth suggested that policymakers must propose the latest innovations, and adoption of modern technology to influence youth to agriculture	36% of participants recommended this step

Findings further show that promoting agricultural education and gender balance in the sector should be one of the priorities to attract youth to agriculture	34% of respondents suggested this step
Policymakers must encourage rural industrialisation while exposing more non-farm jobs within the agricultural known by youth, such as jobs in manufacturing, sales jobs, engineering, and admin jobs in the sector	30% of participants expressed this step

Table 4.14 shows the summary findings on unemployed youth views on possible steps that can be made towards a public policy to enable youth entry into the agricultural profession in the study area.

Table 4.14 Possible steps towards a public policy to enable youth entry into the agricultural profession.

Findings on possible steps towards public policy	Results that support the findings
Introducing subsidies in farm inputs for youth, modern infrastructure, providing youth with equipment to convert perishable products to processed food, introducing a market for youth to compete and adjust funding requirements for good business plans	34% of respondents suggested this step
The findings further show that developing more strategies as precautions for produce against climate change and infestation and bringing investments that will positively influence youth to join agriculture	34% of participants recommended this step
There should be more inclusion of youth in policy dialogues and their recommendations in the implementation process	32% of participants suggested this step

Table 4.13 and table 4.14 presents the summary of unemployed youth views on possible steps that can be taken towards a public policy to influence youth attitudes and enable youth entry into the agricultural profession in the study area. Table 4.13 and table 4.14 summarises the suggestions mainly highlighted and suggested by unemployed youth towards improving public policy to influence youth attitudes and enable youth entry into the agricultural profession.

Table 4.13 demonstrates that 36% of youth suggested that investing in the latest innovations and adopting modern technology can positively influence youth to participate in agriculture. Table 4.13 further indicates that 34% of respondents expressed that promoting agricultural education and gender balance in the sector should be one of the priorities to attract youth to agriculture. Table 4.13 displays that 30% of respondents expressed that the government should invest in and encourage rural industrialisation while exposing non-farm jobs within the agricultural sector, such as manufacturing, sales jobs, engineering, and admin jobs. Table 4.14 illustrates that 34% of respondents expressed that the state should introduce more subsidies in farm inputs for youth and modern infrastructure.

Additionally, the government should provide youth with advanced equipment to convert perishable products to processed food. Table 4.14 demonstrates that 34% of respondents suggested developing more precautions for production against climate change and infestation and bringing investments will positively influence youth to join agriculture. Lastly, Table 4.14 shows that 32% of respondents suggested that there should be more inclusion of young people in policy dialogues and implementing some of their recommendations to see if they will be a success.

4.13 Comparison graphs for Likert scale results

This section presents graphs that compare school going and unemployed youth results on attitudes that influence youth attitudes towards agriculture and barriers that prevents youth entry to agriculture.

4.13.1 School-going and unemployed youth attitudes towards the agricultural profession.

Figure 4.7 and 4.8 presents a diverging stacked charts with results of school-going and unemployed youth attitudes towards agriculture as a profession in the Eastern Cape, displaying positive and negative responses from participants where a thick visual baseline separates these categories.

Figure 4.7 attitude survey for high school learners

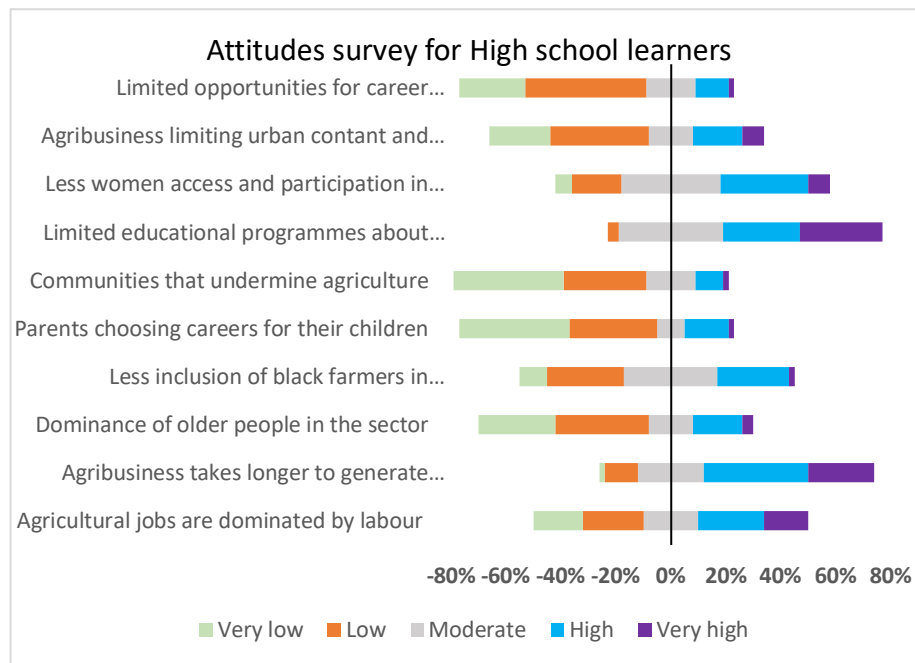
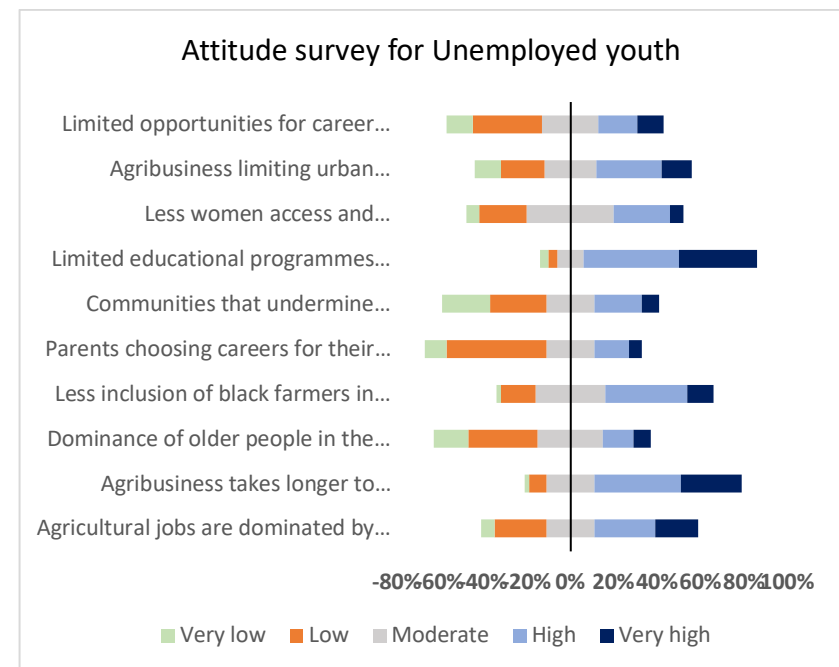


