

-RESEARCH ARTICLE-

PERCEPTIONS OF AGRICULTURAL POSTGRADUATE STUDENTS ON UNEMPLOYMENT IN SOUTH AFRICA

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—Abstract—

The process of job-hunting among graduates inevitably involves experiences of failure and rejection, which in the long or short run may tamper, directly or indirectly, with one's self-esteem and self-confidence. Therefore, the aim of this paper is to evaluate perceptions of agricultural postgraduate students on unemployment in South Africa. To understand these, the researcher looked at what motivates students to enrol in the field of agricultural studies as well as the perceived causes of unemployment by graduates. In order to achieve the objectives of the study, data is collected from 163 post graduate students enrolled in various higher institutions of learning in South Africa. The mixed method research design is applied in the present study. The Statistical Package for the Social Sciences version 27 is used to analyse the quantitative data. Whereas, the content analysis technique is used to analyse qualitative data. The results show the participants' satisfaction level with agriculture as their choice of study and their willingness to assist farmers and the larger agro-based community in overcoming their farming challenges. The findings also present the top five perceived reasons causing unemployment amongst the educated youth of South Africa. Finally, the study offers practical solutions and recommendations to reduce the rate of unemployment in South Africa.

Keywords: Agriculture, agricultural career, unemployment, perceptions, postgraduate students, South Africa

JEL Classification: O1, O2, Q1

1. INTRODUCTION

The number of young people (aged 15 to 24) is expected to increase to 1.3 billion by 2050 with the overall global population projected to reach about 9 billion by the same year (Food and Agriculture Organisation (FAO, 2014)). This increase accounts for almost 14 per cent of the projected global population. Currently, the majority of world's food is produced by elderly farmers. Elderly farmers are less likely to adopt agricultural innovations needed for sustainable agricultural productivity and food security for the rising world population (FAO, 2014). Young people, through effective awareness and education, are more likely to adopt these agricultural innovations. It is therefore vital for youth to access information and knowledge to address current and future challenges in agriculture which may impact the production of food in order to feed the growing population. There is a need to prepare the new generation to continue being involved in the agriculture sector because of the importance of the sector in the food security context (Dahalan et al., 2020). According to FAO (2014), youth needs to receive appropriate information and education to successfully participate in the agricultural sector. Education and information are important to shape agricultural policies affecting youth directly.

Students' level of perception and awareness about a particular course of study influences their attitude and choice towards pursuing a higher degree in that field of study (Obayelu

et al., 2019). Career and institution choice are major decisions that students have to make. Career choice determines one's future profession and students in secondary school often face problems of matching their career choices with their abilities as well as their school performance (Ahmed et al., 2017). Career guidance and counselling is needed in order to help students choose the correct career paths. Career guidance is generally acknowledged as an incredible and compelling technique for bridging the gap and overcoming barriers among education and the professional world (Aluede et al., 2020). The aim of career counselling is to help students understand work life and their individual preferences in order to make the right career, educational, and life decisions. There are various factors such as personal factors, socio-economic factors and socialisers/family which have an influence on ones' career choice (Chinyamurindi, 2018). Chinyamurindi (2018), further states that availability of bursaries and parental influence are also important factors. Career development is a lifelong process and choices made at secondary and tertiary educational level have a huge impact on ones' career.

With the increasing rate of unemployment, career guidance has a role in ensuring that graduates are working within the correct fields. The issue of graduate unemployment and unemployment in general is one of the most alarming challenges facing the South African economy. South African economy has been experiencing rising unemployment over many years (Oluwajodu et al., 2015). This challenge is bound to lead to more problems like poverty, political instability, and socio-economic inequality. According to Van Broekhuizen (2016), a quantity of outstanding studies released since 2000 have raised worries that graduate unemployment may unexpectedly be surfacing as a significant problem in the country, despite the constrained interest that has historically been given to graduate labour market outcomes and their potential implications in the context of South Africa's broader labour market challenges. Tulu (2017) states that one of the major reasons that makes the issue of unemployment so important is that, it does not only affect the economic development of society, but also plays a huge role in ensuring the stability of the society.

Graduate unemployment negatively affects one's self-esteem and does not only affect the unemployed but also elicits fears of being unemployed to other students who are still pursuing their studies. Unemployment may be accompanied by a change in the social position of the individual (Álvaro et al., 2019). There are several studies on the impact of unemployment to date. One of the impacts of unemployment is impaired mental health which can sometimes even lead to suicide. Job-seeking efforts amongst graduates certainly involve experiences of failure and rejection, which in the long or short run may tamper, directly or indirectly, with one's self-esteem and self-confidence. According to Putter (2021) the psychological effects of unemployment are manifested in feelings of worthlessness, loss of identity, embarrassment, depression, and a sense of powerlessness. A study conducted by Voßemer et al. (2018) finds that unemployment

has an adverse effect on psychological functioning, with the unemployed becoming more anxious, depressed and concerned with bodily symptoms than those who are employed. However, the study also found that people with strong support systems and greater self-esteem seem to cope better with the stress of unemployment (Voßemer et al., 2018). Some researchers argue that unemployment affects your self-esteem, while others claim that self-esteem is not affected by unemployment, but is just a personality trait that is constant and not dependent on any situation or surrounding (Álvaro et al., 2019). This paper aims to explore the general perceptions on unemployment and determine what influences postgraduate students to enrol in the field of agriculture.