Figure 4.8 attitude survey for unemployed youth



The diverging stacked graph 4.7 and 4.8 shows the results of unemployed youth attitudes towards agriculture as a profession in the Eastern Cape. There were negative and positive responses from respondents, and a thick visual baseline separates these categories. The study uses these charts to visually present the differences in issues that influence the attitudes of school-going and unemployed youth respondents. Based on the comparison of the two groups there are similarities and differences on issues that influence youth attitudes towards agriculture.

Similarities between school going and unemployed youth on issues that influence youth attitudes.

The results indicate that limited awareness and educational programmes about agricultural diversity strongly influenced the attitudes of school-going and unemployed respondents, showing that this issue negatively affected both respondents. This issue can potentially limit youth participation in agriculture, which needs to be improved by the sector to accommodate youth interested in agriculture. The comparison of the two groups revealed that the issue of agricultural businesses taking longer to generate the desired income while having risks strongly influenced youth attitudes towards agriculture. This negative influence shows that both groups of respondents are discouraged by this issue, and this limits youth participation in agriculture. We found that variables negatively influence school-going and unemployed youth attitudes, such as agriculture being labour-intensive and agribusiness taking longer to generate the desired income. Some variables have the most neutral response and are split into half-negative and half-positive. Both respondents were more similar in how these issues influence their attitude towards agriculture.

Differences between school going and unemployed youth on issues that influence youth attitudes.

The study found that less inclusion of black farmers in commercial farming had a low influence on school-going respondents. In contrast, this issue strongly influenced unemployed youth's attitudes towards agriculture, revealing their views differ. Their interest in agriculture is not similarly influenced by how many black farmers are in commercial farming. This difference revealed that these respondents differ in how they are affected by the demographics that are present in commercial farming in South Africa and addressing it might increase youth participation as there are respondents who are half negative and half positive. The comparison further revealed that agribusiness requiring attention and its limitation to urban contact and recreation enjoyment does not negatively influence school-going learners. At the same time, this issue greatly influences the attitudes of unemployed youth towards agriculture. This comparison reveals that being based in rural areas for farm business limits youth participation in agriculture, as unemployed youth indicated that this influences their decision to join the sector. Urban areas need to utilise more arable land to allow youth who want to practise farming to participate while they are based in urban areas.

4.13.2 School-going and unemployed youth results on barriers that affect youth participation in agriculture.

Figure 4.9 and 4.10 presents a diverging stacked graphs with the results of school going and unemployed youth on barriers that limit youth entry into agricultural practice in the Eastern Cape. These graphs display participants' positive and negative responses where a thick visual baseline separates these categories.

Figure 4.9 Barriers survey for high school learners

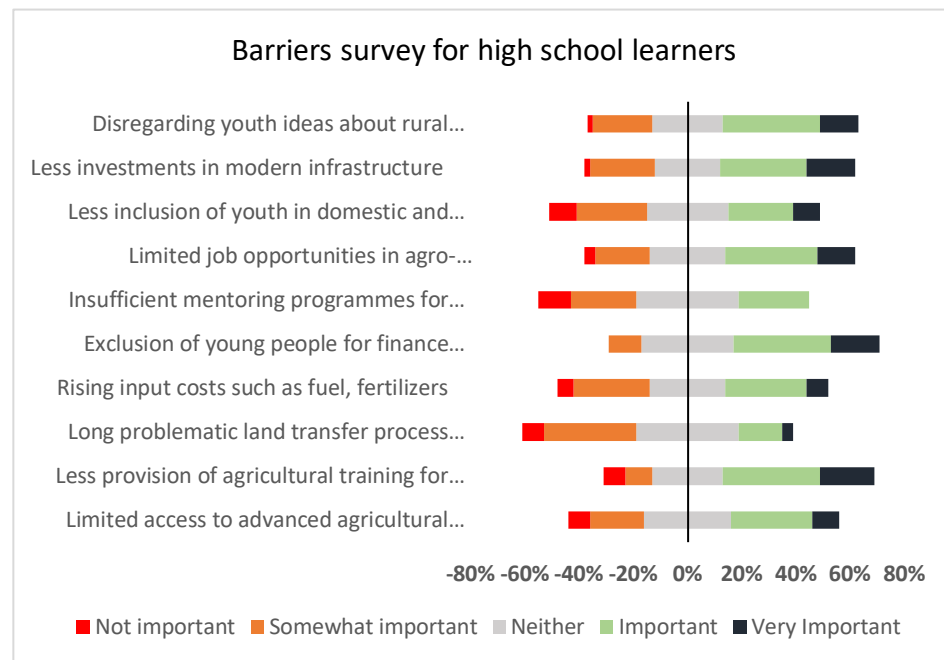
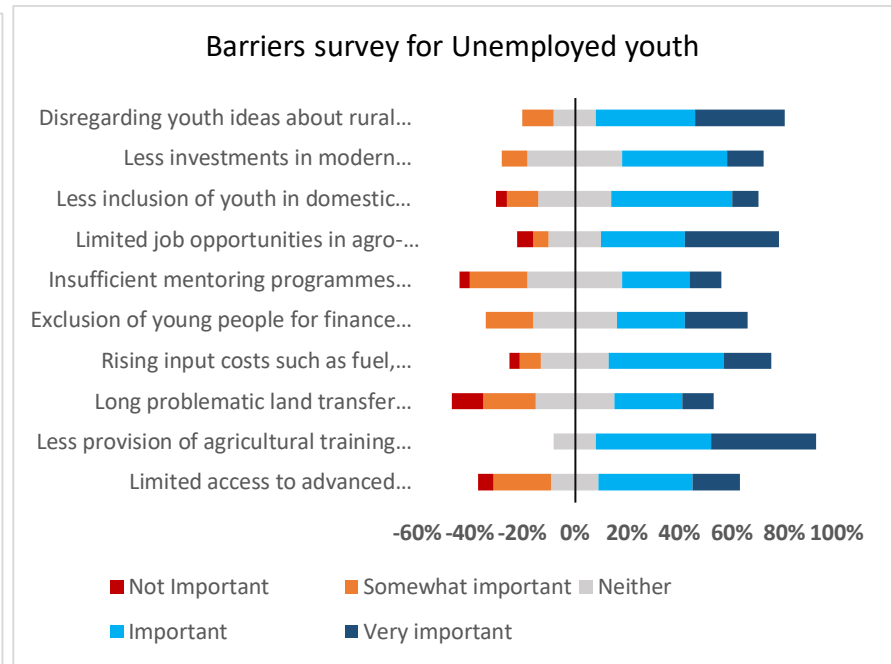


Figure 4.10 Barriers survey for unemployed youth



The diverging stacked graph 4.9 and 4.10 shows the results of unemployed youth and school-going learners on issues that are barriers to entry in agricultural practice in the Eastern Cape, and the graphs displays positive and negative responses from participants where a thick visual baseline separates these categories. The study uses these charts to visually present the difference in results on barriers that school-going and unemployed youth respondents view as necessary for youth entry into agriculture in the Eastern Cape.

Similarities of school-going and unemployed youth on barriers that prevent youth entry into agriculture.

We discovered from the comparison that school-going and unemployed respondents believe that less provision of agricultural training to graduates for the job market is a barrier that limits youth participation in agriculture. Young people struggle to meet specific requirements for some agricultural opportunities and cannot start businesses due to less exposure and some expertise needed. The study found out that both groups of respondents have issues they believe prevent youth entry into agriculture, such as the exclusion of young people who do not meet the requirements of funding, loans, and agribusiness insurance. Rising costs for inputs such as fuel and fertiliser discourage youth from being interested in farming since they cannot afford to buy these products and join important schemes to help run a successful business. The variables have neutral responses, showing that the respondents are likely negative and likely positive in issues that prevent youth entry into agriculture.

Differences of school-going and unemployed youth on barriers that prevent youth entry into agriculture.

Youth experience different issues when joining agriculture, whether starting a business or entering employment. The study found that school-going respondents believe that long, complicated land transfer processes are not a problem preventing youth participation in agriculture. In contrast, unemployed youth believe this barrier is a problem that delays those who want to use the land to conduct businesses and produce food for their families. Based on the comparison, we further found that school-going respondents believe less inclusion of youth in domestic and international markets is unimportant and does not prevent youth entry into agriculture as they can sell to their communities. In contrast, unemployed youth believe this problem limits youth, and such limitation leads to a loss in business and fewer returns. The study discovered that school-going learners believe that insufficient mentoring for youth to form saving clubs for business is not a problem that prevents youth participation in agriculture. In contrast, unemployed youth believe that this problem limits youth participation. Such programmes can assist them with funds, especially for farm inputs, when they are not receiving financial assistance from financial institutions.

4.14 Chapter Summary

This chapter presented the results of attitudes of school-going and unemployed youth towards agriculture as a profession in the Eastern Cape. Descriptive statistics were used to analyse data of both high school learners and unemployed youth. The results show that these groups have similar and different views on agriculture. The diverging stacked graphs were used to visually compare the Likert scale results to show the difference between the attitudes of unemployed youth and high school learners. The charts also compared their barriers to entry to agricultural practice in the Eastern Cape.

CHAPTER 5

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a discussion of the results from chapter four. This study aimed to identify possible recommendations for a public policy to influence attitudes and encourage youth participation in agriculture in the Eastern Cape. Furthermore, this chapter presents recommendations that can be suitable to change youth attitudes towards agriculture and possible government interventions to enable youth entry into agriculture. Lastly, the chapter presents recommendations for future studies and conclusions from the study's results.

5.2 Discussion

The study involves two groups of respondents: high school learners and unemployed youth in the Eastern Cape. This study has three research objectives: to identify school-going and unemployed youth attitudes towards agriculture as a profession; to identify barriers that youth encounter when joining the agricultural profession; and to develop possible recommendations towards a public policy that can encourage youth entry into the agricultural profession.