2. LITERATURE REVIEW

Unemployment is a situation where an individual is willing, and has the necessary skills, to work but is unable to find employment. Unemployed people are therefore those who are able to work, are allowed to work, and prefer to work but cannot find the job (Korniienko et al., 2020). Unemployment is a phenomenon that is recognised globally whereby eligible workforce is deprived from being of service to their country or economy (Adegoke, 2015). The persistently high youth unemployment has always been one of the most pressing socio-economic problems of South Africa (Scarlato et al., 2019). There are several causes to unemployment which can either be cyclical, structural or frictional. These include recession, undeveloped labour market, unpredicted natural disasters and pandemics such as COVID-19, *etc.* The COVID-19 situation may cause long-term unemployment as an acute problem because the longer people are out of work, the more problematic it is to return to professional activity (Korniienko et al., 2020). This challenge is bound to cause more problems such as poverty, crime and political instability. Unemployment in a given society adversely affects economic welfare, reduces output and erodes human capital, (Oluwajodu et al., 2015).

Institutions of higher learning play a vital role in helping African countries to strive towards creating knowledge-based societies (Amani, 2017). However, higher education does not guarantee one a decent job (Remeikienė et al., 2020). Young people migrate to urban areas with the probability of security lucrative employment in industries of their choice as well as to avail social amenities in urban centres (Makinde et al., 2019). De Lannoy et al. (2015) argue that apart from labour market structure, there are other factors to consider when it comes to unemployment. These factors include community, household and personal factors. At community and household level, majority of youth have limited options and are even unable to afford internet café fees to search for jobs. On a personal level, young people are engaging in a range of job-seeking activities but due to their lack of access to information about how best to apply for jobs, may have unrealistic expectations of what kinds of jobs they are qualified for as well as what wages they should be earning. Furthermore, a study conducted by Baldry (2016) shows that

graduates are serving in positions that do not completely capitalise on their aptitudes and therefore, this finding indicates that there may be a skill surplus among those who are already employed.

2.1 Review of Unemployment Statistical Data in the Southern African Region

In South Africa, the rate of unemployment is continually rising and youth, including graduates, form the largest share of the job-seeking population. A study conducted by [Kriiaa et al. \(2020\)](#) indicates that insufficient job creation is one of the factors influencing unemployment rates among graduates. The authors argue that the economy in Tunasia does not create enough jobs especially for university graduates and one of the solutions to this has been migration by graduates in search of jobs suitable to their qualifications and the case is similar in South Africa. [Table 1](#) below shows youth unemployment figures in the Southern African region between 2016 and 2020. Youth unemployment rate in this case refers to unemployed persons from 15 to 24 years of age. Compared to other countries in the Southern African Region, South Africa's youth unemployment and the overall unemployment rate is fairly high. According to [Falakahla \(2018\)](#), unemployment rate in South Africa has been extremely high as compared to other countries over the past decades. Youth unemployment rate in South Africa has been over 50 per cent for the past five years. However, this can be explained by the fact that South Africa also has highest population compared to other countries in the Southern Africa. Madagascar has the lowest unemployment rate in the region, with its youth unemployment ranging between 3.09 to 3.27 in the past five years.

2.2 The Perceived Impact and Causes of Graduate Unemployment

Graduate unemployment is linked to a huge number of South African debates such as the quality of school education and the content of school curricula, university access, university curricula and so on ([Van Broekhuizen, 2016](#)). There are multiple factors that cause unemployment among graduates such as a slow economic growth. [Oluwajodu et al. \(2015\)](#) ascribe causes of graduate unemployment to the lack of employment that is caused by a lack of employability, type of qualification obtained as well as field of study, quality of secondary school education, quality of tertiary education, unrealistically high expectations, job search and work experience. [Mncayi et al. \(2021\)](#) argue that permanent job placement is related to one's field of study. Therefore, the field of study is said to be one of the most factors influencing employability in South Africa. Studies by [Mncayi et al. \(2021\)](#) found that humanities and arts graduates have the lowest figures for finding jobs related to their studies. Reasons for the low figures for finding jobs with these qualifications are that, "they are considered to be too general in skills focus and employers may be less certain about the capability of graduates with these kinds of qualifications" ([Mncayi et al., 2021](#)).

Table 1: Youth Unemployment Figures in the Southern Africa between 2016 and 2020

Country	Population	Unemployment Rate (%)	Youth Unemployment Rate (%)				
			2016	2017	2018	2019	2020
Angola	25,646,166	6.77	16.81	16.63	16.47	15.98	15.74
Botswana	2,024,904	18.72	35.84	35.80	35.68	37.35	38.00
Comoros	575,660		10.03	9.90	9.78	9.88	9.94
Eswatini (Swaziland)	844,223	21.97	46.02	46.12	46.24	46.55	47.37
Lesotho	1,741,406	22.83	34.84	34.96	34.61	33.68	32.8
Madagascar	12,238,914	1.83	3.27	3.2	3.13	3.09	3.12
Malawi	13,077,160	5.67	7.70	7.58	7.48	7.52	7.55
Mauritius	1,237,000	17	22.44	23.65	23.77	23.88	24.05
Mozambique	20,252,223	3.24	7.09	6.96	6.84	6.87	6.87
Namibia	2,104,900	20.59	44.37	41.14	37.89	39.53	41.17
South Africa	56,000,000	28.48	53.66	53.62	53.79	55.97	55.75
Zambia	13,046,508	11.43 (2019 Stats)	20.73	21.62	21.50	21.41	-
Zimbabwe	12,973,808	4.95 (2019 Stats)	8.55	8.44	8.35	8.09	-

Source: Statista 2020

According to [Chigunta \(2017\)](#) the persistently high rate of youth unemployment is attributable to the area of residence of young people, skill levels and qualifications, ethnicity group, age, and the economic environment. Over the past few decades, employability among graduates has become progressively significant, ([Cuadrado Rey et al., 2020](#)). Young people should be encouraged to participate in agriculture entrepreneurship through farm work engagements, ([Chen et al., 2020](#)). [Chen et al. \(2020\)](#) state that, agricultural entrepreneurship has become critical for promoting increased food productivity, environmental sustainability, and ecological diversity.

2.3 Entrepreneurship to Solve Graduate Unemployment and Boost the South African Economy

Entrepreneurship is regarded as a complete process of creating, growing and sustaining a new business ([Santini et al., 2017](#)). Entrepreneurs, therefore, recognize gaps in the society with several opportunities for improvement, gather resources, and implement

plans of action to capitalize on those opportunities. According to [Maluleke \(2016\)](#), innovation in entrepreneurship helps to explore opportunities for both present and future purposes. Entrepreneurs have an ability to turn ideas into action by applying innovative thinking and creativity. Engaging in entrepreneurship shifts people from being job seekers to job creators and requires creativity to be competitive. Entrepreneurship is one of the solutions put forth to curb the threat of unemployment for graduates instead of over dependence on employment in the commercial sector ([Oyetunde et al., 2017](#)).

There are various characteristics an entrepreneur must possess and these include innovation and creativity, commitment, perseverance, determination, willingness to take risks etc. There are many reasons which may trigger individuals to be entrepreneurs. [Maluleke \(2016\)](#) identifies two categories of entrepreneurs; namely the necessity and opportunity entrepreneurs. Necessity entrepreneurs are basically individuals who start businesses out of necessity. *“In South Africa, this could be a university graduate who has finished his/her tertiary education but does not find a job; to add insult to the injury, they have a family that has a high expectation from them to support the family now that they have graduated”* ([Maluleke, 2016](#)). Opportunity entrepreneurs, as defined by Reynolds et al (2001) are entrepreneurs who pursue a business opportunity for personal interest. *“In South Africa, this may be someone who is a director in a government department who thinks that there is a lot of red tape in government and may free his/her creativity more as an entrepreneur than a government employee, or a manager in a private-sector firm who thinks that he has learnt all the tools of the trade needed for an opportunity that he wants to exploit in the market...”* ([Maluleke, 2016](#)). According to Mersha, Sriram and Hailu (2010), necessity entrepreneurs are motivated by ‘push factors’ as a last-ditch effort for economic survival and opportunity entrepreneurs are driven by ‘pull’ factors to attain greater personal satisfaction and wealth accumulation, to create employment opportunities for others and are more skilled as compared to necessity entrepreneurs.

Entrepreneurship in general is the key driver of South African economy. Entrepreneurship is the vital factor that determines the development of economic wealth in South African society with the growth of South Africa’s economy largely depending on creating sustainable small and medium enterprises (SMEs). The importance of the SME sector in economic development includes many activities that are of either a direct or an indirect nature, such as employment creation and contributions to local government revenue and to the national GDP (Gross Domestic Product), as well as to the taxes of the countries concerned. The definition of SMEs varies amongst countries because of the lack of clear set criteria as to what businesses can be classified under SMEs. Moreover, the definition of SMEs also varies across sectors. In South Africa, an SME is defined as a business with less than 200 employees, whereas a small business has fewer than 50 employees and a medium-sized business has between 50 and 200 employees ([Streicher, 2019](#)). The term ‘small and medium-sized enterprise’ typically encompasses