5.2.1 Overview of literature review and conclusion

The study highlighted youth attitudes and barriers that young people face when joining the agricultural sector. The study examined the examples of policy programmes used by different countries abroad, and in Africa and South Africa, to promote youth participation in agriculture. The review of previous studies highlighted that youth attitudes towards agriculture are influenced by different reasons, such as parents and communities who make their children believe that the sector is for poor people with limited resources to make a good living. Previous studies further stated that a higher unemployment rate and limited programmes supporting youth in agriculture are negatively influencing youth.

The previous studies revealed that young people face different barriers when entering agriculture, market access that comes with varying compliance requirements, land access and financial access such as loans, grants or insurance as they do not meet the criteria. Previous studies also highlighted programmes used by countries abroad and some African countries, including South Africa, to promote youth participation in agriculture. For example, Murphy (2012) revealed that Canada has an Agriculture Financial Service Corporation programme that caters to people new to farming and looks at their net worth to check if they qualify. Deijl *et al.*, (2017) further highlighted that Kenya has programmes such as the Medium-Term Investment Plan catering for smallholder farmers, women, and young people to improve the development of agriculture in the country, and they are given infrastructure and equipment for farming activities. In South Africa, DAFF (2019) highlighted a Land Care programme that offers a

once-off conditional grant to farmers doing different farming projects and assists in developing the capacity and skills of youth intending to join the agricultural sector.

The findings of previous studies revealed that parents and communities negatively influence youth attitudes. In contrast, this study shows that unemployed youth and school-going respondents believe parents and communities have no negative influence towards their attitudes about agriculture. The study findings highlight that fewer employment opportunities for graduates and educational programmes influence youth attitudes negatively, and the literature reviewed also highlighted these issues. The literature reviewed in this study highlighted that market access, land access and financial assistance are part of the challenges youth face when entering agriculture. The respondents from this study also believe that the challenges mentioned above limit youth participation in agriculture. Previous studies highlighted programmes in place to help young people in agriculture. However, some of these programmes have requirements that exclude youth with limited resources from participating in agriculture.

5.2.2 Overview of the study area and the sample size

This study was conducted in the Eastern Cape Province of South Africa, looking at the attitudes of school-going and unemployed youth towards agriculture as a profession, the barriers that limit youth participation in agriculture and possible recommendations that can be used towards public policy in the province to improve youth participation in agriculture. The study selected 100 respondents from different municipalities in rural and semi-urban areas to have different views as their experiences are not the same. The respondents consist of 50 school-going learners and 50 unemployed youth.

5.2.3 Demographic characteristics of school-going and unemployed youth in the study area

This study looked at demographic characteristics of school-going and unemployed youth to profile their interests and views on agriculture as a profession. The findings show that the number of female respondents who participated in the survey was higher than male respondents in both school-going and unemployed youth groups. The high number of female respondents was due to the availability and willingness to participate and share their views and experiences in agriculture.

It has been highlighted in Chapter 4 that the study used the age variable to determine which group dominated the survey. The findings show that the age group between 15 and 18 years was more available to participate in the survey, followed by respondents from 19 to 20 years in the school-going group. These findings show that most respondents who participated in the survey from different schools were between lower age groups, as the study included learners in grade 10. The results further show that most unemployed youth respondents were aged 19 to 24, followed by youth between 25 to 29, and fewer respondents aged 30 to 35 in the survey. These findings show that youth between 19-24 was the most willing group to participate, and graduates falling in this age group are the most affected group by

the unemployment rate in the country (Stats SA, 2021). The study looked at the level of education respondents obtained. The respondents in the school-going category were high school learners; 44% were grade 12 learners, followed by 30% of grade 11 learners, and 26% were grade 10 respondents. Unemployed youth obtained different qualifications, with 38% of respondents holding a bachelor's degree, 20% advanced degree holders, and 18% technical college diploma holders. The last two groups were 12% of university diploma holders and 12% of matric holders from unemployed youth respondents. In addition, the study looked at the unemployment period for unemployed youth to determine how long they have been unemployed after finishing school. The findings show that the majority (60%) of respondents have been unemployed for one to three years, followed by 34% who have been unemployed for four to six years, and 6% who have been unemployed for seven years and above. The results further show that most respondents from unemployed youth (52%) are currently looking for employment while 28% are volunteering, and 20% of respondents are helping in family and friends' businesses and tutoring school children. These findings show that young people struggle to get jobs in the province. Stats SA (2021) reported that young graduates between 15 and 24 have the highest unemployment rate in the country, about 63.9%, compared to the other age groups from the youth bracket.

5.2.4 Attitude of school-going and unemployed youth towards agriculture.

The study identified issues influencing school-going and unemployed youth attitudes towards agriculture in the Eastern Cape. The findings show that high school respondents and unemployed youth have different and similar attitudes and interests in agriculture. For example, both respondents shared similar perspectives about labour-intensive agriculture, negatively influencing school-going learners and unemployed youth. In addition, the findings show that high school respondents and unemployed youth attitudes are influenced negatively by agricultural businesses taking longer to generate the desired income and the risks involved. The findings align with Komarek *et al.*, (2020), who reported that production, markets, and institutional risks influence many people out of agriculture due to uncertain and unpredictable changes such as market prices, regulations and policies, climatic conditions and other issues.

The findings show that the dominance of older people in the agricultural sector does not negatively influence school-going and unemployed youth respondents. These findings contradict Guo *et al.*, (2015), who reported that older people put agricultural production at risk as young people move to the cities after not getting jobs and do not want to compete with them in the sector. Lastly, the findings revealed that school-going and unemployed respondents indicated that parents do not choose careers for them. Therefore, their attitudes towards agriculture are not influenced by their parents.