a broad spectrum of definitions across countries and regions. Many countries and international organisations set their own guidelines, which are often based on the number of employees, sales, or assets concerned, for defining SMEs. The SME sector contributes to economic development in a number of ways, say, by creating employment for both the rural and the urban growing labour force, especially that of the local government authorities, and by providing desirable sustainability and innovation for the country as a whole. According to Ngota et al. (2017), the SME sector plays an essential role in the development of a country, making a significant contribution to the flourishing and growing of the national economy. Maluleke (2016) identifies three ways of starting a business. These are starting from scratch, buying an existing business and investing in a franchise. Fu et al. (2019) suggests that when an individual is interested in starting a business, they need to make decisions such as ensuring the feasibility of the business idea before investing more in their project in terms of talent, determination, and hard work.

3. METHODOLOGY

The mixed method research design was applied in the present research study. For the purpose of this study, two questionnaires were administered in order to fulfil the research objectives. First, a 12-items questionnaire was designed to seek the perception of participants regarding unemployment of agriculture postgraduate students. All the items were measured on the five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The second questionnaire was comprised of open and close-ended questions regarding unemployment in South Africa. The selection of respondents involves selecting a group of subjects from the research population and is known as sampling. The study population consisted of postgraduate students enrolled at institutions of higher learning which offer agriculture and therefore purposive sampling was used to select participants. Snowball sampling method was also used and the research participants were requested recruit other participants relevant for a test or study. Data was collected from 163 post-graduate students from higher institutions of learning in South Africa. The survey link was sent to over 200 students electronically using the institutions databases and only 163 filled in the questionnaire. This database was requested through a number of heads of department in the school of agriculture from the relevant institutions as well as the Agricultural Research Council since it offers bursaries to agricultural postgraduate students. Two analytical methods were used i.e., descriptive statistics, which provide the characteristics of the sample and therefore frequency, percentages and cumulative percentages were used. The Statistical Package for the Social Sciences version 27 was used to analyse the quantitative data. The few open-ended questions were analysed through content analysis. Content analysis is one of numerous research methods used to analyse text data. It was appropriate to use content

analysis in the present study to analyse the open-ended questions in the survey. The manual content analysis is performed in accordance with Kemer et al. (2017)'s recommended process. The first step is to determine the research topic and construct. Step 2 involves the identification of the texts that will be evaluated. The unit of analysis is specified in Step 3. Step 4 specifies the categories, which include single versus multiple classification, assumed versus inferred categories, and the use of existing content analysis. Step 5 specifies the categories. Step 6 provides an example coding scheme that can be used as a template. After that, the researcher codes the data sets in order to pre-test the classification scheme, which they perform in Step 6. In Step 7, the coding scheme and coding form are amended or "purified" in light of the results of the pre-test, and more exemplars of words and phrases are added. Content analysis, or data evaluation, is the final step in the process, which is Step 8. After that, manual coding is carried out. This entails reading each response and then concentrating on coding one category with one pass (or more) through the data before moving on to coding the following category.

4. FINDINGS

4.1 Demographics

Table 2 below shows the demographic composition of the students. Most participants in the study were female (51.5%) The majority of participants belong in the 26-35 age group (65,0%). Most participants were Black (93.3%) and the highest qualification was a Masters (44.2%), followed by an Honours degree (32.5%), and Postgraduate diploma (17.2%). Only 10 (6.1%) participants already had PhD to their credentials.

4.2 Study Discipline

Table 3 shows the study discipline of the students. Most participants were from the discipline of Agricultural Economics (30.1%) followed by Agricultural Extension (27.0%), Animal Sciences (19.0%), Agronomy (12.3%). Other disciplines (11.7%) included Soil Sciences, Agricultural Management and Agro-meteorology.

Table 2: Demographics

		Frequency	Per cent	Valid Per cent
Gender Composition	Female	84	51.5	51.5
	Male	78	47.9	47.9
	Prefer not to say	1	0.6	0.6

	Total	163	100.0	100.0
Age	25 or younger	29	17.8	17.8
	26-35	106	65.0	65.0
	36 and older	28	17.2	17.2
	Total	163	100.0	100.0
Ethnicity	Black	152	93.3	93.3
	Coloured	3	1.8	1.8
	Indian	2	1.2	1.2
	White	5	3.1	3.1
	Other	1	0.6	0.6
	Total	163	100,0	100,0
Highest qualifications of the respondents	Postgraduate diploma	28	17.2	17.2
	Honours	53	32.5	32.5
	Masters	72	44.2	44.2
	PhD	10	6.1	6.1
	Total	163	100.0	100.0

Table 3: Field of Study

		Frequency	Percent	Valid Percent
Valid	Agricultural Extension	44	27.0	27.0
	Agricultural Economics	49	30.1	30.1
	Animal Sciences	31	19.0	19.0
	Crop Sciences/ Agronomy	20	12.3	12.3
	Other	19	11.7	11.7
	Total	163	100.0	100.0

4.3 Choosing a Career Path in Agriculture

4.3.1 Satisfaction with the Choice of Study

Table 4 below shows the respondents' satisfaction levels towards the choice of their studies. Approximately a quarter of the participants (25.2%) were not satisfied with their educational qualification and one of the main reasons participants were not satisfied with their education qualification is that there were limited employment opportunities,

however, some mentioned that they wanted to study further/ obtain a higher qualification. From the 25.2% of participants who were not satisfied, the main reason was limited employment opportunities (39.0%), followed by those who still wanted to study further. The latter however is arguable as these individuals are somehow satisfied with their choice of study as they still want to continue studying.

Table 4: Reasons Why Participants were Not Satisfied with Their Choice of Study

		Frequency	Percent	Valid Percent
Valid	Did not explain	1	2.4	2.4
	Limited employment opportunities	16	39.0	39.0
	I want to study further / obtain a higher qualification	15	36.6	36.6
	Lack job-relevant skills/ knowledge	6	14.6	14.6
	It's what was expected of me	1	2.4	2.4
	I think I chose a wrong degree	1	2.4	2.4
	Developed interest in other fields	1	2.4	2.4
	Total	41	100.0	100.0

4.3.2 Persuasion of Post Graduate Studies

Participants were asked why they embarked on a post-graduate academic journey. As presented in [Table 5](#), most participants studied further because they wanted to learn more (51.5%). Some participants embarked on the journey because they could not find employment (33.1%), and about 4.3% had a bursary to further their studies.

Table 5: Reasons for Studying Further

		Frequency	Percent	Valid Percent
Valid	I wanted to learn more	84	51.5	51.5
	I could not find employment	54	33.1	33.1
	I had a bursary	18	11.0	11.0
	Other	7	4.3	4.3
	Total	163	100.0	100.0

Other participants (4.3%) had other reasons for continuing with their studies and the majority of these participants (1.8%) wanted to pursue an academic career. Some of the reasons why participants studied further ranged from expanding knowledge and expertise in order to advance themselves and their careers.

4.3.3 Reasons for Choosing Agriculture as a Career

Participants were asked why they chose agriculture as a career. As shown in Figure 1, most participants (44.8%) chose agriculture because they wanted to assist farmers and communities overcome their farming challenges. Other reasons included; employment purposes, wanting to be a farmer, wanting to be agricultural entrepreneurs. Fewer participants chose agriculture because they wanted to market, promote and sell agricultural products, because it was their second/ third option in their university application form, and because of family and peer pressure.

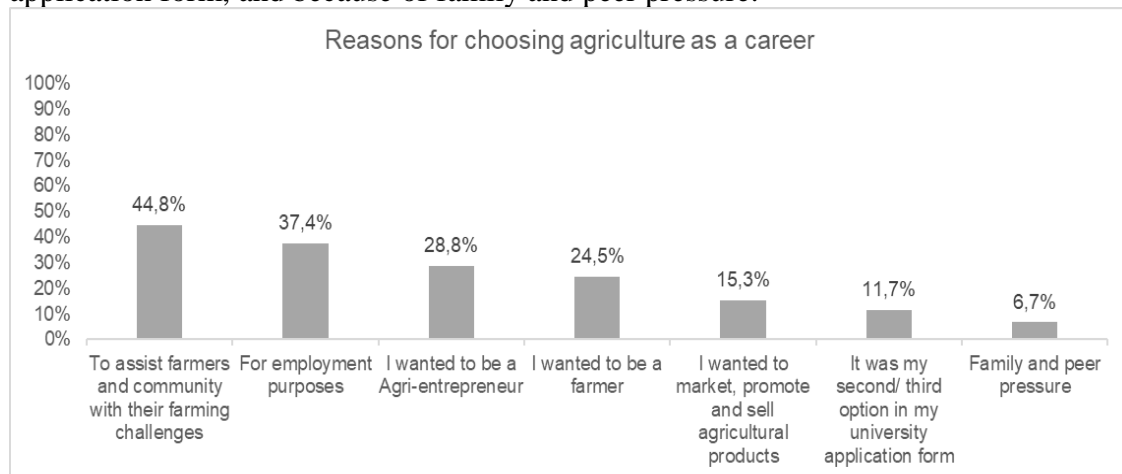


Figure 1: Reasons for Choosing Agriculture as a Career

4.3.4 Reasons for Discipline

Table 6: Reasons for the Choice of Discipline

	Number of times code applied	% of participants (n=163)
Gain agricultural knowledge and skills	86	52.8%
<i>Be able to assist farmers/ develop the country</i>	42	25.8%
Passion/ interest in the field	54	33.1%
Employment/ provide opportunities	20	12.3%

Could not pursue my first choice	8	4.9%
Met the requirements	6	3.7%
Influenced by teacher/ mentor/ family	6	3.7%
More affordable field to study	1	0.6%

4.4 Activities after Post-Graduation

Table 7 shows the activities of the students after post-graduation. Most participants (55.2%) pursued their first postgraduate degree in agriculture This is supported by the above factor as to why they chose agriculture as a career because most of them suggested that they continued with their studies because they wanted to learn more (51.5%). Some participants went to look for employment (20.9%), however, some ended up pursuing postgraduate studies because they could not find employment (33.1%), some had a bursary (11.0%). 15.3% of participants got involved in internship/learner-ship programmes.