These findings contradict Chifamba's (2019) findings, highlighting that parents strongly influence their children's career decision-making and advise them on their career path.

The respondents shared different perspectives about their attitudes towards agriculture. For example, the findings show that unemployed youth respondents are negatively influenced by the issue of fewer black farmers in commercial farming in South Africa, and high school respondents are not negatively influenced. Therefore, it can be concluded that more inclusion of black farmers in commercial farming might change unemployed youth's attitudes towards agriculture and increase their participation in the sector. In addition, the findings revealed that unemployed youth attitudes are negatively influenced by the issue of agriculture requiring someone to be based in rural areas working in agriculture, and this issue does not negatively influence high school respondents. These findings reveal that most unemployed youth respondents are not interested in opportunities requiring them to be based in rural areas with less urban contact. The findings present that limited awareness and education programmes in secondary school negatively influence high school respondents' and unemployed youth attitudes. These findings align with Tolamo (2014), who reported that learners are not receiving background and more advanced information about agriculture compared to other subjects, and agriculture is not promoted as a promising career by the Department of Education and Media as they do with Science and Technology. It also emerged from the findings that the issue of limited opportunities to develop a career in the sector has no negative influence on high school and unemployed youth respondents' attitudes towards agriculture. The findings align with Rana *et al.*, (2018), who reported that agriculture offers extensive career opportunities.

5.2.5 Barriers that affect youth when entering the agricultural profession.

The study identified barriers that young people face when entering the agricultural sector. The findings show that different issues influence youth participation in agriculture. In this study, respondents expressed that some barriers are necessary, government intervention is needed to reduce their impact on young people, and some are less significant. School-going and unemployed youth respondents have similar and different views towards these barriers based on the findings from Chapter 4. The results indicate that rural young women's minimal access to advanced information and agricultural skills programmes were considered important by both high school and unemployed youth respondents. The results align with Benfica (2018), who reported that rural women must be introduced to advanced information and technology to improve their literacy and chance of participating in income-generating activities in agricultural chains. The findings further show that high school and unemployed respondents indicated that less provision of training programs for graduates is important, and it limits youth participation in agriculture. It was observed from the results that longer processes of land transfer are not viewed as necessary by high school respondents. At the same time, unemployed youth expressed that it is important, which shows that some young people find it difficult to access land for farming purposes.

The findings show that rising input costs are important for school-going respondents and unemployed youth and negatively influence youth participation in agriculture. The results align with Walters (2021), who reported that inputs such as fertilizer and petrol continue to be the primary input that mainly influences a positive experience, affecting many smallholder farmers as a primary input for their production.

In addition, it has emerged from the findings that high school respondents and unemployed youth see the issue of excluding young people who do not meet requirements from funding opportunities as important. It can be concluded that less financial assistance for youth interested in agriculture limits youth participation as they cannot afford the primary input needed to start a business in the sector.

The findings further show that higher exposure to job opportunities in agro-processing is considered necessary by both high school and unemployed youth respondents. These findings indicate that young people are not exposed enough to agro-processing jobs. Exposing them to that level can increase youth participation in agriculture, allowing them to use knowledge and skills obtained from higher education institutions. In addition, the results present that unemployed youth respondents indicated that less availability of mentoring programmes for savings clubs is important, and school-going respondents expressed that they are less important. It can be concluded that unemployed youth believe it is important to have savings clubs to help those needing money for primary inputs such as fuel and fertilizer instead of waiting for financial institutions and the government to give them the money. The findings further show that unemployed youth respondents expressed that limited access to markets by smallholder farmers is important and limits youth participation in the sector. In contrast, high school respondents viewed it as less important. These findings show that unemployed youth have more understanding of the importance of markets for smallholder farmers and how it can attract more youth to the sector if markets are easily accessible for all farmers.

The findings reveal that poor infrastructure with less investment is another important barrier for unemployed and high school respondents and negatively affects young people who want to join agriculture. The findings of Udemezue (2019) report that poor infrastructure, such as roads, unreliable electricity and internet, and damaged recreational centres, negatively affects businesses in rural areas. Subsequently, improving rural infrastructure can attract young people to agriculture.

The findings further illustrate that lower inclusion levels of youth ideas negatively influence their participation in the sector. It is seen as necessary by both unemployed youth and school-going respondents. Udemezue (2019) reports that African leaders tend to exclude youth in policy-related meetings, which must be rectified. The current leaders need to listen to their ideas and allow them to contribute to policy revisions and implementations.

5.2.6 Recommendations for public policy to encourage youth entry into agriculture.

The study identified views from high school and unemployed youth respondents about possible recommendations for public policy to encourage youth to join agriculture in the study area. The findings confirm that school-going and unemployed youth had different views regarding government support and parents' involvement in youth in agriculture. The findings illustrate that most high school respondents and unemployed youth expressed that they prefer that the government prioritise the youth for employment in agriculture. An important finding from the study shows that most high school respondents intend to look for jobs in the agricultural sector, and most unemployed youth respondents indicated that they no longer intend to seek employment opportunities in agriculture. It can be concluded that limited job opportunities, farming being based in rural areas and limited support for those owning businesses in agriculture might influence the lower interest of unemployed in agriculture.