Table 7: Activities after Graduating

		Frequency	Percent	Valid Percent
Valid	Pursued my first postgraduate degree in agriculture	90	55.2	55.2
	Pursued my first postgraduate degree in another field of study	6	3.7	3.7
	I went looking for employment	34	20.9	20.9
	I decided to quit school and stay at home	1	0.6	0.6
	I got an internship/learner-ship programme	25	15.3	15.3
	Other	7	4.3	4.3
	Total	163	100.0	100.0

There are various other activities (4.3%) that the graduates engaged in such as involvement in farming, changing career fields while some immediately started working.

4.5 Employment Status

As per Table 8, most participants were unemployed and looking for a job (30.1%) and 4.9% were unemployed although not looking for employment. 27.6% were currently on internship and/or learner-ship programmes which leaves only 37.5% of employed people on permanent basis, part-time basis and self-employed.

Table 8: Participants' Employment Status

	Frequency	Percent	Valid Percent
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Valid	Permanently employed	34	20.9	20.9
	Employed on part-time basis	15	9.2	9.2
	Self-employed	12	7.4	7.4
	Unemployed and looking for a job	49	30.1	30.1
	Unemployed not looking for a job	8	4.9	4.9
	Internship/ leadership training programme	45	27.6	27.6
	Total	163	100.0	100.0

4.6 Improving Chances of Getting Employed

Participants were asked by the researcher what they think can be done to improve their chances of getting employment. As presented in Table 9, most participants who were unemployed said that employers should frequently visit universities and scout graduates to improve chances of getting employed (26.3%). Some participants (17.5%) feel that the agriculture curriculum needs to be revised so it can meet employers' requirements.

4.7 Causes of Unemployment

This section was qualitatively analysed. Table 10 in this section summarises the perceived causes of unemployment. The participant's top five reasons causing unemployed of educated youth in South Africa were:

1. Lack of job creation/ job opportunities (33.1%)

Participants shared their insight regarding the lack of job creation/ job opportunities and the following statements were made by some of the participants:

"Employers take a limited number of people for internships and don't even absorb them for employment, and universities keep enrolling large numbers of students for outdated degrees."

"Too many graduates' vs limited employment opportunities in government and private sectors."

"Government does not prioritise graduate in South Africa. The system in South Africa does not offer entrepreneurship chances, especially in the field of agriculture."

Table 9: Participants' Responses on Chances of Getting Employed

		Frequency	Percent	Valid Percent
Valid	Potential employers should have access to my academic results	9	15.8	16.4
	Employers should frequently visit universities and scout graduates	15	26.3	27.3

	Themes for research should be based on the challenges facing employer companies and government	9	15.8	16.4
	Change of career/ degree	3	5.3	5.5
	In-service training should be mandatory	9	15.8	16.4
	The agriculture curriculum needs to be revised so it can meet employers' requirements	10	17.5	18.2
	Total	55	96.5	100.0
Missing	System	2	3.5	
Total		57	100.0	

4.8 Causes of Unemployment

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"Too many graduates' vs limited employment opportunities in government and private sectors."

"Government does not prioritise graduate in South Africa. The system in South Africa does not offer entrepreneurship chances, especially in the field of agriculture."

3. Nepotism/ corruption (23.9%)

The second most frequently mentioned cause of unemployment was said to be nepotism/corruption and some participants alluded to this, as follow:

"Sometimes the knowledge that is taught at university is far behind with what is happening at the workplace. Nepotism also plays a big role."

"Nepotism is a serious problem in South Africa, especially in the agricultural sector resulting in those educated staying at home than being employed. Secondly, inequality and racism are other factors within this sector. Black people or the government employs their counterparts which results in skill not being proper transferred."

4. Lack of experience (16.0%)

Lack of work experience is said to be one of the possible causes of unemployment in South Africa. This seems to be the most common complaint as most graduates do not have sufficient work experience immediately after graduation. The following statements were mentioned by participants regarding lack of experience:

“High demand for skilled graduates but lack of practical experience.”

“Youth are educated to look for employment and not to create employment opportunities; worst part is that employment opportunities are limiting day by day.”

“We are not trained in entrepreneurship where they prepare us to start businesses and employ people.”

“No experience and people who refuse to retire and open up vacancies for the youth.”

The statements above show two common issues regarding lack of experience; 1. The lack of practical work experience and 2. The lack of training in business and entrepreneurship in order to prepare the students to be job creators. This seems to be one of the issues which institutes of higher education need to solve by either ensuring students are equipped with sufficient practical experience as required by the labour market and/or equip students with enough business development skills.

5. Misalignment between education and job market (13.5%)

22 participants (13.5%) argue that there is a misalignment in what is required in the labour market and what the institutions offer (see [Table 4](#)). Some of the participants mentioned the following:

“Emphasis on other disciplines and neglecting technical and entrepreneurial skills.”

“Government does not prioritise graduates in South Africa. The system in South Africa does not offer entrepreneurship chances more especially in the field of agriculture.”

6. Weak economy (7.4%)

Some of the participants mentioned that the reason for unemployment in South Africa is the slow economic growth and the following are some of the statements made by the participants to support their responses:

“The country's economy is not run efficiently enough to generate new businesses which attracts new investments, instead talk of expropriation without compensation causes investors to be very nervous and to steer away from SA to countries like Zambia, whose agricultural growth has overtook ours. We have to all work together to convince investors that their investments will be safe and contribute to the well-being of all within the sub-continent”

“Inequality in terms of ownership of means of production and slow growth in the economy to accommodate everyone”

“Inequality in terms of ownership of means of production and slow growth in the economy to accommodate everyone”

“Slow economic growth”

Some of the responses from the participants regarding unfair entry level requirements were: *“Ridiculous additional entry level job requirements that segregate against certain groups. For example, having own transport which excludes a lot of graduates in agricultural marketing positions. Another example is the fluency in Afrikaans, census and various surveyed have repeatedly shown that more than 90% of Afrikaans speakers have decent fluency in English.”*

Lack of experience and no driver's license because most jobs require applicants to have a certain experience and driver's license.

The other participant mentioned that:

“The common misconception that getting a degree ensures that one will be employed. Lack of entrepreneurial and work-ready exposure/skills while at undergraduate level. Corruption in the current government administration. Lack of self-drive, self-motivation and collaboration with fellow colleagues after graduation in looking towards suitable and profitable ventures apart from being an "employee".”

Table 10: Causes of Unemployment

	Number of times code applied	% of participants (n=163)
I don't know/ not answered	22	13.5%
Lack of job creation/ job opportunities	54	33.1%
Nepotism/ corruption	39	23.9%
Lack of experience	26	16.0%
Misalignment between education and job market	22	13.5%
Weak economy	12	7.4%
Unfair entry level requirements	8	4.9%
Older individuals refuse to retire	5	3.1%
Lack motivation/ determination	4	2.5%
Cheap labour from foreign nationals	3	1.8%
Youth studying for higher qualification	1	0.6%

4.9 Strategies for Finding Employment

As shown in [Table 11](#), the most common strategy for looking for employment was using the internet/ online (40.5%), more specifically using relevant websites (12.3%) and LinkedIn (7.4%). The other most used strategies are to continue applying regularly (16.0%) and networking (13.5%).

Table 11: Strategies for Finding Employment

	Number of times code applied	% of participants (n=163)
Internet/ online	66	40.5%
<i>Relevant websites</i>	20	12.3%
<i>LinkedIn</i>	12	7.4%
<i>Job search apps</i>	5	3.1%
<i>Unemployed graduates' WhatsApp groups</i>	1	0.6%
Apply regularly	26	16.0%
Networking/ word of mouth	22	13.5%
Contact prospective employees	16	9.8%
Newspapers	12	7.4%
Through agencies	9	5.5%
Volunteering	4	2.5%
None/ not answered/ not relevant	59	36.2%

4.10 Coping with Unemployment

Table 12 shows how students are coping with unemployment. Most participants cope with being unemployed by continuing with their studies (43.6%). Other participants are getting support from family and friends (16.6%) however, some declare that the situation of being unemployed depresses them and they are therefore, not being able to cope. The participant who said 'other' specified 'side hustles'.

4.11 Perceptions of Agricultural Postgraduate Students on Unemployment

Finally, Participants were asked to rate their level of agreement against perceived statements regarding unemployment. According to Table 13, most people argue that the mean of an ordinal variable is meaningless - what is the average between strongly agree and disagree? The main reason is because there's normally no 'equality' between options - is the difference between 'strongly disagree' and 'disagree' the same as between 'disagree' and 'agree'? etc.