The findings presented that most high school and unemployed youth respondents believe that career orientation can help prepare youth for employment in the sector. These findings show that young people need more career fairs hosted by schools and municipalities to expose young people to different industries and fields that are essential. In addition, the findings reveal that most high school respondents do not view entrepreneurship as the best way to practice agriculture. In contrast, most unemployed youth view it as the best way to practice agriculture. It can be concluded that some young people believe the sector offers many employment opportunities. The private and public sectors should expose more of these opportunities and hire more youth while supporting those starting their businesses in the sector. The findings confirm that most high school respondents and unemployed youth believe that digital technologies such as smart ICTs, irrigation systems, sensors, and digital farming equipment can attract more young people to agriculture. These findings align with Yoon *et al.*, (2021), who reported that digital technologies such as drones and vertical farming could train farmers with entrepreneurial desires and attract youth participation in agriculture.

The results show that school-going and unemployed youth respondents believe that enough financial support from the government can encourage youth participation in agriculture. The findings further assert that young people already participating in agriculture can motivate and inspire youth to join the agricultural profession. These findings are confirmed by Wittman *et al.*, (2021), who reported that some young in Uganda are part of an initiative driven by the government ministry and FAO to encourage more youth to learn from these young farmers and hope to influence them to join the agricultural sector.

Unemployed youth shared different views that can be used in recommendations towards a public policy to encourage youth to agriculture. The findings show that unemployed youth suggested that the state should promote skills development programmes and improve agricultural education in rural areas to increase youth participation in the sector. These findings align with Haruna *et al.*, (2019), who reported

that providing agricultural knowledge and skills using formal education and early school-level training can equip youth and guarantee sustainable food security and development in the sector.

The results show that the state should support high-value agriculture and market access for smallholder farmers who farm such products to make profits without competing with commercial farmers. The findings further show that youth want more employment in agriculture, especially agro-processing. The findings highlight that unemployed youth and school-going respondents want to see more inclusion of women in the sector. The above finding aligns with Kilimani (2017), who reported that youth employment needs to be increased and policy intervention is necessary for employment, especially in infrastructure, rural development, credit markets and business regulations. Phiri *et al.*, (2022) further reported that a remarkable number of agricultural policies and development programmes in several sub-Saharan African countries still favour men in the sector even though women are participating in agriculture and more interested in joining; therefore, an approach is needed to embrace more women and youth in agriculture.

The results show that unemployed youth respondents expressed that the state should invest in advanced modern technology and infrastructure innovations. These suggestions indicate that young people want to see the sector upgraded from a traditional one to a modern industry. In addition, the findings show that youth suggested that the sector should promote market access and open market spaces where young farmers will compete with other younger farmers to make profits without involving older farmers. The findings further show that developing strategies as precautions to assist farmers in dealing with climate change events and involving young people in policy dialogues can influence youth interest in agriculture.

5.3 Conclusions

In conclusion, this study aimed to identify possible recommendations that can be used to encourage youth to consider the agricultural profession as a potential career. The study looked at issues influencing school-going and unemployed youth attitudes towards agriculture. The study further considered barriers that limit youth participation in the sector. The study reviewed previous studies on issues that influence youth participation in agriculture. A survey was used to collect youth perspectives, and several key findings emerged similar to those of previous studies reviewed. The study shows that youth attitudes towards specific issues vary based on their knowledge and exposure to the agricultural profession and the activities in the field. Based on previous studies, agriculture has been viewed as a labour-intensive and unattractive profession, leading to a decline in youth participation in agriculture.

The findings of this study discovered that both groups of respondents believe that the sector has not evolved and discourages them from participating in the sector. These findings display that the sector needs to adopt resources developed countries use to reduce labour and improve youth participation, which can lead to more productivity. In addition, the sector has been labelled as a field that takes longer

to generate the desired returns, and the respondents highlighted that this issue is influencing their decision to participate in agriculture. The findings show that such problems must be addressed with viable solutions that will make young people interested in joining the agricultural profession. The study reveals that limited awareness and educational programmes about agricultural diversity at the school level affect youth participation in agriculture since they are not fully exposed to the policy programmes and activities that take place in agriculture. Therefore, the above findings show that including agriculture in the curriculum can assist in shaping youth attitudes and perspectives towards agriculture before they select careers they want to embark on.

The findings illustrate that unemployed youth and school-going respondents believe that agriculture has an opportunity for career development. It can be concluded that some respondents recognise the sector's potential and see it as a dynamic field with diverse career prospects, despite the limited exposure some have to the programmes implemented by the people currently participating in the sector. Additionally, the research findings highlighted that the respondents believe that negative issues such as rising input costs, less investment in modern technology like ICTs and smart irrigation systems and limited financial assistance influence young people's decision to participate in agriculture. Therefore, improving access to these types of resources and promoting innovative programmes to come up with solutions to issues that affect agricultural productivity, including environmental impact, can help increase youth participation in agriculture. Additionally, good infrastructure might increase the number of entrepreneurs and potentially improve the sector's performance.

The research study discovered that youth believe that skills development programmes and supporting young people who want to pursue agriculture can improve youth engagement in agriculture. Therefore, getting more funds to finance skills development programmes and improving access to agricultural education and vocational training programmes can equip youth with advanced skills and knowledge to participate in agriculture. The study further revealed that some respondents do not intend to look for employment opportunities in agriculture. These findings show that public and private sector agriculture needs to work with international organisations to create more employment opportunities to accommodate people interested in contributing to the sector in all departments. In addition, the findings highlighted that the respondents believe that government support through different programmes and career fairs can motivate youth to agriculture. The government should encourage their departments to host more career fairs and invite professional experts from various disciplines to enlighten the youth about agriculture opportunities and stimulate their interest in agriculture.

In conclusion, this research highlights the progress in youth attitudes towards agriculture, showing the different reactions to these issues and some respondents' interest in the sector. The public and private sectors must take such interest positively and encourage policymakers, educational institutions and all stakeholders involved in agriculture to create an enabling environment that encourages youth

participation. The government must provide more solutions to the current challenges that negatively influence attitudes towards agriculture to improve the sector's image and performance.

5.4 Recommendations

In light of the findings discussed above for the study of attitudes of high school learners and unemployed youth towards agriculture, the researcher makes the following recommendations for public policy and future studies to improve youth participation in agriculture.

- a) Public policy should include and promote more employment for educated youth in most departments in the sector and encourage them to engage in agribusiness activities to know more about operations and ways to manage them.
- b) Public policy should encourage more partnerships with the private sector for projects in rural areas and have them monitored by all partners involved, particularly projects that aim to improve rural infrastructure and technology.
- c) Rebranding agriculture as a modern business can attract youth and introduce digital technologies used in developed countries.
- d) The public policy should avail state land for rentals to rural youth that request it for the short term and allow everyone who wants to rent and operate their business to generate income for their families.
- e) Skills development programs should target rural areas for specific natural resources, including the non-farm sector, so that young people from that community can be hired for projects based in their locations after receiving training and information.
- f) There should be more institutions like NRF with public funding that fund agricultural research where experiments will be done to develop strategies that will improve farming and protect produce from natural disasters.

Recommendations for future studies

This study consisted of school-going and unemployed youth respondents from the Eastern Cape. Future studies can be expanded to include respondents from various provinces and races and to include university lecturers and other educators who teach agricultural content. Including different participants with different levels of knowledge can also help draw more comparisons on challenges and programmes that support youth entry into agriculture.

Future research can investigate the effectiveness of the current programmes in agriculture and what kind of change these programmes bring to the lives of the farmers and rural people.

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ANNEXURE 1- Ethical clearance letter



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Faculty of Natural and Agricultural Sciences
Ethics Committee
E-mail: ethics.nas@up.ac.za

19 January 2022

ETHICS SUBMISSION: LETTER OF APPROVAL

Dr T Ngomane
Department of Agricultural Economics Extension and Rural Development
Faculty of Natural and Agricultural Science
University of Pretoria

Reference number: **NAS324/2021**
Project title: **Attitudes of school going and unemployed youth towards agriculture as a profession in Eastern Cape of South Africa**

Dear Dr T Ngomane,

We are pleased to inform you that your submission conforms to the requirements of the Faculty of Natural and Agricultural Sciences Research Ethics Committee.

Please note the following about your ethics approval:

- Please use your reference number (NAS324/2021) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.
- Please note that ethical approval is granted for the duration of the research (e.g. Honours studies: 1 year, Masters studies: two years, and PhD studies: three years) and should be extended when the approval period lapses.
- The digital archiving of data is a requirement of the University of Pretoria. The data should be accessible in the event of an enquiry or further analysis of the data.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.
- **Applications using GM permits:** If the GM permit expires before the end of the study, please make an amendment to the application with the new GM permit before the old one expires
- **Applications using Animals:** NAS ethics recommendation does not imply that Animal Ethics Committee (AEC) approval is granted. The application has been pre-screened and recommended for review by the AEC. Research may not proceed until AEC approval is granted.

Post approval submissions including application for ethics extension and amendments to the approved application should be submitted online via the Ethics work centre.

We wish you the best with your research.

Yours sincerely,



Prof VJ Maharaj
Chairperson: NAS Ethics Committee

ANNEXURE 2- Study questionnaire

Attitudes of school going and unemployed youth towards agriculture as a profession in Eastern Cape of South Africa

Research Lead: University of Pretoria, AEERD



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FACULTY OF NATURAL SCIENCE AND AGRICULTURE

Department of Agricultural Economics, Extension and Rural

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September – October 2021

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Part 1: Consent and Demographics

Question code	Question	Response/s
consent	Consent information	
	<p>Consent</p> <p>The University of Pretoria is conducting a survey to study attitudes of school going and unemployed youth towards agriculture as a profession in Eastern Cape of South Africa</p> <p>You have been selected from a list of young people obtained from ... to take part in the survey. Your school and parents are aware of this study and support your participation. The survey will take around 15 minutes. We may contact you at a later date for follow up purposes.</p> <p>Your participation in this interview is voluntary. You have the right to refuse to participate in this study, to refuse to answer specific questions, or to discontinue the interview at any time. There will be no consequences if you refuse to participate, but your views are important. All Standard Operating Procedures (SOP) for conducting field-based research of this nature will be followed.</p> <p>There will be no direct benefits to you from the study itself.</p> <p>All information that you share will be anonymous and will be impossible to be linked back to you. For most of the questions, we will list choices and you can pick the most relevant one.</p> <p>If you have questions or concerns about the research in general or about your role in the study, please feel free to contact Ms. Mhlahli MNUKWA by email at u19321369@tuks.co.za or via WhatsApp at 0833925096</p> <p>By participating in this study, you confirm that you are over 18 years of age.</p>	
consent	Do you consent to participate in this survey?	0=no 1=yes <i>If no, end the survey.</i>
consent	Do you consent to the COVID-19 protocols applied during this survey?	
name	Respondent's name (OPTIONAL?)	<first name> <last name>
1.1	Respondent's sex	0=male 1=female 2=prefer not to say

1.2	Respondent's age (in completed years)	0= 15-18 1= 19-24 2=25-29 3=30-35
1.3	What was the last level of schooling that you completed?	0=Primary school completed 1=Secondary/high school completed 2=Technical College Diploma completed 3=University Diploma completed 4= University degree completed 5=Advanced degree (masters or equivalent) completed
1.4	How long have you been unemployed? (number of years unemployed)	
1.5	Which category best fit your level of unemployment	0=Still searching for employment 1=No longer searching for employment 2=Voluntary worker 3=Other: specify....