Table 12: Ways Employed to Cope with Unemployment

		Frequency	Percent	Valid Percent
Valid	Support from family and friends	27	16.6	22.0
	Continuing with my studies	71	43.6	57.7

	I am not coping, I am depressed	23	14.1	18.7
	Substance/ alcohol	1	0.6	0.8
	Other	1	0.6	0.8
	Total	123	75.5	100.0
Missing	System	40	24.5	
Total		163	100.0	

The most agreed upon statement (based on the mean) was that participants were considering being self-employed and starting their own business ($\bar{X} = 3.54 \pm 1.40$) while the least agreed upon statement was that participants felt they were unemployed because their grades were low ($\bar{X} = 1.48 \pm 0.70$). From the stacked bar chart above it can be seen that the statement most agreed upon to some extent (agreed and strongly agreed) was that they are considering being self-employed and starting their own business (43%) while the least agreed upon statement was that they are unemployed because their grades are low (1%). Furthermore, when looking at the extremes (strongly agree and strongly disagree), the statement most strongly agreed with was again that they are considering being self-employed and start their own business (26%), while the most strongly disagreed with statement was again that they are unemployed because their grades are low (47%).

5. CONCLUSION

The aim of this paper is to evaluate perceptions of agricultural postgraduate students on unemployment in South Africa. To understand these, the researcher looked at what influences the students to enrol in an agriculture-related field of study, and the perceived causes of unemployment by graduates. Most students report that they are satisfied with their studies. The main reason students study agriculture is because they want to assist farmers and their communities in overcoming their farming challenges. Other reasons include employment purposes and entrepreneurship. Since agricultural entrepreneurship focuses on these aspects, it is suggested that more advocacy efforts be placed on engaging in agricultural entrepreneurship as a career. Unemployment on its own can interfere with one's mental health.

Table 13: Perceptions of Agricultural Postgraduate Students on Unemployment

		I am unemployed because I studied Agriculture and I wasted my time	I am considering being self-employed and start my own business	I am considering changing my qualification	There is a mismatch between the degree attained and with what is required by employers	The ranking and background of my university is the reason why I struggle to get employment	I am unemployed because my grades are low	Weak government/ private sector support for agriculture graduates	Financial inability to provide employment arrangements in the agricultural sector	Disproportion courses offered in agricultural colleges with labour market needs	Limitation of career opportunities in the agriculture sector	Low levels of employment knowledge and skills of agricultural graduates	Low level of creativity in graduates because of inappropriate teaching methods in university
N	Valid	125	124	127	125	126	125	126	126	123	126	123	125
	Missing	38	39	36	38	37	38	37	37	40	37	40	38
Mean		1.87	3.54	2.07	2.56	1.82	1.48	3.33	3.27	2.83	2.95	2.87	2.38
Median		2.00	4.00	2.00	2.00	2.00	1.00	3.00	3.00	3.00	3.00	3.00	2.00
Mode		1	5	1	1	1	1	5	5	1 ^a	2	2	1
Std. Deviation		1.024	1.393	1.310	1.334	0.950	0.691	1.481	1.422	1.359	1.379	1.305	1.306
Minimum		1	1	1	1	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5	5	5	5	5

Coding: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

There are five top perceived reasons causing unemployment amongst the educated youth of South Africa and these are: 1. Lack of job creation/ job opportunities (33.1%), 2. Nepotism/ corruption (23.9%), 3. Lack of experience (16.0%), 4. Misalignment between education and job market (13.5%) and 5. Weak economy (7.4%). Most participants are unemployed and to cope with being unemployed they are continuing with their studies while looking for unemployment. This seems to be the best strategy as one will be expanding their knowledge while getting more experience in their field. In order to solve this problem, most participants consider being self-employed and starting their own business ($\bar{X} = 3.54 \pm 1.40$). Entrepreneurship seems to be the most reasonable strategy in this situation as graduates will be able to solve their personal problems when it comes to unemployment but also create job opportunities for others.

6. RECOMMENDATIONS

- It is recommended that institutions of higher education prepare students to become job creators rather than job seekers in order to reduce the rate of unemployment in South Africa. Therefore, there should be more advocacy efforts undertaken to engage students in agricultural entrepreneurship and there should be curriculum reviews to ensure a match between what is studied and what is needed to grow the economy.
- Non-Governmental Organisations are encouraged to play an active role in advocating for practical strategies to address unemployment in South Africa.
- Government needs to create opportunities and enforce policies to ensure there is alignment between what is offered by the education sector and what is required by the labour market to meet the needs of the economy. There needs to be mutually agreed upon plan between employers in the public and private sectors for graduate placement for at least three years per graduate. The host company can then receive a certain percentage from the government for each participant they host.

7. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The present research has several limitations. First, the present study is cross-sectional in nature and the data is collected from the respondents at one point of time. Therefore, potential researchers are recommended to perform the longitudinal studies to draw causal inferences. Secondly, the quantitative data analysis is only based on descriptive statistics. Further studies should extend the present study and apply inferential statistics. Finally, the present study only focuses on the agricultural postgraduate students of South Africa. Future research should be conducted in general in South Africa as well as in other countries to validate the findings of the present study.

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