Part 2: Attitudes of School going and unemployed youth towards Agriculture.

For each of the following, how important is the issue to you as a young person in school or unemployed on a scale from 1 (not important at all) to 5 (very important):

	Issue	Very Low	Low	Moderate	High	Very High
2.1	Agricultural jobs are dominated by labour intensive	1	2	3	4	5
2.2	A business in agricultural sector takes long time to generate desired profit with a lot of risks	1	2	3	4	5
2.3	The dominance of older people who mostly use traditional ways to conduct a business in agriculture	1	2	3	4	5
2.4	Less inclusion of black people in South African commercial farming	1	2	3	4	5
2.5	Parents choosing careers they desire for their children without enough information about other fields	1	2	3	4	5
2.6	Growing up in a community where agricultural sector is labelled as a field for poor, uneducated people	1	2	3	4	5
2.7	Limited awareness and educational programs about diversity of agricultural sector at secondary school level	1	2	3	4	5
2.8	Limiting women access and participation on agribusiness to household activities	1	2	3	4	5
2.9	Agribusiness requiring all attention which limit urban contact and recreational enjoyment	1	2	3	4	5
2.10	There is no enough opportunity for career development in agriculture	1	2	3	4	5

If you are a high school respondent please skip the following question

If you are an unemployed youth please answer this section

2.11. In your opinion, what are the 2 steps that policy makers must take to influence a positive change in attitudes towards the agricultural profession and practices amongst youth in the E. Cape?

2.11.1 _____

2.11.2 _____

2.11.3 Other (specify) _____

Part 3: Barriers to entry into the agriculture profession and practices for youth in the E. Cape

For each of the following, how important is the issue to you in your role as a young person in school or unemployed on a scale from 1 (not important at all) to 5 (very important):

	Issue	Not important at all	Somewhat important	Neither important nor unimportant	Important	Very important
3.1	Minimal chances for rural young women in accessing advanced information which includes agricultural skills as part of education.	1	2	3	4	5
3.2	Less provision of agricultural training for all graduates after finishing school in order to meet labour market standard.	1	2	3	4	5
3.3	Long problematic process of land transfer to those who inherited land for entrepreneurship purposes.	1	2	3	4	5
3.4	Rising input costs such as fertilizer, seeds and fuel.	1	2	3	4	5
3.5	Exclusion of young people who do not meet the requirements of funding, loan and insurances for agribusiness.	1	2	3	4	5
3.6	Insufficient mentoring programmes that encourage youth to form club savings to start businesses in the sector.	1	2	3	4	5
3.7	Limited job opportunities for those who are interested in agro processing jobs.	1	2	3	4	5
3.8	Inadequate inclusion of young people to local and international markets in order to engage in different agricultural ventures.	1	2	3	4	5
3.9	Less investment in modern infrastructure as many young people are spending their time using technology for other businesses.	1	2	3	4	5
3.10	Disregarding youth ideas and suggestions about ways to improve rural economy and excluding them decision making.	1	2	3	4	5

If you are a high school respondent, please skip the following question

If you are an unemployed youth, please answer this section

3.11. In your opinion, what are the 2 steps that policy makers must take to enable entry into the agricultural profession and practices in the E.Cape for the future?

3.11.1 _____

3.11.2 _____

3.11.3 Other (specify) _____

Part 4: Contribution towards policy issues that can be used to encourage youth entry into the agriculture profession in the Eastern Cape of South Africa.

Question code	Questions	Response/s
	<i>Attitudes towards policy makers and parents - Please respond 'yes' or 'no' to the following statements:</i>	
4.1	I prefer it if young people were prioritised for employment in agriculture	0=no 1=yes
4.2	I find it easy to relate to potential employers in the sector	0=no 1=yes
4.3	I do not intend to search for employment anymore in agriculture	0=no 1=yes
4.4	I believe that career orientation can help prepare young people for employment in the sector	0=no 1=yes
4.5	I believe that entrepreneurship is the best way to practice agriculture	0=no 1=yes
4.6	I believe that young people can be attracted to agriculture profession and practice through digital technologies	0=no 1=yes
4.8	I believe our local councillors do not take youth matters seriously	0=no 1=yes
4.9	I believe parents play a key role to motivate choice of agriculture profession at school level	0=no 1=yes
4.10	I believe school teachers play a key role to motivate choice of agriculture profession at school level	0=no 1=yes
4.11	I believe government has a major role to play motivating youth participation in the agricultural sector.	0=no 1=yes
4.12	I believe that youth are better placed to influence other youth to participate in agriculture profession and practices	0=no 1=yes
4.13	I believe that entry requirements for youth to enter employment are exclusionary	0=no 1=yes

4.14. If yes to 4.13 above, pls explain how so? _____

4.15 In your view, what role can parents play in encouraging their children who want to practice or pursue a career in agricultural sector?

If you are a high school respondent please skip the following question.

If you are an unemployed youth please answer this section.

4.16 Given the current support youth participating in agriculture receives from the government do you think it is enough Yes/No

4.16.1 If yes, explain why? _____

4.16.2 If no, explain why? _____

4.17 In your opinion, what adjustments can policy makers make on the existing programs in order to improve youth participation in agriculture in Eastern Cape? _____

End of survey message: Thank you for taking the time to participate in the survey. If you have questions, would like to see the results, or want to know more, please contact [same names as above in informed consent.] If you have questions about your rights as a study participant, please contact the University of Pretoria, Department of Agricultural Economics Extension and Rural Development at (+27) 12 420 3251.